# The Dispensatory of Ibn at-Tilmī<u>d</u>

ARABIC TEXT, ENGLISH TRANSLATION,

STUDY AND GLOSSARIES



BY

OLIVER KAHL

The Dispensatory of Ibn at-Tilmīd

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# The Dispensatory of Ibn at-Tilmī<u>d</u>

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For Karine

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0. Kahl

"Pharmacy then is the knowledge of chosen simple drugs in regard to their species, varieties and forms, as well as the mixture of compound drugs on the basis of written prescriptions or in accordance with what a trustworthy and skilful man may have contrived"

The Muslim polymath Abū r-Raiḥān al-Bīrūnī in the preface to his *Kitāb aṣ-Ṣaidana fī t-țibb* (completed mid 11th century CE)<sup>2</sup>

# 1. Towards a History of Arabic Pharmacology<sup>3</sup>

If we were to compare Arabic pharmacology to a building, we would be looking at a very elaborate and complex architectural structure, made by using materials and styles from different parts of the world and joining them together in an ingenious though somewhat idiosyncratic fashion. Studying such a structure is necessarily both challenging and rewarding-the challenge arising from its compositional diversity, the reward resulting from its conceptual harmony. The conditions for the rise of Arabic pharmacology are varied. First and foremost there is the Arabic reception of foreign scientific traditions in the course of a translation movement which took place between the middle of the 2nd/8th and the end of the 4th/10th centuries in Baghdad,<sup>4</sup> and which acquainted the Arabs with the medico-philosophical theories as well as the medico-pharmacological practices notably of the Greeks and Indians, either through direct translations from Greek and Sanskrit or through Syriac and Pahlavi intermediates; the translation movement also played a major rôle in the formation of a professional language, that is in developing Arabic into a language of scientific and philosophical discourse. Then there are the commercial and to some

 $<sup>^{\</sup>rm 1}$  The system of transliteration used in this book is that of the Deutsche Morgenländische Gesellschaft.

<sup>&</sup>lt;sup>2</sup> See Meyerhof *Vorwort* 10,9ff. (Arabic text).

<sup>&</sup>lt;sup>3</sup> Here and in the following the term "Arab(ic)" is used to denote the language only, bearing no reference to race or religion.

 $<sup>^{\</sup>rm 4}$  Dates separated by a slash refer to the Islamic and Christian calendars respectively.

extent cultural relations with at least the southern regions of China, which brought the Arabs in contact with certain aspects of Chinese herbal medicine. And lastly there is the enormous geographical extension of the Abbasid empire, stretching from the Atlantic to the Indian Ocean and from the Caucasus down to the Horn of Africa, which facilitated trade and made possible the acquisition and relatively safe transport of medicinal drugs from all corners of the then known world. The earliest pharmacological works in Arabic of which we possess more or less complete textual witnesses appeared, seemingly out of nowhere, around the middle of the 3rd/9th century, and in their high degree of literary organization and deliberate use of technical jargon they already bear the markings of a scientific genre. Due to a lack of authentic Arabic source material for the formative period we can only employ common sense and draw the general conclusion that the old Arab scholars sliced and spliced preceding pharmacological traditions with remarkable swiftness, great skill, and a fair measure of intuition. The particular scientific form which Arabic pharmacology had assumed in the course of the 3rd/9th century was to become the basic pattern for almost all later literary activities in the field, and it is in precisely this form that we find Arabic pharmacology also lying at the crossroads of other, related scientific genres-medicine with its semiphilosophical base of humoral pathology; botany both theoretical and applied,<sup>5</sup> mineralogy; zoology; alchemy insofar as its chemical principles may be concerned; and occasionally even astrology as a means to jatromathematical ends.

It follows from all this that an adequate understanding of the structural features of Arabic pharmacology requires an extremely broad approach, whilst its expressional features can only be studied through a magnifying glass. For certain periods in the history of Arabic pharmacology, that is with regard to specific pharmacological texts in historical settings which are reasonably well known, this task can today be tackled with a good chance of success, though still a relatively large amount of effort. Yet a general history of Arabic pharmacology above and beyond a merely chronological or descriptive

<sup>&</sup>lt;sup>5</sup> Applied botany in this context means pharmacognosy. The Arabs considered the writings which deal with simple drugs (*adwiya mufrada*) as belonging to a different branch of pharmaceutical literature than the writings which deal with compound drugs (*adwiya murakkaba*), and we are going along with this classification; cf. also Ullmann *Medizin* 257 and 295.

plane—an 'inner' history of the subject that proceeds to interpret its heterogeneous origins, diverging and converging lines of development, classic manifestations, and eventual stagnation at the very point of congruency with other scientific structures in late mediaeval Arab society—such a thing must remain in the realm of the future.<sup>6</sup> There are several reasons which call for restraint. Arabic pharmacological texts inevitably cover vast, and partly still uncharted territories. We already mentioned the different scientific disciplines which intersect with mediaeval Arabic pharmacology, and which must be understood well enough to inform its study on the level of natural principles; but there is also a delicate range of source languages which need to be considered in order to arrive at justifiable historical interpretations of the subject, and which include, apart from the obvious Arabic, at least Greek, Syriac and Persian, and ideally also Sanskrit and Chinese. Rare exceptions granted, the individual scholar of modern day more often than not finds himself stretched beyond the limits of his expertise when trying to adequately deal with the diverse material under his hands, and wishes for institutional conditions and intellectual attitudes more favourable to interdisciplinary collaboration-as matters stand, the historian of Arabic pharmacology better get used to single-tracking. Another problem is the lack of calibrated theoretical tools with which to work the material, and the absence of generally acknowledged methodological approaches even among historians, let alone representatives of 'exact' science-this means that already the most basic questions, like how the achievements of earlier scientific traditions ought to be measured, remain subject to dissent. Then there is in our contemporary world an ever widening gap between the natural and the social sciences which renders next to impossible any attempts at re-establishing a mutually comprehensible terminology,

<sup>&</sup>lt;sup>6</sup> Here we should contemplate Martin Levey's *Early Arabic Pharmacology*, which is the only explicit (though hardly serious) attempt so far at presenting a general survey of the subject. Let it be said at the outset that I am a great admirer of Levey's scholarly achievements, just as I readily admit that his linguistic theories left their mark on my own approach to Arabic pharmacology. But the book in question, even by the modest standards of positivistic historiography, can only be described as a disaster. It appeared in 1973, more than three years after Levey's death, and features a short 'Preface' apparently written by Levey himself. The rest of the book, however, looks as if it were printed straight off a card-case, it is badly organized, incoherent, uncritical, full of mistakes and misconceptions, and in all its prematurity certainly not the kind of stuff Levey would have approved for publication had he been alive.

and which is also responsible for the fact that no pharmacodynamic investigations are being carried out with regard to historical bodies of medicinal drugs-we have no idea whether these drugs actually did what they were supposed to do, and therefore even the most circumspect translations of relevant historical texts can be accused of being hypothetical. Next we have to accept that many important pharmacological works in the Arabic language simply did not make it across time,<sup>7</sup> and then acknowledge that many other, equally important works have not yet been resurrected from the archives and turned into publications<sup>8</sup>—without a broad and solid basis, however, no historical study, not even the most humble one, will rise much above the level of speculation. Finally there is an obstacle of a purely philological but no less crucial nature, namely the nonexistence of a historico-critical Arabic reference dictionary except for the two letters *k*āf and *l*ā*m*, which in our case is aggravated by a dearth of reliable medico-pharmacological glossaries derived from the sources-many a linguistic commodity the classicist and even the sinologist take for granted is a pie in the sky to the arabist, who constantly has to recur to indigenous lexicology which, in turn, poses hermeneutic problems similar to those he is trying to solve. Bearing all this in mind, it is also clear that readers of my book who may hope for highflying theoretical expositions will be disappointed, as there is no meaning to theories which are based on insufficient data.

In conclusion of this preliminary section and before embarking on a more detailed investigation into Ibn at-Tilmīd's dispensatory in subsequent sections, I will now try to put down a rough template and briefly delineate the historical position and scientific significance of

<sup>&</sup>lt;sup>7</sup> For example the key dispensatories of the 3rd/9th century physicians Yūḥannā ibn Sarābiyūn, Ḥunain ibn Ishāq, and ʿAbdūs ibn Zaid, or that of the 4th/10th century Andalusian Ḥāmid ibn Samaǧūn, see Ullmann *Medizin* 103, 299f., and 302 with *GaS* 3/242, 255, 264, and 317.

<sup>&</sup>lt;sup>8</sup> For example Muḥammad ibn Zakarīyā' ar-Rāzī's (d. 313/925 or 323/935) al-Aqrābādīn al-kabīr, see Ullmann Medizin 303 and GaS 3/283; Sahlān ibn 'Uṯmān ibn Kaisān's (d. 380/990) al-Aqrābādīn, see GaS 3/310; the revised and abridged edition of the large version of Sābūr ibn Sahl's (d. 255/869) dispensatory as prepared during the first half of the 5th/11th century by the physicians of the 'Adudī hospital in Baghdad s.t. Muḥtaṣar min Aqrābādīn Sābūr fī ta'līf al-adwiya, see Kahl Sābūr<sup>1</sup> 18 and 22; or Naǧībaddīn as-Samarqandī's (d. 619/1222) second and major dispensatory entitled al-Qarābādīn ʿalā tartīb al-ʿilal, see Ullmann Medizin 308. To this selection can be added almost all of those manuscripts which belong to the muǧarrabāt or "empirical (drugs)" category of pharmacological literature, see Ullmann Medizin 311ff.

that text in the general framework of mediaeval Arabic pharmacology. It is not known when exactly Ibn at-Tilmīd wrote his dispensatory, but biographical accounts point to the fourth decade of the 6th/12th century as the presumable time of compilation. The dispensatory of Ibn at-Tilmīd thus already stands near the end of a relatively long chain of inventive pharmacological development in the Arab world, and insofar as clinical pharmacology is concerned undoubtedly marks the apogee of this genre of scientific literature.<sup>9</sup> According to the Arabic historiographical tradition, it was Ibn at-Tilmīd's dispensatory which soon after its appearance became the pharmacological standard work in the hospitals and apothecs of Baghdad if not the Arab East-replacing, after almost 300 years, the hitherto indispensable dispensatory of Sābūr ibn Sahl (d. 255/869);<sup>10</sup> it turned out to be the most renowned and widely circulated of all his writings,<sup>11</sup> and for at least the following 200 years, possibly longer, it was considered in medical circles to be the final say on the matter.<sup>12</sup> The dispensatory of Ibn at-Tilmīd, as is recorded in subtitles to some of its manuscripts, was "compiled from a number of (other) dispensatories" (muntaza *min* '*iddat aqrābādīnāt*).<sup>13</sup> Here we have to think in the first place of those sources, strictly pharmacological or not, which Ibn at-Tilmīd explicitly quotes along the way,<sup>14</sup> bearing in mind that he is far from being consistent in this department and quite capable of copying a written source verbatim without even hinting at it—in particular, he

<sup>&</sup>lt;sup>9</sup> The equally celebrated dispensatory which Badraddīn al-Qalānisī wrote a few years later in 590/1194 represents a very different breed of pharmacological writing it is much more comprehensive than the dispensatory of Ibn at-Tilmīd, and contains a lot of practical explanations and theoretical excursions which Ibn at-Tilmīd dismisses completely; but it is also quite wordy and homiletic in style, and in that respect clearly addressed to the generalist rather than the specialist: Ibn at-Tilmīd gave an analytical handbook to the pharmacist, al-Qalānisī a synthetical textbook to the physician. For an edition of al-Qalānisī's dispensatory see Qalānisī Aqrābādīn, for a (mediocre) study of it see Fellmann *Qalānisī*.

<sup>&</sup>lt;sup>10</sup> See Kahl  $S\bar{a}b\bar{u}r^1$  21 note 69.

<sup>&</sup>lt;sup>11</sup> See Ibn Abī Uṣaibiʿa ʿUyūn 1/276.

<sup>&</sup>lt;sup>12</sup> See Ibn Hallikān Wafayāt 6/75 and Abū l-Fidā Muhtaşar 3/57. Apparently there also once existed a version of Ibn at-Tilmīd's dispensatory in 13 (instead of 20) chapters, see Ullmann Medizin 306; it is this shorter version which Ibn Abī Uşaibi'a 'Uyūn 1/276 refers to as "hospital epitome" (mūğaz bīmāristānī), and which Yāqūt Iršād 7/245 calls the "small" (şagīr) as opposed to the "large" (kabīr) dispensatory of Ibn at-Tilmīd.

<sup>&</sup>lt;sup>13</sup> Compare section 3.a. (manuscripts BD, then A).

<sup>&</sup>lt;sup>14</sup> For a discussion of Ibn at-Tilmīd's sources and the problems entailed by source criticism in Arabic pharmacy see section 3.c.

owes much more to the dispensatory of the aforementioned Sābūr ibn Sahl than the few quotations would suggest, and completely adopts the latter's principles of formal arrangement.<sup>15</sup> The value of Ibn at-Tilmīd's dispensatory can of course neither be judged by his nonchalant manner of citation nor be diminished by his habit to hang on to materials and structures he was familiar with and deemed useful. The mind of a mediaeval scholar cannot be measured against our own ideas of scientific progress, and not be grasped by modern concepts of originality or innovation—science in the Middle Ages is essentially conservative and speculative, and deeply embedded in a received system of physical and spiritual truths which is considered in itself stable and worthy of preservation. With this picture in the background, Ibn at-Tilmīd's decision to reject whole clusters of obsolete 'traditional' prescriptions is a most remarkable achievement, and compared to earlier works on the subject his dispensatory can therefore be said to have stretched the rational or else scientific elements in mediaeval Arabic pharmacology to the very limits of a system of preconceived universal truths.<sup>16</sup> It is by a combination of brevity and clarity, expertise and experience, and not least by an undogmatic pragmatism rare in those days that the dispensatory of Ibn at-Tilmīd is distinguished from most other manifestations of mediaeval Arabic pharmacology-in these respects, it had few precursors indeed, and has never been succeeded.

<sup>&</sup>lt;sup>15</sup> In this context we also have to remember the updated synopsis of Sābūr's *large* dispensatory which for a good century had been the vade-mecum of the pharmacists in the 'Adudī hospital in Baghdad when Ibn at-Tilmīd was put in charge of that same institution, cf. note 8 above.

<sup>&</sup>lt;sup>16</sup> Among the prescriptions Ibn at-Tilmīd eliminated we find *inter alia* the Greek *mithridatium* and *sūţīrā* 'panaceas', the Syrian *šīlţā* 'panacea', the Indo-Persian *qafţa/āraġān* and *zāmihrān* as well as the Indian *ğ/kalkalānağ* group of remedies, and also the bulk of the 'classic' Greek *hierata*, see e.g. Kahl *Sābūr*<sup>1</sup> nos. 16, 34, 48–49, 51, 54–55, 57, 67–71, and 73 (Arabic text) or Ibn Sīnā *Qānūn* 3/315, 317, 318ff., 322f., 334f., 335f., and 341–347; these time-honoured but often woolly and complicated drugs were semifictional accessories which owed their survival through the centuries and across different cultures to magical or ritual rather than practical observations, and some of them were probably in no circumstances ever actually prepared and/or used.

# 2. Ibn at-Tilmīd<sup>17</sup>

### a. Life

Muwaffagalmulk Amīnaddaula Abū l-Hasan Hibatallāh ibn Sāʿid ibn Hibatallāh ibn Ibrāhīm ibn ʿAlī Ibn at-Tilmīd was, for all we know, born in Baghdad around the year 466/1074, into a Christian Arab family of the Nestorian persuasion. We do not know, of course, whether it was sung to him at his cradle but we can safely say that he turned out to be one of the most celebrated and influential physicians of his century, and a littérateur and poet of some repute, too. There is little doubt that his general interest in medicine, and presumably an early inclination towards this profession, were fostered by his maternal grandfather Mu'tamadalmulk Abū l-Farağ Yahyā ibn at-Tilmīd, a distinguished scholar and physician, and by his father Abū l-ʿAlā' Sāʿid who also had made himself a name as a medical practitioner; but it was his teacher Abū l-Hasan Saʿīd ibn Hibatallāh (d. 495/1102), physician to the Abbasid palace, who had the greatest impact on the shape and direction of Ibn at-Tilmīd's career, and who at the time was already well-known as the author of a number of important medical books.<sup>18</sup> Apart from receiving a thorough medical training, the young and unusually gifted Ibn at-Tilmīd was also instructed in other branches of learning, such as Christian and Muslim theology, theosophy, logic, poetry, music, and calligraphy. He thus not only deepened his knowledge of the Syriac language but gradually acquired a most profound understanding of Arabic, too, the language of his literary productions to come.

Then his years of travel began and he made long journeys in Persia, about which we know virtually nothing. We only hear that he was once

<sup>18</sup> See Ullmann Medizin 160f.

<sup>&</sup>lt;sup>17</sup> This bio-bibliographical sketch is based on the following Arabic sources (in chronological order): Baihaqī (d. 565/1170) *Tatimma* 144ff., Işfahānī (d. 597/1201) *Harīda* (after Cheikho *Mağānī* 4/303ff. [missing from the *Harīda*-edition as quoted in the bibliography s.n. Işfahānī]), Yāqūt (d. 626/1229) *Iršād* 7/243–247, Ibn al-Qiftī (d. 646/1248) *Hukamā* '340ff., Ibn AbīUşaibi'a (d. 668/1270) 'Uyūn 1/259–276, Ibn Hallikān (d. 681/1282) *Wafayāt* 6/69–77, Barhebraeus (d. 685/1286) *Duwal* 209f., Abū l-Fidā (d. 732/1331) *Muḥtaṣar* 3/56f., Yāfi'ī (d. 768/1367) *Mir`āt* 3/344, Ibn al-'Imād (d. 1089/1679) *Šadarāt* 4/190f.; cf. further Baġdādī *Hadīya* 2/505, Cheikho Šuʿarā' 315–334, 'Alūčī *Ta`rīḥ* 457 and passim, Ziriklī A'lām 8/72, Kaḥḥāla Muʿġam 13/138f. Corresponding information is provided by Wüstenfeld *Geschichte* 97f., Leclerc *Histoire* 2/24–27, Sarton *History* 2/234, *GaL* 1/642 with *Suppl.* 1/891, Graf *Geschichte* 2/199f., Elgood *History* 165ff., Ullmann *Medizin* 163f., Meyerhof "Ibn al-Tilmīdh" 956f., Hamarneh "Ibn al-Tilmīdh" 415f.

called out to treat the 'Supreme Sultan' of the Great Seljuks, Sanğar ibn Malikšāh,<sup>19</sup> who resided in the city of Marw in Khurasan, and who had assumed this title in 511/1118—if this is anything to go by, Ibn at-Tilmīd would have still been in Persia in his mid-forties. However that may be, he eventually returned to Iraq and settled in his home town Baghdad, now being proficient in Persian as well.<sup>20</sup> Upon his return he learned that his maternal grandfather and mentor of his youth had long since died. He took his place ( $q\bar{a}ma \ maq\bar{a}mah\bar{u}$ ), and with it he took that part of his grandfather's name under which he then became known: Ibn at-Tilmīd.

What follows is a success story as good as it gets. In a large house bordering on the Nizāmīya college<sup>21</sup> he set up a medical practice. This is where he lived, and where the majority of consultations took place. It was not unusual for him to provide severe or important cases with free board and lodging, and his clientèle in those days included impoverished scholars just as well as 'foreign kings' complete with entourage. He had also started to give lectures on medicine, and we hear that the number of his regular students reached 50 before long. These lectures were always attended by two grammarians, whom Ibn at-Tilmīd paid to listen very carefully; when a student, asked to read out a passage in a medical text, made a lot of grammatical mistakes or mispronounced words, the master would get one of the grammarians to read it out again correctly, and then charge the student a small fee on behalf of the grammarian. It may be remarked here in passing that Ibn at-Tilmīd seems to have advocated, guite against the current opinion, the theory of infectious and contagious diseases.<sup>22</sup> His reputation as a physician and teacher spread, and so it is no surprise that a few years later he was appointed head physician  $(s\bar{a}^{\dagger}\bar{u}r)^{23}$  of the

<sup>&</sup>lt;sup>19</sup> See Baihaqī *Tatimma* 144f.

<sup>&</sup>lt;sup>20</sup> According to Yāqūt *Iršād* 7/243, Ibn at-Tilmīd also knew Greek; this is of course not impossible, but it is an isolated claim.

<sup>&</sup>lt;sup>21</sup> Founded in 457/1065 on the bank of the Tigris in the eastern part of Baghdad by the Seljuk vizier Niẓāmalmulk and opened in 459/1067, the so-called Niẓāmīya college was a celebrated institution of learning which flourished for at least three centuries, possibly longer. On the Niẓāmīya college and its location see Le Strange *Baghdad* 297–300 with map 8 no. 32; further Pedersen/Makdisi "Madrasa" 1126. <sup>22</sup> His poem in which a fly "leaves a wound to rot" exemplifies this, see specimen

<sup>&</sup>lt;sup>22</sup> His poem in which a fly "leaves a wound to rot" exemplifies this, see specimen 3 below; it also underlies his saying that certain diseases come "out of the blue" (*min* tarīq as-samāwa), see Ibn Abī Uṣaibi 'a 'Uyūn 1/267.

<sup>&</sup>lt;sup>23</sup> On this loan word from Syriac see Payne Smith *Thesaurus* 2/2688 with Margoliouth *Supplement* 237, and then Lane *Lexicon* 4/1364.

famous 'Adudī hospital,<sup>24</sup> a post for life. Besides his medical career, Ibn at-Tilmīd also appears to have played an important rôle in the social life and administrative organization of the Christian community in Baghdad, who elected him as their leader (ra's) and gave him the office of presbyter ( $qiss\bar{s}$ ).

Less blessed, though, was the relationship he had with his son, Raḍīaddaula Abū Naṣr, who seems to have been a rather difficult, maladjusted and somewhat deranged individual, causing his father a lot of grief and despair which he occasionally expressed in the form of bitter poetic complaints; there is also a letter of admonition, considered a classic example of successful prose writing, which Ibn at-Tilmīd had composed in very polished and elaborate Arabic, engaging even Plato,<sup>25</sup> urging his son to turn away from his pranks, to learn something, to stop talking nonsense and wasting his time, and to do something useful with his life.<sup>26</sup>

Apart from suchlike domestic worries, which may now and then have cast a shadow over his life, Ibn at-Tilmīd did just fine. His practice brought him wealth, his headship at the hospital brought him fame, and his ecclesiastical offices brought him honour and, more importantly,

<sup>&</sup>lt;sup>24</sup> Founded in 368/979 at the bend of the Tigris in the western part of Baghdad by the Buyid prince 'Adudaddaula and opened shortly before his death in 372/983, the so-called 'Adudī hospital was the best institution of its kind in the whole of Baghdad for more than 250 years; a combination of natural and political catastrophes around the middle of the 7th/13th century led to its decline, and when the Arab traveller Ibn Baṭṭūṭa visited Baghdad in 730/1330 he found of the hospital's former buildings no more than traces of walls. On the 'Adudī hospital and its location see Le Strange *Baghdad* 103ff. with map 8 no. 39; further Dunlop "Bīmāristān" 1223f.

<sup>&</sup>lt;sup>25</sup> al-faḍā'il murrat al-wird ḥulwat aṣ-ṣadar war-raḏā'il ḥulwat al-wird murrat aṣ-ṣadar "Virtues are bitter to arrive at (but) sweet to return from, and vices are sweet to arrive at (but) bitter to return from", see e.g. Yāqūt Iršād 7/246. A slightly different, somewhat less archaic version of this (pseudo-?)Platonic gnomologium can be found here and there in Arabic wisdom literature, see Gutas Gnomologia 140f. no. 54; the Greek original, if there ever was one, seems to be lost.

<sup>&</sup>lt;sup>26</sup> This unfortunate relationship between father and son naturally aroused the curiosity of the Arab biographers, and it is indeed difficult to read the character of Radīaddaula Abū Naṣr. On the whole, he is portrayed as a downright fool—one who believed that there is a huge drill in the southern hemisphere wherefrom smoke arises and spirits descend, one who intended to build a wooden cart with big wheels to carry visitors home to Damascus fast and easy on the grounds that the journey goes 'downhill', one who in the presence of guests lathered his whole face, save the eyes, with soap, one who, in short, was not at all into anything his father would have considered worthwhile; see e.g. Ibn Abī Uṣaibi'a 'Uyūn 1/263f. On the other hand, there are reports which describe him as a very diligent medical practitioner "who could see the diseases as though they were behind glass" (yarā l-amrāḍ ka-annahā min warā' zuǧāǧ); see e.g. Ibn Ḫallikān Wafayāt 6/77.

political influence. Despite all this success, or possibly just because of it, he remained a modest and down-to-earth person, kept treating the poor free of charge, and apparently even went so far as to take an oath not to accept any 'gifts' except from a caliph or sultan.<sup>27</sup> It was only a matter of time until the palace, too, took notice. Ibn at-Tilmīd was in his early sixties when the Abbasid caliph al-Muqtafi (reg. 530/1136-555/1160) entrusted him with the supervision ( $ri^2\bar{a}sa$ ) of medicine in Baghdad and the surrounding districts, which basically meant the promotion of some kind of licensing authority. It would appear that this took the form of an examination (*imtihan*), however informal, whereby groups of medical practitioners were summoned under the chairmanship of Ibn at-Tilmīd who talked to them one by one in the presence of the others; standard questions included "Who were your teachers in medicine?" and "Which medical books have you read?", implying that the emphasis was laid rather on theory than practice; old and experienced practitioners without such references, however, were allowed to continue to practise medicine under the conditions not to put a patient knowingly at risk (!), not to perform venesections, and not to prescribe strong purgative drugs.

It must have been round about this time that Ibn at-Tilmīd's annual salary (*marsūm*) began to exceed 20,000 gold coins ( $d\bar{n}n\bar{a}r$ )—the claim that he used to spend all this money on itinerant scholars and other lost souls<sup>28</sup> is no doubt a well-intended exaggeration, but it does reflect his reputation of being a very generous and charitable man. He also owned a large landed estate (dai or  $iqt\bar{a}$ ), and the caliph himself once declared all of Ibn at-Tilmīd's property inviolable. Ibn at-Tilmīd had by now, if not earlier, firmly established himself in Baghdad—not only as a physician and church representative, but also as an associate of the ruling classes and member of various literary and scientific circles. We may consider this a reflection of his political instincts as much as his wide-ranging intellectual interests. He particularly loved music and poetry, and liked to surround himself with musicians, poets, and men of letters; but among those who frequently visited his house we also find philosophers, astrologers, architects, and engineers. Ibn

<sup>&</sup>lt;sup>27</sup> It is said that he once refused to accept 4,000 gold coins ( $d\bar{n}a\bar{r}$ ), four saddles covered with ornate embroidery ( $tuh\bar{u}t$  ' $att\bar{a}b\bar{r}$  [on the latter term and its origin see Dozy *Supplément* 2/93]), four white slaves, and four horses which had been sent to him as a gift from a grateful wealthy patient, see Ibn Abī Uşaibi'a 'Uyūn 1/260f.

<sup>&</sup>lt;sup>28</sup> See Baihaqī Tatimma 145.

at-Tilmīd was a prolific poet himself, and also on occasion liked to exchange stanzas with poetically disposed patients or politicians, notably to accompany a gift. Besides, he conducted over many years a lively artistic correspondence (*tarassul*), namely with high-ranking government officials (kuttāb).

The culmination of his career, though, was being appointed court physician, in which capacity he served the aforesaid caliph al-Muqtafī for more than two decades, and then the latter's son and successor al-Mustanğid (reg. 555/1160-566/1170), up until his own death. To honour this appointment, Ibn at-Tilmīd moved to another house in the eastern part of Baghdad, on the street which led from the perfume market along the northern precinct wall of the caliphal palaces, past the so-called willow-tree gate, down to the bank of the Tigris.<sup>29</sup> His early days as a court physician were spoiled to a certain measure by a feud between him and the Jew Auhadazzamān Abū l-Barakāt, a former fellow student who had pursued a double career as a philosopher and physician, recently converted to Islam, and a long-standing ambition to get his foot in the door to the palace. The two men had never liked each other, but so far managed to stay out of each other's way-this was now impossible.<sup>30</sup> Apparently in the end Abū l-Barakāt fell victim to his own cunning, a petty and silly intrigue backfired on him, he was lucky to get away with his life, and died in exile a few years later. Ibn at-Tilmīd must have served the Abbasid caliphs well, for they in turn honoured, trusted, and protected the old man. So we hear that Ibn at-Tilmīd, who came to see the caliph once a week, was allowed to sit down in the latter's presence-a most remarkable token of reverence.31

Ibn at-Tilmīd died in Baghdad on 28 Rabīʻ I 560/12 February 1165,<sup>32</sup> at the age of 94 lunar (91 solar) years, in full possession of his mental

<sup>&</sup>lt;sup>29</sup> For the approximate location of this house cf. Le Strange Baghdad map 8 nos. 8 and 26.

<sup>&</sup>lt;sup>30</sup> The feud between Ibn at-Tilmīd and Abū l-Barakāt was notorious, as the following poem by their contemporary, the astronomer-poet al-Badī 'al-Asturlābī, shows:

Abū l-Ḥasan, the physician, And Abū l-Barakāt. his mime.

Stand in total opposition: One's humbly amidst the Pleiades found,

The other's proudly on the ground!

For the poem see e.g. Ibn Hallikān Wafayāt 6/75.

<sup>&</sup>lt;sup>31</sup> See Ibn al-Qiftī Hukamā' 341.

<sup>&</sup>lt;sup>32</sup> See e.g. Yāqūt Iršād 7/245 and Ibn Abī Uşaibi'a 'Uyūn 1/264; cf., however, Ibn al-Qiftī Hukamā' 342 and (after him) Barhebraeus Duwal 209: "Safar 560 [/mid December

faculties. He was buried in a courtyard nearby the old Nestorian church and great monastery in the Christian quarter of Baghdad,<sup>33</sup> and we hear that there was nobody from the two sides of Baghdad who did not come to the church and attend the funeral procession.<sup>34</sup>

Ibn at-Tilmīd left to his son and only heir a considerable fortune, both liquid assets and real estate, and a large library of inestimable worth. When the son, who had become a Muslim in his old age, choked to death in a corridor of his house, all his property was seized, and the books were taken on twelve camels to the house of al-Mağd Ibn aṣ-Ṣāḥib, a high-ranking eunuch of the palace. A few years later the library resurfaces in the possession of the Abbasid caliph an-Nāṣir (reg. 575/1180–622/1225) who, in a fit of gratitude, passed it on to his ageing court physician Saʿīd ibn Abī l-Ḫair al-Masīḥī,<sup>35</sup> one of Ibn at-Tilmīd's pupils as it were.

Unfortunately, we possess only one unmediated eyewitness account on Ibn at-Tilmīd, that of his much younger contemporary 'Imādaddīn al-Kātib al-Isfahānī, the famous stylist and historian, who was born in Persia in 519/1125 and died in Syria in 597/1201. Imādaddīn lived in Baghdad at least until the year 551/1156, possibly longer, and met Ibn at-Tilmīd on several occasions, towards the end of the latter's life. 'Imādaddīn's account is short, and written in a scholarly and mannered style, as is his wont. Here is an abridged translation focusing on those passages that contain a personal judgement: "Ibn at-Tilmīd [...] was the world's destination for the science of medicine. He was the Hippocrates of his epoch and the Galen of his time. He set his seal on this science, for nobody in the past had taken it thus far [...] When I saw him he was an old man with an elegant and pleasing appearance. a friendly, witty, refined and charming character, quite cheerful, highminded, full of bright ideas, a man with an acute mind and a good judgement [...] He understood many sciences [...] His company was better than moulded gold and strung pearls. And looking at him made one wonder why a man of his understanding, intellect and knowledge

<sup>1164-</sup>mid January 1165]", to which Ibn Hallikān *Wafayāt* 6/76 (after Ibn al-Azraq al-Fāriqī [d. ca. 577/1181]) adds fī 'īd an-naṣārā "at Christmas" (normally 'Easter'). The claim made Baihaqī *Tatimma* 145: "some time (fī šuhūr) in [5]49[/1154]", is based on hearsay alone.

<sup>&</sup>lt;sup>33</sup> See Cheikho Šuʻarā' 315; for a fine description of this site see Le Strange Baghdad 208 with map 5 no. 56.

<sup>&</sup>lt;sup>34</sup> See Ișfahānī Harīda (after Cheikho Mağānī 4/305).

<sup>&</sup>lt;sup>35</sup> See İbn Abī Uşaibi'a *Uyūn* 1/302.

refused Islam".<sup>36</sup> And all we can add to this is the laconic statement of an even younger contemporary of Ibn at-Tilmīd, that of the lute player Saʿdaddīn Ibn Abī s-Sahl al-Baġdādī, who was still alive in 620/ 1223. As a young man, he had met Ibn at-Tilmīd, and this is what he remembered: "He was a venerable old man of medium build, with a full beard, an engaging person, and a great raconteur".<sup>37</sup>

Ibn at-Tilmīd may have had only one rather awkward son but he had no lack of gifted and able students, some of whom went on to become famous physicians themselves. We already mentioned Sa'īd ibn Abī l-Hair al-Masīhī (d. after 589/1193) who for his part served the Abbasid caliphs in Baghdad, or Abū l-Farağ Ibn Tūmā (d. 620/1223) whose rank in the palace equalled that of a vizier. Others left Baghdad for Damascus after their teacher's death, no doubt attracted by the Nūrī hospital which had recently been established there, and by the rising star of the Ayyubid dynasty: Muhaddibaddīn (Ibn) an-Nagqāš (d. 574/1178), Muwaffaqaddīn Ibn al-Mutrān (d. 587/1191), Radīaddīn ar-Rahbī (d. 631/1233, aged 97!)-they were among the founding fathers of the new medical schools which began to flourish in Syria and then Egypt in the 7th/13th century.<sup>38</sup> Thus, to give but one example, there is a straight line leading from the two last-named physicians, through Muhaddibaddīn ad-Dahwār (d. 628/1230), to Ibn an-Nafīs (d. 687/1288), the man who discovered the pulmonary circuit some 300 years before Servetus and Colombo.

# b. Works

As for Ibn at-Tilmīd's works, which are almost exclusively dedicated to medicine and pharmacy, we possess manuscripts and/or bibliographical records of the following:

1. Independent writings: *al-Aqrābādīn* "The Dispensatory";<sup>39</sup> Quwā *l-adwiya al-mufrada* "The Faculties of Simple Drugs" (preserved), see *GaL* 1/642 = Hamarneh Catalogue 139f.; *al-Muğarrabāt* "The Empirical (Drugs)" (preserved), see *GaL* 1/642 = Ullmann Medizin 312; *al-Maqāla al-Amīnīya fī l-adwiya al-bīmāristānīya* "Amīn[addaula]'s Treatise on

<sup>&</sup>lt;sup>36</sup> See Isfahānī Harīda (after Cheikho Mağānī 4/303f.).

<sup>&</sup>lt;sup>37</sup> See Ibn Abī Uşaibi'a 'Uyūn 1/262f.

<sup>&</sup>lt;sup>38</sup> Compare Savage-Smith "Medicine" 930–933.

<sup>&</sup>lt;sup>39</sup> See section 3.a.

Hospital Drugs" (preserved), see Iskandar *Catalogue* 129f. = Ullmann *Medizin* 306f.; *Maqāla fī l-Faṣd* "A Treatise on Phlebotomy" (preserved), see *GaL* 1/642, Iskandar *Catalogue* 130f., Ullmann *Medizin* 163f., Hamarneh *Catalogue* 140;<sup>40</sup> *al-Kunnāš* "The (Medical) Handbook" (lost?), see e.g. Yāqūt Iršād 7/245, Ibn Abī Uṣaibiʿa ʿUyūn 1/276, Ibn Ḫallikān *Wafayāt* 6/75.<sup>41</sup>

2. Nonindependent writings:<sup>42</sup> a) Commentaries on: Galen's (d. 199 CE) Hīlat al-bur' Θεραπευτικὴ μέθοδος; the medical aphorisms attributed to the prophet Muḥammad (d. 11/632) (aḥādīṯ nabawīya taštamil ʿalā masāʾil țibbīya); Hunain ibn Isḥāq's (d. 260/873 or 264/877) al-Masāʾil fī ț-țibb; Ibn Sīnā's (d. 428/1037) al-Qānūn fī ț-țibb;<sup>43</sup> b) Summaries of or selections from: Galen's Abdāl al-adwiya Περὶ ἀντεμβαλλομένων; Galen's commentary on Hippocrates' (d. ca. 375 BCE) al-Fuṣūl Ἀφορισμοί, i.e. Tafsīr Ğālīnūs li-Fuṣūl Buqrāț Eἰς τοὺς Ἱπποκράτους ἀφορισμοὑς ὑπομνήματα; Galen's commentary on Hippocrates' Taqdimat al-maʿrifa Προγνωστικόν, i.e. Tafsīr Ğālīnūs li-kitāb Buqrāţ fī Taqdimat al-maʿrifa Eἰς τὸ Ἱπποκράτους προγνωστικόν ὑπομνήματα; ar-Rāzī's (d. 313/925 or 323/935) al-Hāwī fī ț-țibb; Miskawaih's (d. 421/1030) al-Ašriba; Saʿīd ibn Hibatallāh's (d. 495/1102) Ḫalq al-insān;<sup>44</sup> c) Notes on or glosses to: Abū Sahl al-Masīḥī's (d. 401/1010) al-Mi'a fī ṣ-ṣināʿa aṭ-țibbīya; Ibn Ğazla's (d. 493/1100) Minhāğ al-bayān.

Apparently there once also existed a large volume of collected letters  $(d\bar{v}an ras\bar{a}'il)$ ,<sup>45</sup> as well as a small volume of collected poetry  $(d\bar{v}an \tilde{s}i'r)$ .

<sup>&</sup>lt;sup>40</sup> According to *GaL Suppl.* 1/891 this treatise is published: "gedr[uckt] Lucknow 1308[/1890]" (?).

<sup>&</sup>lt;sup>41</sup> Alūčī Ta'rīh 492 attributes to Ibn at-Tilmīd another (independent) writing s.t. an-Nahğ al-wādih "The Obvious Method" (medicine?), and so does Ziriklī Aʻlām 8/72 s.t. Maqāla fī Uşūl at-tašrī 'inda l-masīhīyīn" "A Treatise on the Sources of Legislation among the Christians"—where this information comes from, though, is not clear in either case; cf. further Cheikho Šuʿarā' 318: risāla [...] fī itbāt 'aqā'id ad-dīn al-masīhī (was in Diyarbekir in 1895).

<sup>&</sup>lt;sup>42</sup> Unless otherwise noted none of these writings seem to be preserved; for records of their previous existence see e.g. Yāqūt *Iršād* 7/244f. and Ibn Abī Uṣaibi'a 'Uyūn 1/276.

<sup>&</sup>lt;sup>43</sup> For an edition and translation of the surviving parts of this marginal commentary, preserved in the author's own hand, see Iskandar "Autograph" 192–235 with Iskandar "Fragment" 256–261.

<sup>&</sup>lt;sup>44</sup> According to Ebied *Bibliography* 107 this 'selection' is published: "Beirut 1912" (?).

<sup>&</sup>lt;sup>45</sup> It is likely that the book called *at-Tauqī āt wal-murāsalāt* "Sketches and Correspondence", which is mentioned Baġdādī *Hadīya* 2/505, refers to this collection; cf. Ibn Abī Uşaibi a 'Uyūn 1/276: *kitāb yaštamil ʿalā tauqī āt wa-murāsalāt*.

Finally, to give the reader an idea of the nature of Ibn at-Tilmīd's poetry, I have translated below a few specimens of it, arranged under the headings of ethics, metaphysics, love, satire, humour, and enigmas—though the boundaries between these different 'genres' are, of course, not always clear cut. However, the selected specimens are fairly representative of Ibn at-Tilmīd's favourite topics of poetic contemplation. There is, to be sure, no 'medical' poetry as such, but images and similes of medicine now and then reveal the poet's profession.<sup>46</sup>

# Ethics

تواضع كالبدر استنار لناظر \* على صفحات الماء وهو رفيع ومن دونه يسمو الى المجد صاعدا \* سمو دخان النار وهو وضيع

> Modesty is like a moon Whose disk has risen to the sky, Yet on the surface of the water It still illuminates the eye. Without it, aiming high and yonder, To glory people would aspire Like smoke that fleetingly arises From a lowly burning fire.

العلم للرجل اللبيب زيادة \* ونقيصة للاحمق الطياش مثل ألبهار يزيد ابصار الورى \* نورا ويغشى اعين الخفاش

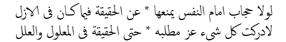
Knowledge benefits a wise man, But is no good for a prat— Daylight, which helps humans see, Dims the eyesight of the bat.

<sup>&</sup>lt;sup>46</sup> It may be worth noting that the old Arab biographers considered Ibn at-Tilmīd's poetry inferior to his prose writing, see e.g. Yāqūt *Iršād* 7/243; unfortunately, hardly anything of the latter has come down to us. They also observed that he seemed to have been more at ease with the composition of short poems, normally consisting of two or three verses, rather than longer poems (*qaṣā'id*), of which we possess a very small number of examples (elegies and panegyrics), see e.g. Cheikho Šu'arā' 319–334. All the translated specimens are taken from Ibn Abī Uṣaibi'a 'Uyūn 1/268–273; parallel transmissions are found here and there in the Arabic sources referred to in note 17 above.

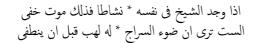
لا تحقرن عدوا لان جانبه \* ولو يكون قليل البطش والجلد فللذبابة في الجرح الممد يد \* تنال ما قصرت عنه يد الاسد

Never scorn an enemy For his friendliness, Even if he's little strong And almost powerless— So it is the tiny fly That leaves a wound to rot, Thus completing what the lion's Mighty hand could not.

# Metaphysics



The soul exists behind a curtain, Unable to make out for certain Events in past infinity— Or else it surely could have solved Each problem, though it be involved, In fact, causality.



A vital spark in an old man's soul Is a death in disguise— Can't you see a lamplight flashes Just before it dies?

Love

عانقتها وظلام الليل منسدل \* ثم انتبهت ببرد الحلى فى الغلس فبت احميه خوفا ان ينبهها \* واتقى ان اذيب العقد بالنفس

> When the darkness of the night fell Long in my embrace she lay; Then I woke and found her jewels Cold before the break of day; And I warmed them with my breath,

Lest to chase her sleep away, Anxious not to melt the lace— So I held the day at bay.

برانى الهوى برى المدى فاذابنى \* صدودك حتى صرت انحل من امس ولست ارى حتى اراك وانما \* يبين هباء الذر فى افق الشمس

> Love has wasted me away, I can't take it any more! Your refusal eats me up— A victim of the day before! All I care to see is you, Not the gaily dancing motes On the sun's remotest shore.

#### Satire

قالوا فلان قد وزر \* فقلت کلا لا وزر والله لو حکمت فیه \* جعلته یرعی البقر

So-and-so is now vizier? Never! Not this nerd! By God, if it were up to me, I'd make him cattleherd! (on the appointment of ad-Darkazīnī<sup>47</sup> to the post of vizier)

<sup>&</sup>lt;sup>47</sup> There are several viziers of the Great Seljuks in the 6th/12th century who were known under the name of ad-Darkazīnī. The most 'distinguished' of those was Qiwāmaddīn Zainalmulk 'Imādaddaula *Abū l-Qāsim* Nāṣir ibn 'Alī *ad-Darkazīnī* al-Ansābādī, whose first appointment to the post of vizier fell in the year 518/1124 while his fourth and final appointment in 527/1133 also marked the year of his execution. Abū l-Qāsim ad-Darkazīnī, the son of a peasant from the village of Ansābādī near the town of Darkazīn in the Hamadan province of western central Iran, was stigmatized by many of his contemporaries for his plebeian background; more importantly, though, he was infamous for his ruthlessness, intriguing, financial exactions, and general mismanagement of affairs, incurring along the way a great deal of both fear and enmity. On him and some other members of his clan see Bosworth "Dargazīnī" 33; for the exact location of Darkazīn see Adkā'ī "Darjazīn" 55f. with Le Strange Lands map 5 s.n. Darguzin.

مدور العبن فاتخذه \* لتل غرس وثل عرش لو رمقت عينه الثريا \* اخرجها في بنات نعش

His eye's revolving in its socket! He should sow seed or topple a throne, Look long enough at the Pleiades And spin them in the Great Bear's pocket! (on a person with a goggle)

أكثرت حسو البيض كما يستديم قيام ايرك ما لا يقوم ببيضتيك فلا يقوم ببيض غيرك

You slurped away a lot of eggs To make your penis stronger? There are no eggs that can replace What's in your own no longer!

#### Humour

بزجاجتین قطعت عمری \* وعلیها عولت دهری بزجاجة ملئت بحبر \* وزجاجة ملئت بخمر فبذی اثبت حکمتی \* وبذی ازیل هموم صدری

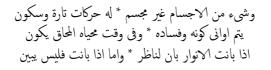
I broke my life in these two glasses, And this is how my lifetime passes: One glass is filled with writing-ink, The other one with wine to drink— The former makes my wisdom stay, The latter puts my grief away.

كاس يطفى لهب الاوام \* ثان يعين هاضم الطعام وللسرور ثالث المدام \* والعقل ينفيه مزيد جام

One glass of wine to cool the chest, A second one to help digest, A third one, then, just to unwind, Another one will shift your mind! Enigmas

وهاجم لیس له من عدوی \* مستبدل بکل مثوی مثوی بکاؤه وضحکه فی معنی \* اذا بکی اضحك اهل الدنیا

> It is forceful but not vile, Forever changes domicile, Cries and laughs the very while, Weeps and makes all people smile. (the cloud)



It springs from bodies but a body it's not, It moves at times or stays on the spot, It comes into being and passes away, Its hour of birth bears the seed of decay, It doesn't go out when the lights are gone But is otherwhile seen by everyone. (the shadow)

3. The Dispensatory

# a. Arabic Manuscripts

The edition of the Arabic text containing the dispensatory of Ibn at- $Tilm\bar{l}d$  is based on the following manuscripts:

(A) London British Library Or. 8293/1, fols. 2a–128b. 11 lines per page of large vocalized calligraphic Nashī. Title (fol. 2a) Iqrābādīn [sic] Madīnat as-Salām Baġdād<sup>48</sup> and (fol. 2b) Kitāb Qarābādīn, subtitle (fol. 2a)

<sup>&</sup>lt;sup>48</sup> A dispensatory entitled Aqrābādīn Madīnat as-Salām or Aqrābādīn Baġdādī figures among the writings attributed to Ibn at-Tilmīd's teacher Saʿīd ibn Hibatallāh (d. 495/ 1102) in *GaL Suppl.* 1/888 and then Ullmann *Medizin* 306; this information, however, which seems to be based on a couple of manuscript witnesses, is not confirmed by Ibn Abī Uşaibiʿa ʿUyūn 1/254f. or, for that matter, by any other indigenous biobibliographical source.

(B) London *Wellcome Library* Or. 9/4, fols. 79a–128b. 17 lines per page of medium-sized partly vocalized Nashī; the chapters on the contents page (fol. 79a) and in the headings of the main text are numbered by the letters of the abăad alphabet. Title (fols. 79a and 128b) (al-)Agrābādīn, subtitle (fol. 79a) muntaza' min 'iddat agrābādīnāt; author's name (fol. 128b) Amīnaddaula Muwaffaqalmulk Ra'īs al-Hukamā' [!] Abū l-Hasan Hibatallāh ibn Sāʿid al-maʿrūf bi-Ibn at-Tilmīd; copvist (after Iskandar [as quoted below]) Ibrāhīm ibn Nasr ibn Ibrāhīm ibn Muhammad ibn al-Hasan ibn Ibrāhīm ibn Munīr al-Kindī, a physician: date (after Iskandar [as quoted below]) 597[/1200].<sup>51</sup> The textual quality of this manuscript is very good. Missing recipes: 39, the end of 50 through to the end of 62 (was originally there), 202, most of 213 through to the end of 221 (was originally there), 360, 372, most of 407 through to 415 (was originally there), the first half of 417; recipes in reversed order: 416 and 417; recipe 232 appears twice in full; the 'modern leaves' cover the recipes 131–139.—Cf. Iskandar Catalogue 78; for a specimen see plate 2.

(C) Bethesda National Library A 3I/1, fols. 1b–66b. 19 lines on average per page of small to medium-sized normally unvocalized Nashī; the leaves are numbered in Coptic numerals. Title (fol. 1b) Afradabaddin

<sup>&</sup>lt;sup>49</sup> Additionally referred to as *al-hakīm al-failasūf* (fol. 2b).

<sup>&</sup>lt;sup>50</sup> Brockelmann misread the date of copying as 525, see *GaL* 1/642; based on this error, Dietrich *Medicinalia* 231 and then Ullmann *Medizin* 306 note 4 suggested the manuscript itself might be an autograph.

<sup>&</sup>lt;sup>51</sup> Two <sup>4</sup>modern leaves' (95ab and 96ab, 19th century); five blank leaves (85ab, 86ab, 105ab, 106ab, and 127ab).

[sic] and (fol. 66b) *al-Aqrābādīn*; author's name (fol. 1b) *Amīnaddaula* and (fol. 66b) *Amīnaddaula Muwaffaqalmulk Ra'īs al-Ḥukamā'* [!] *Abū l-Ḥasan Hibatallāh Ṣā'id ibn at-Tilmīd*; copyist unnamed; date (fol. 66b) 25 Rabī' I 902 [/1 December 1496]. The textual quality of this manuscript is very good. Missing recipes: 250–262, 264, the second half of 265 with the first half of 266, 267, 268, 270–273, 275–279, 302, 306–308, 368, the second half of 421 with the first half of 422; recipes in reversed order: 29 and 30, 159 and 160, 204 and 205, 331 and 332, 364 and 365, 416 and 417; recipe 176 precedes 174; recipe 232 appears twice in full; a wrong chapter heading at the wrong place (fol. 39a).—Cf. Savage-Smith *Manuscripts* s.v. Aqrabadhin; for a specimen see plate 3.

(D) Oxford Bodleian Library Marsh 537/10, fols. 182b–226b. 23 lines per page of small erratically vocalized Nashī; the chapters on the contents page (fol. 182b) are numbered by the letters of the abğad alphabet. Title (fol. 182b) Agrābādīn, subtitle (fol. 182b) muntaza' min 'iddat agrābādīnāt talhīs [Ibn at-Tilmīd] lil-bīmāristān al-ʿadudī; author's name (fol. 182b) Amīnaddaula Abū l-ʿAlā' Sāʿid ibn [addidit in margine Hibatallāh ibn Ibrāhīm al-maʿrūf bi-Ibn] at-Tilmīd;<sup>52</sup> copyist (?); date (1000[/1591]?). The manuscript represents a strand of transmission different but not entirely disconnected from AB and C-quite a few recipes are missing, and a lot of interpolations and additions (approximating 135 in total), generally short and to the point, now form an integral part of the main text,<sup>53</sup> the quantity of alterations, though, decreases as the text progresses, such that from chapter 12 onwards the manuscript is again completely in line with AB and C; occasionally, the copyist refers to "another copy" (nusha uhrā, e.g. fol. 208b). This manuscript has proved to be of only limited value for the establishment of the text. Missing recipes: 29, 34, 39, 43, 44, 56, 61, 69, 70, 80, 82, 84, 86, 91, 95, 100, 101, 104, 105, 159, 175, 176, 181–183, 188, 193, 196, 207, 210, 211, 214-217, 232, 239, 252, 254, 255, 262, 264-268,

 $<sup>^{\</sup>rm 52}$  This is a confusion with Ibn at-Tilmīg's father, who is not known to be the author of any pharmacological work.

<sup>&</sup>lt;sup>53</sup> Most of these *addenda* are of little interest to us, but some do actually deserve to be mentioned, i.e. a variation on the famous *sağğiznāyā* recipe (fol. 197b); a recipe against loss of memory after ['Alī ibn Sahl Rabban] aṭ-Ṭabarī (fol. 198a); a recipe against the signs of old age ascribed to the Greek philosopher Pythagoras (*Fītāgūras*) as allegedly found engraved on a golden plate in the treasury of Ḥālid ibn Barmak (fol. 198b); and three different versions of Sābūr ibn Sahl's *diyāqūd* (fol. 205b).

270–273, 275, 284–286, 289, 290, 300–302, 309, 312, 358, 360, 372, most of 411 through to the end (was originally there); recipe 74 is placed at the end of chapter 4.—The item is, as far as I can see, not registered in *BBC*; for a specimen see plate 4.

(E) Berlin Staatsbibliothek Petermann II 487, fol. 1ab then pp. 1-160. 13 later 11 lines per page of large generously vocalized Nashi. Title (fol. 1a) *Kitāb* [Aq]rābādīn malīh [sic] and (p. 160) al-Aqrābādīn; author's name not given; copyist unnamed; date (after Ahlwardt [as quoted below]) ca. 900[/1494]. The manuscript represents a strand of transmission which seems to be related to D but clearly distinct from AB and C-thus, many recipes are missing or rearranged within and across the chapters, some only correspond in name, and the numerous, now fully integrated interpolations and additions (amounting to 1/3 of the total material) are no doubt the result of later revisions and often even written in a different style;<sup>54</sup> the copyist sometimes refers to "a second copy" (nusha tāniya, e.g. p. 63) when introducing variant readings. This manuscript stands at the end of a possibly long chain of modification if not corruption, and in this respect its value for the establishment of the text is very limited indeed. Missing recipes: 12, 22, 24, 29, 30, 32, 36, 37, 39-44, 46, 47, 51, 57, 61, 62, 64, 67, 73, 75, 80, 89, 94, 95, 100, 101, 103, 109, 114, 115, 119, 120, 122-125, 127, 130-133, 136-138, 140, 142, 143, 145, 146, 148, 150, 152, 153, 155, 156, 159, 167, 171, 174-176, 178, 179, 181, 192, 202-205, 207, 209-211, 213-216, the first half of 217, 221, 241, 244, 246, 255, 273, 277, 288, 300-302, 312, 314, 321, 325, 326, 330-332, 335-337, 339, 340, 342, 343, 346, 348-351, 354-357, 359-363, 365, 372, 376, 377, 379-381, 390, 391, 394-396, 401, 402, 404, 405, 407, 413, 417, 418, the second half of 421 with the first half of 422: the second half of recipe 406 is placed at the end of 408.—Cf. Ahlwardt Verzeichniss 5/640 no. 6442 with Fonahn "Handschrift" passim; for a specimen see plate 5.55

 $<sup>^{54}\,</sup>$  The general drift of suchlike addenda may be exemplified by two short passages which in the manuscript follow upon recipes 4 and 35 respectively:

<sup>(</sup>٤) ...ويستعمل منه مثقالين للرجل ومثقال للصغير مع قدح ماء تمرهندى وحب الرمان والاميرباريس مع سكنجبين والغذاء مع فروج زيرباج برغيف خبز البيت ويمتص من السفرجل المقطع فى ماء الورد بعد ساعة من تناول الغذاء، (٣٥) عمل المحمودة تقطع تفاحة او سفرجلة نصفين ويخرج حبها وتضع المحمودة فى موضع الحب ويضرب فيها مسار خشب وتضع فى النار وان تعذرت الفاكهة فتكون فى دقيق شعير.

<sup>&</sup>lt;sup>55</sup> Two extant manuscripts of the dispensatory could not be collated: Cairo *Dār al-Kutub* Tibb 141/3 (see Šabbūḥ *Fihris* 23f. no. 24 = Munaǧǧid "Maṣādir" 253 no. 42) and

Apart from the usual and notorious deviations from common Arabic 'orthography', the individual manuscripts show the following more unusual, and hence noteworthy cases:

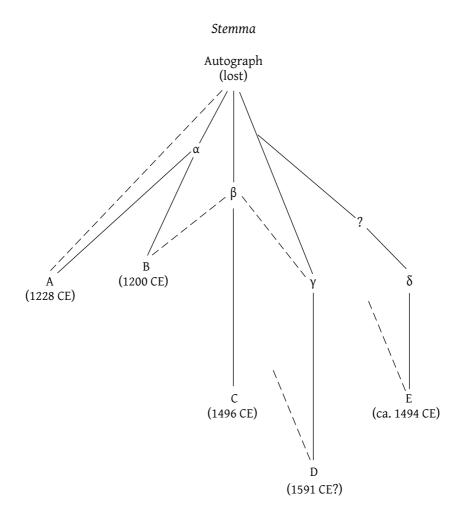
(A) The verb سلق is always spelled صلق, similarly مصطکی is once spelled توت the word حضض is spelled جصض; the word توت is once spelled بغداذی and بغداد are spelled بغداذ and بغداد ; the word توث occasionally receives two or three dots underneath to distinguish it from نصف درهم occurs once as an abbreviation of نصف بش once, a word is separated at the end of the line, i.e. بوز إيدان.

(B) The verb سلق is sometimes spelled صلق; the word قرظ is spelled توت; the word توت is once spelled توث, likewise حلتيت is once spelled توث, being the most frequent metrological unit, is considered implicit and largely omitted; the specifications of weight and, occasionally, of time appear generally in numerical figures, with zero being represented by o and five by \$; on the 'modern leaves', o is three times separated from the following word at the end of the line and, quite remarkably, even a short and genuine Arabic word is once split in this fashion, i.e. of the specification.

(C) The verb احترس is sometimes spelled صلق, likewise سلق is sometimes spelled احترس is spelled باحترص is spelled المعموا the words وقوا are spelled ليمو are spelled المعال ; احترص occurs as المنان . I منا is also spelled المنان . وراهم occurs as an abbreviation of ينصف درهم further نشخ من من and دراهم or درهم or دره or درهم or درهم or درهم or درهم or درهم or درهم or دره or دره or درهم or در در or در هم or در در or در or در در or 
(D) The word توت is spelled (دوقوا); the word توت is once spelled توت is often spelled بحلتيث is often spelled حلتيت; the letter محلتيت is often spelled حلتيت; the letter مراجع dots underneath to distinguish it from (cound the end, specifications of weight begin to appear in numerical figures; once, separated from the following word at the end of the line.

(E) The verb سلق is twice spelled صلق; the verb السلق is occasionally spelled هضم similarly قرض is spelled قرظ is once spelled بذر the word is separated at كبريت; twice, a word is separated at the end of the line, i.e. المور إباريس and المير الموالية.

Manisa *Kitapsaray* 1781/9 (see Dietrich *Medicinalia* 231f. no. 116). Whether or not the manuscript Cairo *Țalʿat* Țibb 511 (see Munaǧǧid "Maṣādir" 253 no. 42), the "unidentified copy" Cairo *Dār al-Kutub* Ţibb 1212 (see Hamarneh *Catalogue* 139), and the "Rabat copies" (see Hamarneh *Origins* 146 note 64) actually belong here is a moot point.



The edition of the text is eclectic in principle. However, A and to a lesser extent B served as 'guide' manuscripts, for they represent the oldest and best strand of transmission. The rigorous and indiscriminate application of a *purely* eclectic method tends to create a formally 'correct' but ahistorical and therefore in the end fictitious text, which cannot be the aim of textual criticism.

The collation of Arabic pharmacological manuscripts almost always produces a huge number of variant readings—some important, but many with no relevance for the philological reconstruction or practical interpretation of the text. Therefore, and in order not to load the apparatus unnecessarily with information of little or no value, the

following variants have not been included: the arbitrary addition or omission of the conjunction wa- in the list of ingredients and procedure of preparation as well as the unmotivated change from wa- to faor *tumma*, and vice versa, in the procedure of preparation; changes in the use of Impf. Sg. 3. masc. or fem. respectively, when the verb refers either to the preceding ingredients (fem.) or to the following preparation of the pharmacological product (masc.); idiosyncrasies or plain mistakes in the construction of numerals; haplographies and dittographies, unless there is an etymological implication. Certain other types of variants have been disregarded by adopting in most cases the reading of one of the 'guide' manuscripts AB: the definite article al- when arbitrarily added to or omitted from the name of a drug or drug category, also in the construct state (e.g. [al-]iyārağ, bizr [al-]qittā'); the prepositions bi-, fī, hattā, ilā, li-, ma'a, and min when arbitrarily added to or omitted from a pharmacological specification, a specification of time or place, and when used synonymically or repetitively (e.g. ratl [min] sukkar, aš-šurba [minhu] dirham, vušrab minhu [min] mitqāl ilā dirhamain, x wa-y [min] kull wāhid dirham, yuharrak [fī] kull yaum marrāt, yakūn maudi'uhu [fī] makān raiyih, mahlūl fī/bi-šarāb, yu'ād fī/ilā l-qidr, vağmud fī/maʿa t-tahrīk, an-nāfiʿa fī/min dālika, hattā/ilā an yaăiff, yuhall bi-sukkar au [bi-]'asal, an-nāfi' li-x wa-[li-]y); the synonymic use of singular or plural forms in pharmacological specifications and, with regard to drug categories, in the headings of the recipes (e.g. *qišr*/ *qušūr, qurs/agrās*); the synonymic use of non-technical specifications as well as synonymic markers (e.g. māristānī/bīmāristānī, magšūr/ muqaššar, nāfiʿ/yanfaʿmin, yudagg naʿiman/nāʿiman, dafaʿāt/dufūʿ/marrāt/ mirār/nuwab. aǎzā' sawā'/mutasāwiva. x hamsa wa-v hamsa / x wa-v hamsa hamsa, min kull wāḥid miṯqāl / miṯqāl miṯqāl, [nāfi ] li-x, [duhn] šīraǧ, [lubb] bizr hiyār, [lubb] al-gurtum, tamar[at] at-tarfā', isfīdāğ [ar-rasās], sunbul  $[at-t\bar{b}]$ ; the arbitrary use of the nominative or accusative cases in singular nouns of specification (e.g. min at-tīn 'ašara 'adad[an], hašab al-kādī madaūa[an], vudāf ilaihi mitluhu sukkar[an]); random repetitions of pharmacological specifications (e.g. asl ar-rāziyānağ wa-[asl] alkarafs, bizr qittā' wa-[bizr] hivār, bi-duhn al-ās wa-[duhn] al-hilāf, waraq al-aafit wa-[waraa] al-afsantin); syntactic metatheses and the like of pharmacological or medical terms and specifications (e.g. ihlīlağ asfar wa-aswad wa-kābulī / ihlīlağ kābulī wa-asfar wa-aswad, al-mā' al-hārr / alhārr min al-mā', halīb māʿiz/laban māʿiz halīban, al-kabid wat-tihāl/at-tihāl wal-kabid, du'f al-hašā wa-riggatuhā / du'f wa-riggat al-hašā, ba'd lattihi/

*baʿd an yulatt, yudaqq al-ǧamīʿ/yuǧmaʿ wa-yudaqq*); demonstratives and words such as adwiva, ăamī, kull, and wāhid when used merely for the purpose of emphasis (e.g. tudaga [hādihi] al-adwiya, tuğma' [al-adwiya] wa-tudaga, yuhammas [al-ǧamīʿ] wa-yudaga, yuǧmaʿ [dālika/kulluhu] wa-vushaa, vu'had ratl [wāhid]); the words vu'had and vusta'mal as arbitrarily used at the beginning or end of a prescription; the word *wazn* as arbitrarily used in metrological specifications; the word *ğuz*' when used as a synonym of dirham. Plain variants of drug names have only been recorded once at the first occurrence in each collated manuscript, unless they reappear in a different form and/or there is an etymological implication. Finally, there is a group of variants which clearly represent later additions on the part of the copyists of the different manuscripts-these variants, which occur sporadically and irregularly and which are of no contextual relevance, have neither been included into the text nor into the apparatus: eulogies (e.g. biidn Allāh, in šā'a llāh, rahimahu llāh); the word sifa as arbitrarily added to or omitted from the headings of the recipes; the word  $n\bar{a}fi$  when used isolated at the end of a recipe.

## b. External Structure

The dispensatory of Ibn at-Tilmīd is divided into 20 chapters, comprising a total of 424 recipes. The medico-pharmacological material is arranged systematically according to certain drug categories and/or forms of application,<sup>56</sup> and the resulting compounds may involve any number of simples up to 45. The chapters are the following:

One	Pastilles (aqrāṣ)
Two	Pills and Hierata (ḥubūb wa-iyāraǧāt)
Three	Powders ( <i>safūfāt</i> )
Four	Electuaries (maʿāǧīn)
Five	Stomachics (ğawārišnāt)

<sup>&</sup>lt;sup>56</sup> Under the influence of Galen's (d. 199 CE) Περὶ συνθέσεως φαρμάκων, the remedies in mediaeval Arabic dispensatories are organized either according to the location of the disease (κατὰ τόπους) or according to the category of the drug (κατὰ γένη); the categorical arrangement was adopted *inter alios* by Ibn at-Tilmīd's predecessor Sābūr ibn Sahl (d. 255/869) and, though it seems less convenient than the topological arrangement, henceforth favoured by the majority of Arab physicians and pharmacologists, cf. Ullmann *Medizin* 48f. and 299–311. For system overlaps see English translation notes 69, 213, 239, and 253.

Six Seven	Lohochs and Robs (laʿūqāt wa-rubūb) Beverages (ašriba)
Eight	Preserves (murabbayāt)
Nine	Decoctions (maṭbūḫāt)
Ten	Collyria, Catapasms, and Ophthalmics ( <i>akḥāl wa-darūrāt wa-šiyāfāt</i> )
Eleven	Oils (adhān)
Twelve	Liniments ( <i>marāhim</i> )
Thirteen	Cataplasms and Ointments (ḍimādāt wa-aṭliya)
Fourteen	Enemas and Suppositories (ḥuqan wa-fatāʾil)
Fifteen	Dry Preparations and Dentifrices (adwiya yābisa wa-sanūnāt)
Sixteen	Nutrition (simna)
Seventeen	Snuffs and Gargles (saʿūṭāt wa-ġarġarāt)
Eighteen	Rhinorrhoeal Preparations (adwiyat ar-ruʿāf)
Nineteen	Emetical Preparations (adwiyat al-qai')
Twenty	What Promotes and Prohibits Perspiration ( <i>mā yudirr</i> al-ʿaraq wa-yaḥbisuhu) <sup>57</sup>

Within these chapters, the individual recipes are built more or less consequently around the same formal skeleton, whose essential parts can be described as follows:

name and/or category of the drug<sup>58</sup> range of its application

 $<sup>^{\</sup>rm 57}$  For a list of all drug categories and/or forms of application occurring in the text see section 3.f.

 $<sup>^{\</sup>scriptscriptstyle 58}\,$  About 40% of all compound drugs in the present text have a 'proper' name, that is some sort of a label under which they were known, quoted, and dealt with among specialists, and which in etymological terms may be derived from Arabic, Greek, Syriac, Persian, or Sanskrit. As a rule of thumb, compounds which are naturally durable or made durable by using acetic or saccharic acids more frequently carry a label than others which are less durable and/or prepared *ad hoc*. From the material on hand it follows that a drug may be named after one, two, or the total number of its ingredients; after the individual(s) to whom its composition is attributed, with whom it is associated, or for whom it is intended; after the medical condition it is expected to improve, its therapeutic effect, or the organ(s) affected; after specific aspects of its preparation or administration including colour, shape, taste, mode, and timing; after certain parascientific properties it is supposed to hold or its desired function; after its alleged provenance or metaphorical value; and after the category to which it belongs; occasionally, a drug may have two names. For a complete list of drug names in the text see technical terms 3; cf. also Kahl Sābūr<sup>2</sup> 15 note 57 for a preliminary evaluation of relevant material from the 3rd/9th century.

# list of its ingredients with doses<sup>59</sup> instructions for combining the ingredients<sup>60</sup> directions for use<sup>61</sup>

## c. Internal Structure

Apart from various natural or artificial products, the dispensatory of Ibn at-Tilmīd implies in principle the availability of 433 simple drugs, of which there are 328 vegetable, 49 animal, and 56 mineral substances; thus, the vegetable substances roughly make up 76%, the animal substances 11%, and the mineral substances 13% of the total materia medica.<sup>62</sup> The distribution of these substances and products as ingredients over the total number of recipes varies considerably, such that some occur only once in the whole text while others are employed more often; among the ingredients which come up most frequently are almond, aloe, anise, bole, celery, ceruse, cinnamom, clove, coriander, emblic, fennel, frankincense, ginger, gum-arabic, honey, liquorice, mastic, myrobalan, myrrh, myrtle, opium, oxymel, pepper, pomegranate, quince, rose, saffron, salt, spikenard, sugar, tragacanth, vinegar, water, and wine.<sup>63</sup> As regards their geographical provenance, it can be said that the various substances are dispersed over the whole of the Near and Middle East (i.e. Indo-Arabia), North and East Africa, Southern and Eastern Europe, Central Asia, South East Asia, and the Far East.<sup>64</sup> The goods were brought to Iraq via a network of trade routes either by caravans or by seafaring merchants, who all participated in a semiglobal market that had become possible with the consolidation of Abbasid power in Baghdad and continued to run in

<sup>&</sup>lt;sup>59</sup> For weights and measures see section 3.d.

<sup>&</sup>lt;sup>60</sup> For pharmacological utensils see section 3.e.

<sup>&</sup>lt;sup>61</sup> As far as timing is concerned, relevant directions are frequently given in hours, days, weeks, or months, also occasionally by referring to particular times of day or night, and further in relation to patterns of sleeping or eating.

<sup>&</sup>lt;sup>62</sup> This account, insofar as vegetable and animal substances are concerned, only includes whole species; what was normally used were in the case of plants the different rhizomatous and aerial parts or products (e.g. seed, root, stem, twig, bark, leaf, flower, fruit, sap, resin, ashes) and in the case of animals certain organs or organic products (e.g. gall, lungs, testicles, rennet, marrow, fat, excrement, horn, shell, milk, honey, ashes).

<sup>&</sup>lt;sup>63</sup> For a complete list of substances and products in the text see technical terms 1.

<sup>&</sup>lt;sup>64</sup> This is also reflected in the rather arbitrary use of 'taxonomic' markers which may precede the name of a substance and refer to its actual or alleged place of cultivation, manufacture, or sale.

the same veins for over half a millennium up until the disintegration of the Mongol empire.  $^{\rm 65}$ 

The question of the origin of the recipes themselves is much more delicate and can, in truth, only be answered on a rather superficial plane. Pharmacological knowledge grows out of long, oral, and by no means consistent popular traditions, whose traces tend to disappear in time and whose eventual emergence in the form of more or less systematic writings is a relatively late, albeit for us often the only visible stage of this development. The appropriation of ancient skills by a class of specialized professionals quite naturally goes hand in hand with various attempts at attributing and thereby 'authorizing' the individual components of that received body of knowledge, creating many fictitious quantities along the way. In reality the very nature of suchlike material undermines, then as now, the search for the 'inventor' of a given recipe—any pharmacologist of an age of literacy can only incidentally be identified as an 'author', and more often than not his 'authorship' will manifest itself in the realm of modification rather than 'invention'. General labels like "Greek" or "Indian" indeed point to a recipe's Hippocratic or Ayurvedic extraction, but this does not mean that the supposed archetype can be recovered; and even in the case of generic drug names whose non-Arabic etymologies seem to suggest specific origins of the recipes so named, matters are never straightforward and immensely impeded by a dearth of comparative literature. Such are the limits of our task. Having established that, we can now turn to have a look, not at the corpus of pharmacological material which Ibn at-Tilmīd implicitly uses but rather at those less remote sources which he explicitly quotes. Here we have to distinguish between specific and unspecific quotations, the former being more or less precise. Specific quotations include (in chronological order): Galen (d. 199 CE), see recipes 65, 201, 309; Zahrūn al-Harrānī (fl. mid 3rd/9th century), see recipes 35 (then 36), 183, 374; Sābūr ibn Sahl (d. 255/869), see recipes 29, 155, 204, 246; [Ya'qūb ibn Ishāq] al-Kindī (d. shortly after 256/870), see recipes 115, 136; Hunain [ibn Ishāg al-'Ibādī] (d. 260/873 or 264/877), see recipes 15, 307, 347, 351; [Tābit ibn Qurra al-Harrānī] (d. 288/901) ad-Dahīra, see recipe 68; Qustā [ibn Lūgā al-Baʿlabakkī] (d. ca. 300/912), see recipe 85; [Muhammad ibn Zakarīyā']

 $<sup>^{\</sup>rm 65}$  For a graphical representation of the Arab trade routes "c. AD 1100", that is in the days of Ibn at-Tilmīd, see HAI 9.

ar-Rāzī (d. 313/925 or 323/935), see recipes 65 (al-Muršid), 269, 360; Abū l-Hasan [Tābit] ibn Sinān (d. 365/976), see recipe 331; 'Alī ibn al-'Abbās [al-Maǧūsī] (d. late 4th/10th century), see recipe 69; ['Īsā ibn Yahyā] al-Masīhī (d. 401/1010), see recipe 96; [al-Husain ibn ʿAbdallāh] Ibn Sīnā (d. 428/1037), see recipe 140; Raǧā [addīn] al-Isfahānī (fl. first half of 5th/11th century), see recipe 138; and Abū l-ʿAlā' Ṣāʿid ibn at-Tilmīd (fl. second half of 5th/11th century), see recipes 50, 244. Unspecific quotations, which may refer to written sources or oral informants, include certain "copies" (nusha pl. nusah), "physicians" (atibba<sup>°</sup>), and "people" (gaum), just as well as phrases like "they say" (dakarū) and "it is said" (zu'ima), see recipes 34 (twice), 54, 75, 134 (twice), 136, 183, 185, 193, 208, 280 (twice), 329.66 Finally, there is a small number of self-quotations and short personal statements which appear in either the first or the third person as "[lit.] I have tried it" (*ğarrabtuhu*), "in my opinion" (*indī*), "[lit.] he says" (*qāla*), and "[lit.] by him" (lahu), see recipes 29, 65 (twice), 89, 96, 159, 257 (twice), 309, 329, 393;<sup>67</sup> the phraseogram *lahu* is also used three times to claim the 'invention' of a drug by the author, see recipes 45, 217, 365.

Another question which needs to be dealt with is that of the health standard. A statistical evaluation of the material relating to pathology and anatomy, as it is normally found at the beginning of a recipe, will give us some information about what kind of health problems the people had who lived in Iraq in the 12th century CE. Putting aside all those conditions which can be identified as parasitic or systemic disorders (12.1%), complaints whose treatment falls rather under cosmetics, dietetics, or hygienics (6.3%), and injuries that result from accidents, warfare, or poisoning (3.7%), we can describe the specified diseases<sup>68</sup> as affecting or involving the

<sup>&</sup>lt;sup>66</sup> Sporadic mentions of "hospital(s)" ( $[b\bar{l}]m\bar{a}rist\bar{a}n[\bar{a}t]$ ), insofar as they involve drugs which belonged to the regular pharmacological stock of these institutions, may also be considered unspecific references, see recipes 21, 33, 34, 49, 67, 84, 137, 183, 230 (as a generic drug name), 277, 310, 329; likewise phrases such as "generally used" ( $ma'm\bar{u}l'$  'alaihi) or "remedy of traditional choice" ( $daw\bar{a}'$  as-sunna), see recipes 29, 34, 148.

 $<sup>^{67}</sup>$  Once, Ibn at-Tilmīd seems to quote himself by name but this could be a later addition to the text, see recipe 30.

<sup>&</sup>lt;sup>68</sup> The fact that the old Arab physicians did not always distinguish as sharply as the moderns do between a sign or a symptom on the one hand and the underlying disease on the other hand, is not a mistake in reasoning but inherent in the holistic system of humoralism; it also means, of course, that any data based on current medical criteria will necessarily comprise a number of ambiguous cases. For full details on pathology and anatomy in the text see technical terms 2.

gastro-intestinal tract	16.5%
eyes	11.9%
skin	10.1%
respiratory organs	7.3%
nervous system	6.4%
urinary tract	3.7%
blood vessels	3.3%
psyche	2.7%
liver	2.5%
teeth and gums	2.5%
reproductive organs	2.4%
brain	1.8%
spleen	1.8%
ear, nose and throat	1.8%
heart	1.1%
others	2.1%

As regards the clientèle for whom the drugs were prepared, we hardly get any direct information from the text itself. Considering its broad range of therapeutic applications, the dispensatory of Ibn at-Tilmīd is based on an inclusive design, covering not only the most common diseases of the time but also patients of all ages and walks of life, whether male or female. This observation is confirmed by the frequent occurrence of recipes which involve large quantities of ingredients and further by a number of preparations which are clearly linked to clinical settings—these drugs were made by professional pharmacists to meet the demands of public health institutions like hospitals, which were generally classless and free of charge.<sup>69</sup> However, as already indicated, explicit information about patients is scarce and only expressed in the shortest of terms—in fact, even the word "patient" ('alīl or marīd) occurs as such only three times in the whole text, see recipes 225, 269, 424; the "unborn" (ağinna), "children" (sibyān), "adolescents" (šabāb), a "breast-feeding pregnant woman" (*ġā'ila*), "old men" (*mašāyih*), the "ordinary" (ğumhūr), and "those who live a life of luxury" (mutrafūn) are mentioned by name about a dozen times altogether, see recipes 34, 48, 102, 120, 122, 179, 204, 298, 330, 346 (twice).

<sup>&</sup>lt;sup>69</sup> For "hospital" drugs cf. note 66 above; for a classic example see recipe 230. An isolated claim that the officials who oversaw the public markets in Baghdad obliged the drug retailers to abide by the dispensatory of Ibn at-Tilmīd is made by 'Alūčī Ta'rīh 109.

It has already been said that about 40% of compound drugs in the text carry a generic name, which may be Arabic in origin or derived from another language<sup>70</sup>—I have tried to establish etymologies for non-Arabic names in the notes to my translation. Yet there is a small number of foreign terms (eight drug names, two products, one substance) which Ibn at-Tilmīd himself, in a rather arbitrary fashion, felt inclined to explain: Persian, see recipes 174, 217 (twice), 251, 389; Greek, see recipes 56, 250, 296; and Syriac, see recipes 24 (twice), 258.

Turning to the pharmaceutical nomenclature proper, that is to say the various substances and products which form the core material of the dispensatory, an etymological investigation results in the following figures:

40.3%
30.1%
12.7%
5.6%
4.8%
6.5%

The only data currently available for comparison are based on similar evaluations of the pharmaceutical nomenclature in three Arabic dispensatories from the middle of the 3rd/9th century.<sup>71</sup> Here it would appear that in the course of the 300 years which separate these dispensatories from the dispensatory of Ibn at-Tilmīd, the process of terminological levelling in the Arab East had worked towards an average increase of Persian loan-words by 5% and a decrease of Greek loan-words by 4%, whilst the amount of Arabic, Syriac, and Sanskrit terms basically stayed the same. Whether this observation is generally applicable or merely down to the fact that Ibn at-Tilmīd spent so much time of his life in Persia, remains to be seen as future research into the lexicon of later Arabic dispensatories may be conducted. As regards the medical nomenclature, that is the various pathological and anatomical terms employed by Ibn at-Tilmīd, the number of non-Arabic contributions is, not surprisingly, just as low as it was three centuries earlier, i.e. roughly 2%.

<sup>&</sup>lt;sup>70</sup> Compare note 58 above.

<sup>&</sup>lt;sup>71</sup> See Kahl Sābūr<sup>2</sup> 24ff.

Finally, it seems worth noting that only once, in the context of a surgical procedure, Ibn at-Tilmīd explicitly refers to the "physician" (*tabīb*), see recipe 384; another time, he mentions in passing the "alchemists" (*aṣhāb al-kīmiyā*'), see recipe 389; and on one occasion, in the context of a minor operation, a patient is "put to sleep" (*nwm II*), see recipe 269. The somewhat ambiguous term *muğarrab*, here always translated "proven by experience", accompanies a small number of drugs, see recipes 19, 126, 257, 331, 393.

## d. Metrological Units

The weights and measures employed in the text can be divided into three groups:

Specific<sup>72</sup>

dāniq	0.52–0.74g [recipe 33 and passim]
dirham	3.125g [recipe 1 and passim]
istār	~20g [recipe 211]
kailağa	~680g [recipe 230 and passim]
makkūk	~2040g [recipe 230 and passim]
mann	~816g [recipe 116 and passim]
mi <u>t</u> qāl	4.46g [recipe 1 and passim]
qīrāț	0.223g [recipe 89 and passim]
rațl	~406g [recipe 43 and passim]
ūqīya	~33g [recipe 35 and passim]

Semispecific

cupful (uskurruğa) [recipe 288] fistful (qabḍa) [recipe 367 and passim] handful (kaff or ḥafna) [recipes 334, 400 and passim] jugful (dauraq) [recipe 174 and passim] mouthful (ğurʿa) [recipe 66] spoonful (milʿaqa) [recipe 114 and passim]

or when referring to the weight and/or shape of an

acorn (ballūṭa) [recipe 371] broad bean (bāqillāh) [recipe 111]

 $<sup>^{\</sup>rm 72}$  For basic conversions and comparative data still see Hinz Masse passim; for Arabic source literature on the subject see Ullmann Medizin 316–320.

chickpea (*ḥimmaṣa*) [recipe 49 and passim] hazelnut (*bunduqa*) [recipe 52 and passim] lentil (*ʿadasa*) [recipe 409] peppercorn (*fulfula*) [recipe 48 and passim] service fruit (*nawāh al-ģubairā*') [recipe 373] walnut (*ǧauza*) [recipe 126 and passim]

# Nonspecific

amount (*miqdār* or *taqdīr*) [recipes 69, 235 and passim] bunch (*bāqa* or *țāqa*) [recipes 138, 178 and passim] drop (*qaṭra*) [recipe 51 and passim] measure (*wazn*) [recipe 156] measure, standard ('*iyār*) [recipe 211] number ('*adad*) [recipe 171 and passim] part (*ğuz*') [recipe 5 and passim] portion (*ğuz*') [recipe 419] quantity (*miqdār* or *qadr*) [recipes 126, 297 and passim] quantity, relevant (*ḥasab*) [recipe 280] share (*maṯal*) [recipe 19 and passim]

# e. Pharmacological Apparatus

The following utensils, including also a few therapeutic auxiliaries, are mentioned in the text:

aludel (utāl) [recipe 389] bag of cotton, new (kīs kirbās ğadīd) [recipe 290] basket of palm-leaves, densely woven (zanbīl hūṣ ṣafīq an-nasğ) [recipe 226] bowl, earthen (bustūqa) [recipe 121] branch of palm-leaf, skinned (aṣl saʿafa maqšūra) [recipe 309] cauldron (tinğīr) [recipe 297 and passim] cauldron of stone (tinğīr ḥağar) [recipe 226] cloth (hirqa) [recipe 138 and passim] cloth, dark-blue (hirqa kuḥlīya) [recipe 378] cloth, double (hirqa nuḍāʿafa) [recipe 138] cloth, soft (hirqa nāʿima) [recipe 384] cloth of cotton (hirqa kattān) [recipe 207 and passim]

34

cloth of linen, double (*hirga kattān mudāʿafa*) [recipe 138] cloth of linen, thick (*hirga kattān safīga*) [recipe 183 and passim] cloth of linen, thin (*hirga kattān ragīga*) [recipe 208] cloth of silk (*harīr*[*a*])[recipes 22, 276 and passim] cooking-pot (*aidr*) [recipe 183 and passim] cooking-pot of baked clay and hair (*qidr maʿmūla min țīn wa-šaʿr mufahhara*) [recipe 55] cooking-pot of clay, new (*qidr hazaf ǎadīd*) [recipe 211] cooking-pot of stone (*qidr hağar*) [recipe 223] cup (uskurruğa) [recipe 288] fans (*marāwih*) [recipe 424] file, small-toothed (*mibrad daqīq an-naqš*) [recipe 121] flannel (labad) [recipe 342] flask (*qārūra*) [recipe 285 and passim] frying-pan, new (*miglan ğadīd*) [recipe 281] jug (barnīya or dauraq) [recipes 122, 174 and passim] jug of alabaster (*barnīya qawārīr*) [recipe 207] jug of china, broad (*barnīya sīnī wāsiʿa*) [recipe 121] jug of glass (barnīya zuǧāǧ) [recipe 221] knife (sikkīn) [recipe 229] knife, wooden (*sikkīn hašab*) [recipe 186] mortar (*hāwun*) [recipe 159 and passim] napkin (*qimāt*) [recipe 376] oven  $(tann\bar{u}r)$  [recipe 55 and passim] pestle (*dastağ al-hāwun*) [recipe 302] piece of barked fig-wood, fresh (hašaba min hašab at-tīn ratba ma'hūd *`anhā lihā'uhā)* [recipe 226] piece of hare's fur (wabar al-arnab) [recipe 388 and passim] piece of paper (*kāģid*) [recipe 339] piece of willow-wood, fresh (hašabat hilāf ratba) [recipe 226] piece of wood (*hašaba*) [recipe 280 and passim] pipette (*zarrāqa*) [recipe 377] plate of marble ([tabaq] ruhāma) [recipes 133, 134 and passim] plate of silver (*tabaq fidda*) [recipe 133] pot (*qidr*) [recipe 216 and passim] pot, double (*qidr muḍāʿafa*) [recipe 282] pot, earthen (*qidr fahhār*) [recipe 380] pot of stone (*qidr birām*) [recipe 376] pouch (*surra*) [recipe 206] receptacle (zarf) [recipe 138]

shred of linen (*hirga kattān*) [recipe 410 and passim] sieve (*munhal*) [recipe 32 and passim] sieve, fine-meshed (*munhal safiq*) [recipe 141] slab of stone (salāya) [recipe 310] spoon (*mil'aqa*) [recipe 114 and passim] stick, surgical (*mīl*) [recipe 257 and passim] stick of willow-wood, broad ('ūd hilāf 'arīd) [recipe 136] tampon (hamūl) [recipe 378] tampons of gauze (fital) [recipe 307] thread (*hait*) [recipe 372 and passim] threads of soft linen (huyūt kattān nāʿima) [recipe 395] trough (*iǎjāna*) [recipe 383] trough, green (*iǎjāna hadrā*') [recipe 174 and passim] trough of porcelain (*iǎjāna muġaddara*) [recipe 247] tube of reed (*unbūb min qasab*) [recipe 412] tube of silver (*unbūb min fidda*) [recipe 412] veil of cotton (*izār kirbās*) [recipe 290] vessel  $(in\bar{a})$  [recipe 74 and passim] vessel, tarred (*inā*' *muqaiyar*) [recipe 210] vessel of alabaster ( $qaw\bar{a}r\bar{r}r$ ) [recipe 212 and passim] vessel of brass (*inā*' *sufr*) [recipe 254] vessel of clay (*inā*' *hazaf*) [recipe 338] vessel of clay, new (*inā*' hazaf ǧadīd) [recipe 152] vessel of glass ([*inā*'] *zuǧāǧ*) [recipes 105, 133 and passim] vessel of glass, broad-brimmed (*inā*' zuǧāǧ wāsiʿ ar-ra's) [recipe 244] vessel of porcelain (*inā' muģaddar* or  $\dot{q}ud\bar{a}r[a]$ ) [recipes 116, 138 and 287] whetstone (misann) [recipe 263] whetstone, new (*misann ğadīd*) [recipe 121] wick (*fatīla*) [recipe 382 and passim]

# f. Applicative Categories

The following drug categories and/or forms of application occur in the text:

analgesic (*musakkin lil-wağa*<sup>°</sup>) [recipe 309] beverage (*šarāb*) [recipe 7 and passim] catapasm (*darūr* or *darīra*) [recipes 259, 374 and passim] cataplasm (*dimād*) [recipe 310 and passim]

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cautery (kaiy) [recipe 389] collyrium (*kuhl*) [recipe 256 and passim] condensation (' $aq\bar{l}d$ ) [recipe 237] coolant ( $bar\bar{u}d$ ) [recipe 247 and passim] corrosive (*akūl*) [recipe 383] decoction (*matbūh* or *tabīh*) [recipes 99, 158 and passim] dentifrice (*sanūn*) [recipe 396 and passim] desiccative (muǎaffif) [recipe 309] detergent (*ġasūl*) [recipe 329 and passim] diuretic (mudirr lil-baul) [recipe 52] dye (*hidāb*) [recipe 334 and passim] electuary  $(ma' \tilde{q} \bar{u} n)$  [recipe 75 and passim] 'elixir' (*iksīrīn*) [recipes 272 and 308] enema (*huqna*) [recipe 22 and passim] errhine (mus<sup>i</sup>t) [recipe 406] foot-wrap (*kafūfa*) [recipe 349] gargle (*ġarġara*) [recipe 408] 'hazelnuts' (banādiq) [recipes 20 and 53] *hiera* (*iyārağ*) [recipe 56 and passim] infusion  $(naq\bar{i})$  or  $naq\bar{u}$  [recipes 98, 244 and passim] injection (*tazrīq*) [recipe 379] laxative (mudirr) [recipe 339] linctus (*mitahtā*) [recipe 154] liniment (*marham*) [recipe 291 and passim] lohoch ( $la'\bar{u}q$ ) [recipe 61 and passim] narcotic (*muhaddir*) [recipe 309] nutritive (musammin or simna) [recipes 399, 400 and passim] oil (duhn) [recipe 280 and passim] ointment  $(til\bar{a})$  [recipe 323 and passim] ophthalmic  $(\check{s}iv\bar{a}f)$  [recipe 263 and passim] paste (*taly*) [recipe 328 and passim] pastille (qurs) [recipe 1 and passim] pill (habb) [recipe 48 and passim] plaster, adhesive (*lāzūq*) [recipe 388] polish ( $\check{q}il\bar{a}$ ) [recipe 393] potion (*šurba*) [recipe 1 and passim] powder (*saff* or *safūf* or *šiyāf*) [recipes 35, 76, 274 and passim] preserve (*murabban*) [recipe 218 and passim] purgative (mushil) [recipe 65 and passim]

rob (*rubb*) [recipe 2 and passim] snuff (*saʿūț*) [recipe 405 and passim] stomachic (*ğawārišn*) [recipe 50 and passim] suppository (*šiyāf*[*a*]) [recipes 371, 373 and passim] treacle (*tiryāq*) [recipe 129 and passim] unguent (*țilā'* or *masūḥ*) [recipes 21 and 406] vomitive (*muqaiyi'*) [recipe 339] wax-liniment (*qīrūțī*[*aš-šam'*]) [recipes 304 and 314]

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ومثك

Plate 1 MS. London *British Library* fol. 70a

بطالاء ادعاظ a job bas

Plate 2 MS. London *Wellcome Library* fol. 112b

بن دویسمجة دراهم سببر! مخشب صند لمقاصيرك ددهين كسعره باسه دراجين قشرا لمستخدا علا درجين دروبخ رومى درههن بهمناب وكهربا ويسبد ولولو غريتهو م کل واحد در میں زعف ن دانقان د ه ابترين وضده مباقنه بن كا واحد شتال با فوت احم لصف منقال ايريسم خام محرق في يستوفد مسدود ف الل س درهم تدق لادو به و شِصل المرهب ا ما ا ن تحک علیسی حدید و بخسل و اما ان نیز د عمر د ر فيع النقش وتجمع الجلله مسحوقه ثم بوُخذ من مآ ا التغاح المامص وتتاالا نزج مركل واحد حسته عسر ددها ومن السكراللوزي يتنوبين بدا - (لسُكَالَ ا وتكشط الدعنى وتعظى قوامرا لعسار ديومنع ي صبنى واسعماحتي نننغسر وسبتنعل عندا لحاجه مزخ دراهم الى خسة مناقبال م . . . . صفتا . 🛉 فالبلغم والس بنايا بالمعادي وتواجبها والمرائد الغابلة والمليك كالجى واصغروه

Plate 3 MS. Bethesda National Library fol. 23a

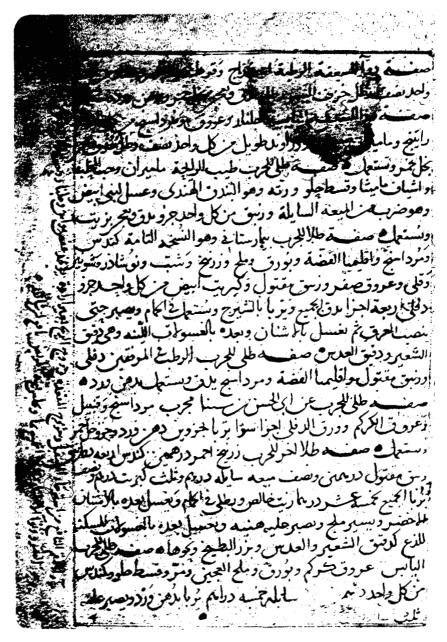


Plate 4 MS. Oxford Bodleian Library fol. 221a

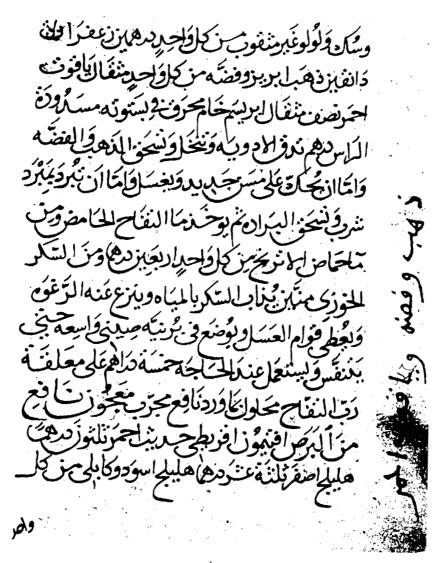
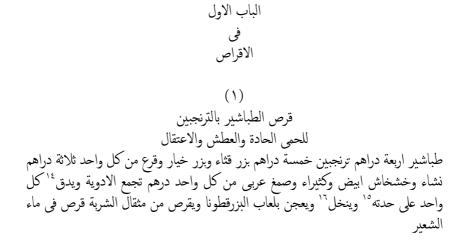


Plate 5 MS. Berlin *Staatsbibliothek* p. 42

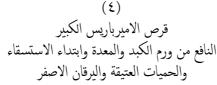
ARABIC TEXT

اقراباذين ابن التلميذ



- <sup>۱۱</sup> يدق: تىخل A ۱۰ حدته: حدة C <sup>۱۱</sup> وينخل: – A <sup>۱۷</sup> الدم: المده C ۱٬ حماض: حميض C " الامير باريس: الأمبر بارس D ۲۰ سبعة دراهم: - A
  - ۲ فنصوری: قیصوری E ۲۲ ویجفف: – BC

(۳) قرص الاميرباريس الصغير النافع من الحمى والعطش والكرب لحم حب<sup>٢٢</sup> الاميرباريس<sup>٢٢</sup> ورب السوس وطباشير من كل واحد ثلاثة دراهم سنبل الطيب درهمان بزر خيار ثلاثة دراهم ونصف ورد منزوع الاقماع ستة دراهم بزر بقلة وزعفران ونشاء وكثيراء من كل واحد درهمان كافور فنصورى نصف درهم يسحق ويعجن بماء الترنجبين ويقرص من مثقال ويجفف<sup>٥</sup>



لحم حب الاميرباريس الحديث ورب السوس وورد احمر وبزر القثاء وبزر البطيخ مقشر<sup>٢</sup>۲ من كل واحد ثلاثة دراهم مصطكى وسنبل الطيب وعصارة الغافت وفوة الصباغين ولك البسر وعصارة الافسنتين واسارون وفقاح الاذخر وبزر الشاهترج<sup>٢</sup>۲ وبزر هندباء وكشوث<sup>٢</sup>۲ وريوند<sup>٢</sup>۶ صينى وزعفران وطباشير من كل واحد درهمان ترنجبين ستة دراهم يحل الترنجبين بماء حار وتعجن به الادوية ويقرص من مثقال ويجفف ويستعمل

(٥) قرص السماق للزحير وقيام الدم ثمرة الطرفاء وسماق شامى وحب الآس وصمغ عربى وجلنار وقاقلة وافيون مصرى جزء جزء يعجن بماء التفاح ويقرص من درهم الشربة قرص واحد

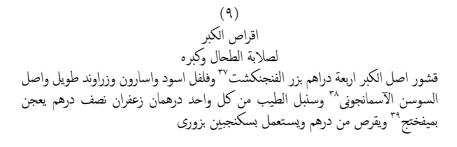
> ۲۳ حب: - B ۲۰ الامیرباریس: البرباریس C ۲۰ ویجفف: - AB ۲۳ الشاهترج: الشاهیرج E ۲۸ کشوث: الاکشوث E ۲۹ ریوند: راوند CDE

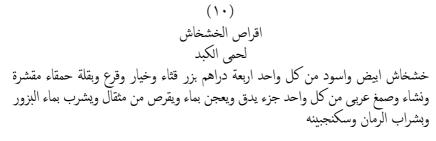
(٦) اقراص تشد البطن اذا كان انحلاله من ضعف الحشا ورقتها ورد وجلنار من كل واحد اربعة دراهم اقاقيا<sup>٣</sup> ثلاثة دراهم صمغ عربى وكثيراء من كل واحد درهمان قشار الكندر وعود هندى خام من كل واحد درهم سك وزعفران من كل واحد نصف درهم يدق ويجمع وينخل٣ ويعجن بماء الطلع او٣ البلح٣ او٣ الخس ويقرص من درهمين ويجفف في الظل ويستعمل



بزر البقلة الحمقاء وبزر قثاء وخيار وقرع مقشرة من كل واحد خمسة دراهم عصارة الاميرباريس الهشة او لحم حب الاميرباريس وخشخاش ابيض واسود من كل واحد سبعة دراهم بزر الخس وخشب الصندل الابيض المقاصيري وطباشير ولب حب السفرجل ونشاء وصمغ عربي من كل واحد اربعة دراهم سكر العشر<sup>٥٦</sup> ثمانية دراهم كافور فنصوري نصف مثقال يسحق كل واحد مفردا ويخلط ويعجن بلعاب بزرقطونا ويقرص من مثقال ويستعمل بماء بزر البقلة وشراب الرمان

- ۳۰ اقاقیا: قاقیا E
- " وينخل: BC
  - آ او: و B
- ۳۳ او البلح: C ۳۴ او: و B
- ۳° العشر: نبات D
- BCDE اسكنجبين: سكنجبين BCDE

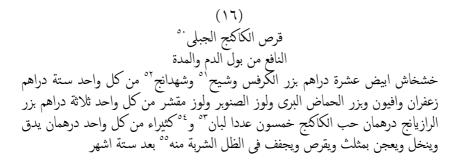




(١١) اقراص الجلنار سليخة وطين ارمنى وصمغ عربى من كل واحد اربعة دراهم اقاقيا وورد منزوع الاقماع وجلنار من كل واحد ثمانية دراهم كثيراء درهم ونصف يعجن بماء الجلنار الرطب<sup>. ع</sup> المطبوخ او ماء الورد ويجفف الشربة من درهمين<sup>١</sup>

 $(\mathbf{17})$ اقراص الاقاقيا النافعة من النزف وبول الدم ونفثه اقاقيا عشرون \*\* درهما سماق ثلاثة دراهم اقماع الرمان وجلنار وعصارة لسان الحمل من كل واحد درهمان ونصف طين ارمني مغسول وشاذنج مغسول \* من كلُّ واحد درهم قرن ايل محرق وكارباً<sup>53</sup> عظمى وبسد وودع وافيون من كل واحد درهم يقرص بماء من مثقال ويشرب بعد ستة اشهر برب الآس وكذلك كل قرص وغيره من المركبات المشروبات التي يقع فيها الافيون فانها انمائن تشرب بعد ستة اشهر ولا تستعمل قبل ذلك

- <sup>٤٤</sup> عشرون: اثني عشر C
- ° وشاذنج مغسول: C ۲ کاربا: کهربا BCD
- <sup>٤٧</sup> انماً: C
- <sup>۸</sup> جملة: من حیث کان C <sup>۱۹</sup> ستة: B V



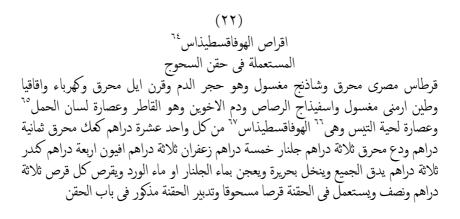
(۱۷) اقراص لبول الدم طین ارمنی عشرة دراهم کهرباء واقاقیا وجلنار وصمغ عربی من کل واحد عشرة<sup>ده</sup> دراهم عصارة لحیة التیس ثلاثة دراهم بزر البنج درهمان افسنتین<sup>۷۰</sup> درهم یدق وینخل ویعجن بماء ویقرص من درهمین

(١٨) اقراص الافسنتين النافعة من سدد الكبد انيسون وبزر الكرفس واسارون ولوز مقشر مر وافسنتين اجزاء سواء يدق وينخل ويعجن بماء ويقرص من مثقال ويشرب مسحوقا بسكنجبين



اصل السوسن الآسمانجوني اربعة دراهم فلفل ابيض سنبل الطيب اشق من كل واحد درهمان يدق وينخل وينقع الاشق بخل خمر وتعجن به الادوية الشربة منه وزن درهم مع سكنجبين البزور وهذا القرص قوى في اذابة صلابة^ الطحال مجرب

# (٢١) الاقراص المثلثة للصداع والسهر تطلى<sup>٥</sup> على الجبهة مر وافيون وبزر البنج وقشور اصل اللفاح ولفاح يابس اجزاء متساوية زعفران ثلث جزء يعجن بماء الخس وماء عنب الثعلب ويقرص مثلثة هذه<sup>٢</sup> انما تتخذ مثلثة لئلا يغلط<sup>٢</sup> فيها فتشرب وسبيلها ان تستعمل من خارج طلاء فقط وعساها غلط بها في بعض البيمارستانات<sup>٢</sup> فاحترس بتغيير<sup>٦</sup> شكلها بعد ذلك



<sup>40</sup> تطلى: يطلى C <sup>١٢</sup> هذه: هذا B <sup>١١</sup> يغلط: يغلظ C <sup>١٢</sup> البيمارستانات: البيمارستان A <sup>١٣</sup> الهوفاقسطيذاس: الهيوفاقسطنداس B، الهوقسطيذاس C، الهيوفقسطيداس D <sup>١٢</sup> وعصارة لسان الحمل: – B <sup>١٢</sup> هي: هو AC <sup>١٢</sup> الهوفاقسطيذاس: الهوفاقسطنداس B (۲۳) قرص لمن يتقيا طعامه ورد طباشير كمون منقع في خل خمر مجفف من كل واحد درهم سماق ثلاثة دراهم<sup>٢٨</sup> كسفرة منقعة في خل خمر مجففة محمصة درهمان سويق حب الرمان درهمان قشور الفستق درهم مصطكى نصف درهم يعجن بماء ورد ويشرب منه مثقال الى درهمين بشراب الرمان<sup>٢٥</sup> المنعنع

مر جندبيدستر `` سنبل سليخة طين مختوم قشور اصل اللفاح من كل واحد خمسة دراهم خشخاش ستة دراهم دوقو انيسون سساليوس `` بزر البنج الابيض ميعة بزر الكرفس من كل واحد درهم طلق اربعة دراهم يدق ويجمع ويقرص من نصف درهم ويجفف

(۲۸) قرص العود لدرد المعدة

ورد احمر منزوع الاقماع اصل السوسن محكوك من كل واحد خمسة دراهم مصطكى قاقلة سنبل الطيب ساذج هندى من كل واحد درهمان مرماحوز <sup>4</sup> وعود هندى من كل واحد درهم زعفران نصف درهم يدق ويعجن بماء ورد ويقرص من مثقال الشربة قرص بميبه

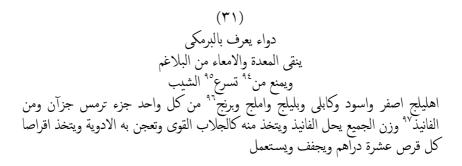
> <sup>۸۰</sup> جندبیدستر: جندباذستر D <sup>۱۸</sup> سسالیوس: سیسالیوس D <sup>۸۲</sup> درهم: – C <sup>۸</sup> غاریقون: اغاریقون BE <sup>۱۸</sup> مرماحوز: مرماجوز BE

لك منقى وفوة عيدان وانيسون وبزر كرفس وعصارة افسنتين او حشيشه ولوز مر مقشور وقسط مر وراشن يابس ودار صينى وزراوند طويل وعصارة الغافت او عروقه من كل واحد درهم يجمع ذلك كله ويسحق وينخل ويعجن بماء عذب ويقرص ويجفف فى الظل الشربة وزن مثقال بماء فاتر وسكنجبين<sup>^</sup> قال سابور بن سهل وجد فى نسخة اخرى بدل دار صينى راوند<sup>1</sup> صينى وزيادة عصارة برباريس ورب السوس مثل اجزاء البواقى من الادوية قال ولم يوجد فيها للراشن ذكر<sup>14</sup> له المعمول عليه هو الاول<sup>^^</sup>

(٣٠) اقراص اللك النافعة من ضعف الكبد والاستسقاء اللحمى مما اختاره الاجل<sup>44</sup> هبة الله بن صاعد بن ابراهيم<sup>٩</sup> ابن التلميذ<sup>٩</sup> ابهل لوز مر قسط فوة عصارة الغافت اسارون زراوند مدحرج جنطيانا<sup>٩</sup> من كل واحد درهم ونصف يتخذ اقراصا ويشرب منها مثقال بماء الاصول المتخذ<sup>٩</sup> من اصل الهندباء والكرفس والرازيانج والاذخر

> <sup>٨٨</sup> وسكنجبين: - B <sup>٢٦</sup> راوند: ززاوند A، ريوند B <sup>٩٨</sup> قال ولم يوجد فيها للراشن ذكر: - B <sup>٨٨</sup> هو الاول: هذا C <sup>٩٢</sup> بن ابراهيم: - C <sup>٩٢</sup> ابن التلميذ: - BC <sup>٩٢</sup> ابن التلميذ: - BC <sup>٩٢</sup> جنطيانا: حنطنايا A

<sup>۹۳</sup> المتخذ: المتخذه B



# (۳۲)

دواء نافع من الصرع تؤخذ الادوية المذكورة في الدواء البرمكي المذكور قبل هذا فتضاف اليها<sup>٩</sup> هذه الادوية<sup>٩</sup> اسطوخوذس<sup>١٠</sup> وبسبايج<sup>١</sup> ومصطكى وسليخة واسارون من كل واحد نصف جزء ويجعل الفانيذ مثل الجملة ويؤخذ الفانيذ فيرش عليه بعد دقه الماء الحار ويصب عليه منه اذا انحل ما يغمره ثم يصفى اذا ذاب بمنخل<sup>١</sup> وتعجن به الادوية ويتخذ اقراصا كل قرص عشرة دراهم الشربة قرصة<sup>٢</sup> محلولة في ماء حار سحرا

(٣٤) اقراص البنفسج المسهلة بنفسج درهمان تريذ اجوف درهم رب سوس اربعة دوانيق سقمونيا دانق^<sup>١٠</sup> وفي نسخة دانق ونصف والمعمول عليه في البيمارستانات<sup>٢٠</sup> دانق وفي نسخة انيسون وزن دانقين وليس يلقونه في هذا القرص المتخذ للجمهور

(٣٥) قرص بنفسج عن زهرون``` سكر عشر اواق بنفسج عسكرى ست اواق تربذ اوقية غاريقون``` ورب السوس من كل واحد نصف اوقية سقمونيا ثلث اوقية يدق الشربة من الجميع سفا``` اربعة عشر درهما

(۳٦) قرص بنفسج آخر عنه بنفسج مائة درهم رب السوس خمسة وعشرون درهما انيسون وملح هندي من كل واحد اثنا عشر درهما ونصف محمودة"`` عشرة دراهم الشربة منه اربعة دراهم

(۳۸) اقراص ايلاوس وتنفع التىء<sup>٧١٢</sup> عن برد المعدة والجوف بزر كرفس وانيسون من كل واحد ثمانية عشر درهما افسنتين اثنا عشر درهما سليخة اربعة وعشرون<sup>١١٢</sup> درهما مر وفلفل وافيون وجندبادستر<sup>١١٢</sup> من كل واحد خمسة دراهم يدق ويعجن بماء ويجفف في الظل ويستعمل بعد ستة اشهر الشربة درهم<sup>٢١</sup>

(٤٠) قرص مازریون آخر مازریون وافثیمون وتربذ<sup>۲۲۱</sup> من کل واحد درهم کمون کرمانی وملح هندی واهلیلج کابلی واصفر من کل واحد نصف درهم تجمع مسحوقة الشربة درهم<sup>۲۲۲</sup> بماء حار

(٤١) اقراص السنبل للورم<sup>٢٢</sup> العتيق في المعدة فقاح<sup>٢٢</sup> الاذخر سليخة ورد ريوند قصب الذريرة سنبل من كل واحد ثلاثة دراهم زعفران وانيسون وقسط وفلفل من كل واحد درهم مقل ازرق ثلاثة دراهم مصطكى درهمان اشق درهم يقرص الشربة في كل يوم مثقال بميفختج

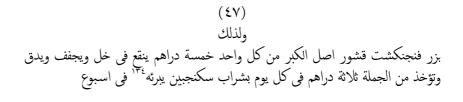
> ۱۱۷ القیء: + اذاکان C ۱۱۹ وعشرون: عشر C ۱۱۹ جندبادستر: جندبیدستر BC ۱۳۱ درهم: - B ۱۳۱ السفرجل: سفرجلی C ۱۳۱ درهم: درهمین C ۱۳۹ للورم: + الحار C ۱۴۹ فقاح: فاح C

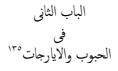
(٤٢) قرص للسعفة المزمنة زاج وملح محرقين وكبريت وتراب الزئبق وعفص وعروق ومرداسنج من كل واحد جزء يدق وينخل اللويعجن بماء ويقرص كل قرص من ثلاثة دراهم ويجفف اللويستعمل بعد ان يحك موضع السعفة ويطلى عليه خل خمر وعسل وملح واشنان اخضر

(٤٣) قرص للسعفة الرطبة اسفيذاج الرصاص وقنبيل وقرظ وطباشير وجلنار من كل واحد نصف رطل خزف التنور رطل يدق وينخل ويعجن بدهن ورد وخل خمر ويستعمل

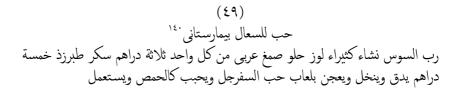
(٤٤) قرص للسعفة<sup>٢٨</sup> اليابسة جلنار وعروق الصباغين ومرداسنج من كل واحد جزء راتينج وعدس مر وماميران وزراوند طويل من كل واحد نصف جزء يدق ويعجن بخل خمر ويستعمل

( 27) وللطحال الصلب"" اسقولوفندريون يطبخ فى شراب ويصفى ويشرب على الريق اياما ويحله التضميد بالاشق والخل كالطين





( ٤٨) حب لسعال ١٣٦ الصبيان ١٣٧ الذين الح<sup>١٣٨</sup> بهم قيء<sup>١٣٩</sup> مع شدة سعالهم افيون درهم نشاء صمغ عربي رب سوس خشخاش ابيض من كل واحد درهم يدق ويعجن بلعاب بزرقطونا ويحبب كالفلفل ويوضع في الفم واحدة عند النوم لا يقصد بلعها



- ۲۳ الصلب: C
- <sup>۱۳٤</sup> يبرئه: شربة A
- <sup>١٣٥</sup> الأيارجات: الجوارشات E
  - <sup>١٣٦</sup> لسعال: السعال B <sup>۱۳۷</sup> الصبيان: – A
- ۱۳۸ الح: لح BC ۱۳۹ قيء: C ۱۴۰ للسعال بیمارستانی: السعال المارستانی B

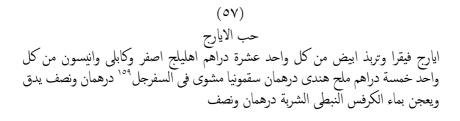
(٥٠) حب للسعال<sup>٤١</sup> مع سهولة الطبع نشاء<sup>٢٤</sup> كثيراء صمغ عربي لوز باقلي مقشور<sup>٢٤</sup> طين ارمني اجزاء متساوية ويعجن بلعاب بزرقطونا قال الشيخ ابو العلاء<sup>٤٤</sup> صاعد بن التلميذ في مداواة<sup>٢٤</sup> ملاسة المعدة وزلقها ان جوارشن<sup>٢٤</sup> الخرنوب بماء العوسج الرطب من اقوى مخشناتها ودونه قرص الجلنار برب<sup>٢٤</sup> الآس وجوارشن وسفرجل الممسك برب التفاح الحامض وتضمد المعدة بورد وعود وزعفران وقصب الذريرة وسعد ورامك معجونة بماء الآس<sup>٢٢</sup> وماء النعنع والغذاء من دراج او من طيهوج<sup>٢٤</sup> مطجن او مشوى فان ضعف عن هضمها فزيرباجة<sup>٢٥</sup>

(٥٢) مدر للبول بزر الكرفس فوة الصباغين بزر الجزر فطراساليون ابهل اسارون نانخواه رازيانج سنبل الطيب قسط لوز مر من كل واحد عشرة دراهم بزر البطيخ خمسة دراهم اشق ثلاثة دراهم يحل بشراب ويعمل بنادق الشربة وزن ثلاثة دراهم

(03) بنادق لحرقة البول وقروح المثانة بزر بطيخ عشرة دراهم بزر خيار خمسة دراهم بزر قرع خمسة دراهم بزر بقلة درهمان بزر بنج وبزر<sup>۲۰۲</sup> خطمی ولوز وکثيراء ورب السوس وخشخاش ابيض ونشاء وطين ارمنی وبزر کرفس من کل واحد درهمان<sup>۲۰۲</sup> يعجن بماء ويحبب ويستعمل

- ۱۹۲ ۱۹۳ وبزر: ىرىر A ۱۹۳ درهمان: + يدق و C ۱۹۴ مفتت: سفوف C

  - <sup>٥٥</sup> اصل: + لحاً A
- <sup>۱۰۲</sup> سکبینج: سکبفیخ D ۱۰۲ اربعة عشر: اربعین C
- <sup>۱۰۸</sup> يسجر: يشجر A، يسخن C



٥٨) حب الصبر صبر عشرة دراهم ورد واهلیلج کابلی ومصطکی من کل واحد خمسة دراهم زعفران درهم یحبب بماء الکرفس منقعا<sup>١٢٠</sup> فیه مقل الشربة درهمان ونصف

(٥٩) حب السورنجان صبر وسورنجان واهليلج اصفر من كل واحد جزء سقمونيا انطاكي سدس جزء الشربة درهمان ونصف

- <sup>۱۰۹</sup> السفرجل: + او التفاح C
  - <sup>۲۱.</sup> منقعا: منتقعا C
- <sup>۱۲۱</sup> ماهیزهره: ماهیزهرج D
- ۱۲۲ فاوانیا: فائیا C، + وهو عود الصلیب E ۱۲۳ شربة: + تامه C

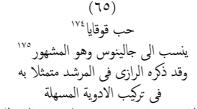
(٦٢) حب الاصطمخيقون<sup>٢٢</sup> حب البلسان وعيدان البلسان وسليخة وسنبل واسارون<sup>٢٢</sup> ودار صينى واصل الاذخر وزعفران ومصطكى وعود الوج وعصارة الافسنتين وزراوند مدحرج وملح هندى من كل واحد درهم صبر سقوطرى<sup>٢٢</sup> خمسة عشر درهما محمودة وغاريقون وشحم الحنظل من كل واحد اربعة دراهم تجمع مدقوقة منخولة وتعجن بماء الكرفس ويحبب كالفلفل الشربة درهمان بماء حار

(٦٣) حب نافع من الماليخوليا<sup>٢٢/</sup> افثيمون عشرون<sup>٢٦/</sup> درهما بسبايج عشرة دراهم غاريقون<sup>٢٦/</sup> عشرة دراهم خربق اسود درهمان ونصف ملح هندى درهمان ونصف اسطوخوذس<sup>٢٧/</sup> سبعة دراهم ايارج فيقرا خمسة عشر<sup>٢٧/</sup> درهما يجمع ويدق وينخل ويحبب الشربة ثلاثة دراهم الى اربعة<sup>٢٧/</sup>

 $(7\xi)$ 

حب الشبيار صبر ثلاثة دراهم مصطکی وورد من کل واحد درهم يدق ويحبب ويجفف"'' الشربة عند النوم مثقال الی درهمين

> <sup>١٦٢</sup> الاصطمخيقون: الاصطخيقون C <sup>١٦٦</sup> وسنبل واسارون: – C <sup>١٦٦</sup> سقوطری: اسقطری C، اسقوطری D <sup>١٦٢</sup> الماليخوليا: المالنخوليا B، الماخوليا E <sup>١٦٨</sup> عشرون: اثنی عشر C <sup>١٩٩</sup> غاريقون: اغاريقون D <sup>١٩٢</sup> الموخوذس: اسطوخوذوس D <sup>١٩٢</sup> الى اربعة: – B <sup>١٩٢</sup> ويجفف: – A



صبر ومصطكى وعصارة الافسنتين او ورقه وسقمونيا وشحم الحنظل اجزاء سواء يجمع بماء الكرفس الشربة من درهم ونصف الى درهمين له ان الدرهمين من هذا يكون فيها اربعة دوانيق سقمونيا وشحم حنظل مناصفة وهو قوى جدا ويجب عندى ان تكون الشربة من نصف درهم الى درهم حتى يكون فى النصف درهم<sup>٢٧1</sup> دانق منهما<sup>٧٧٢</sup> وهى شربة ضعيفة وفى الدرهم دانقان وهى شربة جيدة<sup>٢٧٢</sup> وعساه ان استعمل<sup>٢٧٢</sup> فى قوى قولنجى بلغ به الدرهمين كما ذكر<sup>٢٨</sup>

(٦٦) حب يخرج الدود وحب القرع سرخس وقنبيل وحب النيل وابرنج كابلى وترمس وتربذ ابيض واهليلج اصفر وشيح تركى'^' من كل واحد نصف رطل ويضاف اليه مثله سكرا ويدق ويحبب الشربة منه ستة دراهم وقبل تناوله يشرب نصف رطل لبن ماعز حليبا وبعده يتجرع جرع خل خمر

(٦٨) حب للبخر<sup>١٨٠</sup> من الذخيرة عود<sup>١٨٥</sup> وقرنفل ومصطكى بالسوية تعجن مدقوقة بصمغ محلول فى شراب ريحانى ويحبب ويوضع فى الفم

<sup>١٨٤</sup> للبخر: للنخر AB <sup>١٨٥</sup> عود: + نى BC <sup>١٨٦</sup> لمن: من C <sup>١٨٧</sup> الباذرنجبويه: البادرنبوه E <sup>١٨٩</sup> الفوذنج: الفوتنج B <sup>١٩٩</sup> باسور: ناسور C

(٧١) حب يصلح لليرقان في اكثر الاحوال غاريقون سبعة دراهم ايارج فيقرا ستة دراهم بزر الكشوث ستة دراهم اهليلج اصفر وبزر قطف من كل واحد خمسة دراهم افثيمون حديث واهليلج اسود من كل واحد اربعة دراهم ملح هندى بزر الفجل سقمونيا من كل واحد ثلاثة دراهم انيسون بزر الكرفس رازيانج من كل واحد درهمان يعجن بماء ورق الفجل النيء الشربة من درهمين الى مثقالين

> (۷۲) بنادق البزور قوية الادرار

بزر كرفس مو فو دوقو<sup>۹۴</sup> فطراساليون ابهل اسارون نانخواه بزر الرازيانج سنبل لوز مر من كل واحد عشرون درهما بزر بطيخ مقشور عشرة دراهم<sup>٩٥</sup> اشق ثلاثة دراهم يحل الاشق في شراب وتعجن به ويبندق الشربة ثلاث بنادق او خمس

- ۱۹۱ ثمانیة: ۹ B ۱۹۲ وزعفران: – C
- ۱۹۳ ساذج: شادج E ۱۹۴ دوقو: – A
- دوفو: A ۱۹۰ عشرة دراهم: درهم C
- <sup>١٩٦</sup> لحبّ: دواء لحبّ 'C

 $(Y \xi)$ دواء المسك الحلو ١٩٧ للخفقان وامراض السوداء وعسر النفس والصرع والفالج واللقوة والربع يؤخذ زرنباذ وذرونج^١٩ من كل واحد درهم لؤلؤ صغار ١٩ وكمرباء وبسذ وحرير خام محرق من كل واحد درهم ونصف بهمن احمر وبهمٰن ابيض وساذج ··· هندى وسنبل وقاقلة وقرنفل وجندبادستر واشنة من كل واحد نصف درهم زنجبيل ودار فلفل من كل واحد اربعة دوانيق مسك دانق ونصف تدق الادوية وتنخل بحريرة ونتت تعجن بعسل شهد خام لم تصبه نار للواحد ثلاثة اجزاء عسلا ويرفع في اناء ويستعمل بعد شهرين الشربة منه كالحمصة بشراب ريحاني

 $(\mathbf{VO})$ حب نافع من أكثر اصناف القولنج شحم حنظل سقمونيا `` من كل واحد درهمان صبر ثلاثة دراهم بورق مقل من كل واحد درهم يحبب الشربة من درهم الى مثقال ومن المعجونات النافعة في حل القولنج التمري والشهرياران"٢٠ وفي تسكين وجعه الفلونيا الرومي والفارسي زعم والمشهور عند غيره في ذلك الرومي خاصة وايارج فيقرا قوى المنفعة في تسكين غثيان القولنجيين

- ۱۹۷ الحلو: A
  - <sup>۱۹۸</sup> ذرونج: رووج E ۱۹۹ صغار: C
- ۲۰۰ ساذج: شادنج C
- ۲۰۱ بحریرة و: تحریر وتستعمل بعد ان A ۲۰۲ سقمونیا: محموده C

  - ۲۰۳ الشهرياران: الشهريارات C

. 11 11

 $(\gamma\gamma)$ سفوف الطين للسحج والخلفة الصفراوية بزر الريحان بزر لسان الحمل بزر حماض نشاء صمغ عربي بزر بقلة من كل واحد جزء طين ارمني وبزر الورد وجلنار من كل واحد جزء ونصف عن يحمص سوى الطين ويستف منه ثلاثة دراهم برب السفرجل الساذج

(YY)سفوف حب الرمان المقوى للمعدة والامعاء حب الرمان وحب الحصرم وحب العنب وحب الآس وخرنوب شامي" وخرنوب نبطى وبلوط وكسفرة أنأ منقعة في ماء السماق مجففة وسماق من كل واحد جزء قرظ وطرائيث من كل واحد جزء ونصف ثم يحمص الجميع ويدق ويستعمل الشربة ثلاثة دراهم

 $(\mathbf{V}\mathbf{Q})$ سفوف لاصحاب السعال مع خلفة شاه بلوط وقشور اللوز الاحمر الرقيق وخروب نقم شامى نا وخرنوب نبطى وطين ارمني مغسول وصمغ عربى ونشاء وبزر بقلة وخشخاش يحمص سوى الطين ويستعمل

(۸۰) سفوف ممسك للبول سعد سنبل اسطوخوذس''' كندر قشار الكندر جفت البلوط مشوى اجزاء سواء يدق ويجمع ويتناول منه بالغدوات''' مثقال وآخر النهار مثقال

(۸۱) سفوف يمسك البول السلس بلوط قشار الكندر مر راشن بالسوية يدق ويستف منه مثقال وقد يحبب بميفختج ويستعمل ويغتذي عليه<sup>٣١٢</sup> بمدققه سماق

رماد السرطانات النهرية عشرة دراهم صمغ عربى وطين قبرسى وخشخاش ابيض واسود من كل واحد خمسة دراهم كثيراء ثلاثة دراهم يدق ناعما الشربة وزن درهمين بلبن الاتن له اربعون درهما وقد يشرب بشراب عناب اوقيتين ويؤخذ منه ايضا فى آخر النهار مثقال مع شراب خشخاش

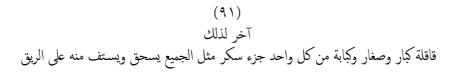
<sup>۱۱۱۲</sup> اسطوخوذس: اسطوخودوس C ۱۱۲ بالغدوات: بالعذاه B ۱۱۲ علیه: بعده C ۱۱۲ ملمه: الدم C ۱۱۲ منهما: منها A، – C ۱۱۲ یحمص: یدق C (٨٤)

سفوف المقلياثا البيمارستاني اهليلج كابلى وبلوط وجلنار وقرظ من كل واحد جزء حب رمان جزآن عفص نصف جزء يرض الاهليلج^`` والبلوط والعفص ويقلى بدهن ورد ويحمص حب الرمان ويدق ويستعمل

## (۲۸)

السفوف المسهل مع ماء الجبن اهليلج اصفر وصبر اسقوطرى وورد وكثيراء وسقمونيا مشوى <sup>٢٢٢</sup> في السفرجل وانيسون وحجر ارمنى مغسول<sup>٢٢٢</sup> وافثيمون وافسنتين واسطوخوذس<sup>٢٢</sup> وبزر الشاهترج وبسبايج ولسان الثور وتربذ وغاريقون يؤخذ منها ما يناسب الحال التى يسقى<sup>٢٢</sup> لها وتستف منه ثلاثة دراهم وقد يقتصر على ثلاثة دراهم من الاهليلج الاصفر مسحوقا كالكحل ملتوتا بدهن لوز طو مع مثله سكر يستف ويشرب عليه ماء الجبن وربما اخذ بالاهليلج<sup>٢٢</sup> الاسود الهندى مع دانقين ملح هندى وسقمونيا مشوى ويؤخذ للتبريد بسكر وطباشير واما المبدل مع ماء الجبن فقد يتخذ بطباشير<sup>٢٢٢</sup> ولحم حب الاميرباريس وورد وبزر قثاء وبزر خيار وقرع حلو مقشورة<sup>٢٢</sup> وبزر بقلة وخشخاش ابيض وصندل ابيض<sup>٢٢</sup>

(۸۷) دواء يسهل فضلا لزجا لعابيا زنجبيل وتربذ وسكر اجزاء سواء تجمع مسحوقة منخولة<sup>.۳۳</sup> وتستف الشربة درهمان بماء حار



(97) دواء ٢٤ يقطع شهوة الطين ونحوه من الاشياء الردية ويطرد الرياح كمون كرمانى وانيسون من كُلُّ واحد درهمان سُعد ونعنع نَّا يَابِس وفوتنج ٢٤ من كل واحد مثقال اهليلج كابلى وبليلج واملج منكل واحد ثلاثة دراهم تدق الادوية ويضاف اليها بوزنها سكر طبرزد الشربة درهم واحد بماء بارد

(93) سفوف آخر مسهل للسوداء يشرب بماء الجبن بسبايج وافثيمون منكل واحد درهمان اهليلج كابلي واسود منكل واحد خمسة دراهم لسان الثور وورق الباذرنجبويه من كل واحد ثلاثة دراهم حجر ارمني مغسول درهم الشربة من درهم الى درهمين اولا وضعفها آخرا

 $(9\xi)$ سفوف يعدُل مزاج كبد صاحب اليرقان بعد استفراغه ورد طباشير من كل واحد درهمان لك نصف درهم زعفران ريوند من كل واحد ربع درهم كافور دانق يؤخذ اذاكانت الطبيعة معتقلة بماء الاجاص والتمرهندي والترنجبين واذاكانت معتدلة فبسكنجبين

(90) قرص لذلك ايضا زرشك طباشير ورد منكل واحد ثلاثة دراهم بزر هندباء وقرع وخيار وبزر بقلة حمقاء وخس وصندل ابيض من كل واحد درهم كافور ربع درهم يقرص من درهمين

- <sup>۲٤۰</sup> دواء: سفوف BC <sup>۲٤۱</sup> نعنع: نعناع D
  - منع. تشعر م وفوتنج: C كد: A

(٩٦) دواء لمن فسد طعامه ولم ينحدر يلين البطن<sup>٤٤٢</sup> من غير لذع ولا اذى للمسيحى تين يابس ولباب القرطم من كل واحد جزء يدقان ويجعل فيهما شىء من الافثيمون الحديث مدقوقا ويستعمل بقدر الحاجة له اذاكان التين والقرطم مائة درهم منهما فليكن الافثيمون من عشرة دراهم الى عشرة مثاقيل وليؤخذ منه من عشرة دراهم الى<sup>٥٤٢</sup> خمسة عشر درهما

(۹۷) سفوف لخفقان القلب عن حرارة لب بزر قثاء وبزر خيار وقرع واميرباريس<sup>٢٤٦</sup> وطين ارمنى وورد وطباشير من كل واحد درهمان كهرباء وعود صرف من كل واحد درهم كافور فنصورى<sup>٢٤٢</sup> ربع درهم مصطكى ثلث<sup>٢٤٢</sup> درهم يدق الجميع ويستف منه عند الحاجة بماء التفاح او بماء الرمان

(۹۸) سفوف يقطع قيام الدم شاذنج<sup>٢٤٩</sup> وكهرباء ودم الاخوين وبسذ وشب يماني وجلنار وطين ارمني من كل واحد خمسة دراهم يدق ويستف مع نقيع السماق ويعطي منه سبعة ايام

(٩٩) سفوف مفتت للحصى بزر الخيار والقرع والقثاء والبطيخ وخطمى ورازيانج من كل واحد درهم حب القلت <sup>٢٥٠</sup> وصمغ الاجاص من كل واحد درهمان حجر يهودى نصف درهم يدق <sup>٢٥١</sup> وينخل ويشرب مع مطبوخ هذه صفته بزر الحسك درهمان يغلى باثنى عشر درهما ماء حتى يبقى النصف ويلقى عليه اوقية لعاب بزرقطونا وخمسة دراهم سكر ويدام عليه سبعة ايام

(۱۰۰) سفوف مفتت للحصى للبارد المزاج حب البلسان بزر الفجل قشور اصل الكبر قشور اصل الجاوشير لوز مر حب الغار اذخر سعد سنبل الطيب اسقولوفندريون حرمل جنطيانا رومى زراوند اسارون الحجر اليهودى قردمانا اشق مر سكبينج مقل فلفل وج اجزاء سواء تدق وتلت بدهن البلسان لتا جيدا وتعجن بالصموغ المذكورة في جملتها بعد حلها<sup>٢٥٢</sup> وتتخذ حبوبا الشربة منها وزن درهم مع دانق من رماد العقارب

(۱۰۱) سفوف آخر<sup>۲۰۳</sup> للحصی<sup>۲۰۲</sup> فی الحار المزاج لب حب القثاء والخیار والقرع والبطیخ وحمص اسود وبزر خطمی وبزر رازیانج ورماد العقارب من كل واحد ثلاثة دراهم صمغ الاجاص خمسة دراهم برشیاوشان<sup>۲۰۲</sup> ثلاثة دراهم قشور البیض المفرخ مكلسا وزن درهمین یدق ویجمع ویستعمل الشربة منه وزن درهمین بماء قد طبخ فیه بزر الحسك

> (۱۰۲) سفوف يفتت حصى الصبيان

ستوت يست حصى الصبيان بزر بطيخ عشرة صمغ الاجاص وحب القلت من كل واحد خمسة دراهم يجمع و<sup>٢٥٧</sup> يدق ويستعمل

(۱۰۳) سفوف<sup>۲۰۹</sup> لذيابيطا<sup>٢٥٩</sup> كسفرة يابسة ورد احمر من كل واحد خمسة دراهم حب الرمان الحامض عشرة دراهم حب الآس<sup>٢٦٠</sup> اربعة دراهم يحمص سوى الورد ويدق وينخل الشربة ثلاثة دراهم

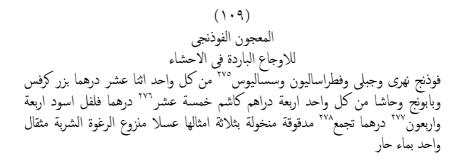


$$(\mathbf{1}\cdot \mathbf{\xi})$$

معجون يزيد في الباه بزر الجزر بزر البصل بزر الفجل بزر الجرجير بزر الرطبة لب حب القطن بوزيدان قسط حلو زنجبيل توذرى السنة العصافير ششقاقل<sup>٢٢٦</sup> بهمنان دار فلفل حلتيت جزء جزء يدق الجميع ويؤخذ منه غدوة ثلاثة دراهم وكذلك قبل النوم والغذاء اسبيدباجة<sup>٢٢٦</sup> بلحم سمين وباقلى وحمص وبياض البيض ودار صينى وخولنجان ومن السمك الكباب والمشوى

(۱۰۰) اصفر سلیم للخفقان السوداوی<sup>۲۲۲</sup> فلفل ابیض زنجبیل ملح هندی<sup>۲۰۰</sup> من کل واحد ستة دراهم افیون وجندبادستر وقرنفل ومصطکی وعاقر قرحا وقسط من کل واحد خمسة دراهم هزارجشان<sup>۲۲۲</sup> وهو الفاشرا<sup>۲۲۲</sup> وفاشرشتین وهو ششبندان<sup>۲۲۸</sup> وسعد وزرنباذ وذرونج وزراوند طویل من کل واحد درهمان دهن البلسان وماء الکافور من کل واحد اربعة دراهم تجمع مدقوقة منخولة وتعجن بعسل منزوع الرغوة ویوضع<sup>۲۲۹</sup> فی اناء زجاج ویترك دون الملآن

- <sup>۱۷۰</sup> الاصغر: الصغیر وهو یسمی جوارشن خوزی ایضا D ۱۷۱۱ الشربة ثلاثة دراهم: A ۱۷۲ ششقاقل: شقاقل DE ۱۷۴ توذری: بوذری C، توذرج D ۱۷۴ فاوانیا: فاونیا C



(۱۱۲) معجون<sup>۲۸۷</sup> مفرح حار<sup>۲۸۸</sup> للخفقان الحادث عن البرد ويسخن القلب ويقويه وكذلك يفعل بالمعدة قرفة قرنفل دار صينى سنبل الطيب جزء جزء اشنة اظفار الطيب نارمشك فرنجمشك<sup>۲۸۹</sup> من كل واحد جزآن زعفران مصطكى من كل واحد نصف جزء يسحق ويعجن بعسل منزوع الرغوة

خشخاش ابیض کزیرة <sup>۲۹۰</sup> یابسة بزر بطیخ حلو من<sup>5</sup>ل واحد ثلاثة اجزاء طباشیر ابیض ورد احمر لسان ثور من کل واحد جزء ونصف عصارة امیرباریس وطین مختوم من کل واحد جزء یسحق ویعجن بعسل قد ربی فیه الاهلیلج

(١١٤) مفرح<sup>٢٩١</sup> معتدل بهمنان من كل واحد خمسة اجزاء اهليلج كابلى منزوع النوى عشرون<sup>٢٩٢</sup> درهما شاهترج لسان ثور باذرنجبويه من كل واحد عشرة دراهم<sup>٢٩٢</sup> كسفرة وطباشير وطين مختوم من كل واحد ثلاثة دراهم ابريسم<sup>٢٩٢</sup> خام محرق غير مرمد<sup>٢٩٥</sup> بل يشيط فى محاره<sup>٢٩٢</sup> حتى يتفحم بحيث يتسحق<sup>٢٩٢</sup> وخشب الصندل المقاصيرى وجفت الفستق من كل واحد درهمان بسذ ولؤلؤ وكهرباء عظمى من كل واحد درهم عود هندى خام نصف مثقال تدق هذه الادوية وتخلط ويؤخذ من ماء التفاح والسفرجل العطر وماء حماض الاترج وماء الاميرباريس وماء

الرمان المز وماء الورد وسلافة الشراب الريحاني او الجمهوري من كل واحد ربع رطل تجمع المياه ويسبك بها ثلاثة ارطال سكرا نقيا وتكشط الرغوة ويعطى قوام العسل وتعجن به الادوية ويرفع ويؤخذ منه في كل يوم ملعقة<sup>٢٩٨</sup> نحو خمسة دراهم والغذاء عليه في اكثر الاحوال من زرشكية او زيرباج<sup>٢٩٩</sup> محلي

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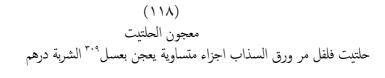
مفرح ياقوتى مصلح لسان الثور الجبلى وباذرنجبويه<sup>٢٠١</sup> وبزر فرنجمشك وبهمن احمر وابيض من كل واحد سبعة دراهم دار صينى وكزيرة يابسة وطباشير وكهرباء وبسذ وعود هندى خام وابريسم خام محرق كما وصفنا قبل من كل واحد وزن درهمين طين مختوم ولؤلؤ غير مثقوب من كل واحد مثقال زعفران درهم قرنفل درهمان زرنباذ وذرونج من كل واحد ثلاثة دراهم سحالة الذهب والفضة والياقوت الاحمر من كل واحد دانقان زرنب درهمان كبابة وقاقلة من كل واحد ثلاثة دراهم املج ينقع في الشراب الريحاني ويقلى<sup>٢٠٢</sup> بعد ذلك عشرون<sup>٢٠٢</sup> درهما ورد فارسى منزوع الاقماع خمسة دراهم<sup>٤٠٢</sup> جرادة الصندل المقاصيرى ثلاثة دراهم تدق الادوية نعما وتجمع ويؤخذ من عسل الاهليلج الكابلى المربى نصف رطل ومن الجلاب المعطى قوام العسل منا ونصف اكثره ومن الزبيب الرازقي المنقى من عجمه رطل واحد يدق الزبيب مرشوشا عليه ماورد وقليل شراب ريحانى حتى يتخبص جدا<sup>٥٠٠</sup> ويخلط به وبعسل الاهليلج والجلاب المقوى جميع الادوية ويساط<sup>٢٠٠</sup> جيدا حتى تستوى اجزاؤه ويرفع في اناء<sup>٢٠٠</sup> زجاج او مغضر ويستعمل من مثراب ريحاني الي ثلاثة كل يوم

- ۲۹۸ ملعقة: معلقه C ۲۹۹ زیرباج: زیریاج C
- ۲۰۰ لیکندی: آلکندی B ۲۰۰ باذرنجبویه: باذرنبویه E
- ۴۰۲ يقلي: ىعل C
- ۳۰۳ عشرون: اثنی عشر C
  - <sup>۳.</sup> خمسة دراهم: A
  - <sup>۳۰۰</sup> جدا: C
- <sup>۲۰۲</sup> یساط: ساط B، تشاط C <sup>۲۰۷</sup> اناء: – BC

/

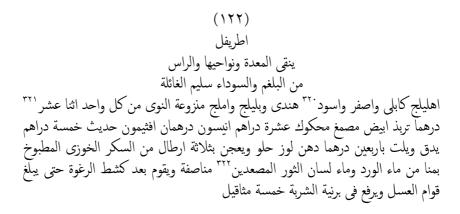
(1)

مفرح معتدل ايضا بهمنان اهليلج كابلى سنا شاهترج ورد<sup>٣٠٨</sup> لسان الثور اجزاء متساوية تعجن بعسل ثلاثة امثالها

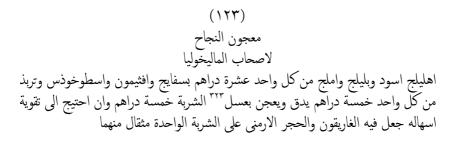


۲۰۸ ورد: ورق C ۲۰۹ بعسل: – A ۱۱۰ غیرها: + ایضا C ۱۱۳ غشرون: اثنی عشر C ۱۲۳ افربیون: اوفربیون B، فربیون C ۱۲۳ عشرون درهما: درهمین C ۱۴۲ ومسك: – C

مفرح بارد طباشير عشرة دراهم ورد منزوع الاقماع خمسة دراهم لسان الثور عشرة دراهم عصارة الاميرباريس خمسة دراهم طين رومى سبعة دراهم شير املج خمسة عشر درهما خشب صندل مقاصيرى درهمان كسفرة يابسة درهمان قشر الفستق الاعلى درهمان ذرونج رومى درهمان بهمنان وكهرباء وبسذ ولؤلؤ غير مثقوب من كل واحد درهمان زعفران دانقان ذهب ابريز فضة صافية من كل واحد مثقال ياقوت احمر نصف مثقال ابريسم خام محرق<sup>٢١</sup> فى بستوقة مسدودة الراس درهم تدق الادوية ويسحل الذهب والفضة<sup>٢١</sup> اما بان يحك على مسن التفاح الحامض ومن ماء حماض<sup>٢١</sup> الاترج من كل واحد خمسة عشر<sup>٢١</sup> درهما ومن التفاح الحامض ومن ماء حماض<sup>٢١</sup> الاترج من كل واحد خمسة عشر<sup>٢١</sup> درهما ومن السكر واسعة حتى يتنفس ويستعمل عند الحاجة من خمسة دراهم الى خمسة مثاقيل



- <sup>۳۱۹</sup> خمسة عشر: B ٤٠ ۲۲۰ اسود: - C
  - ۳۲۱ اثنا عشر: B ۲۰
- <sup>۳۲۲</sup> المصعدين: المصعد B



 $(17\xi)$ 

معجون ينفع من الصرع حب الغار اربعة دراهم سساليوس ثلاثة دراهم زراوند مدحرج درهمان اصل فاوانيا ثلاثة دراهم جندبيدستر درهمان اقراص الاسقيل درهم يعجن ويسقى منه ملعقة بماء العسل او سكنجبين عنصلى وعاقر قرحا وحده معجونا بعسل ينفع من الصرع

(170)

معجون يحفظ من السموم يؤخذ طين مختوم وحب الغار من كل واحد عشرة دراهم يدق وينخل ويعجن بسمن البقر وعسل منزوع الرغوة ويستعمل قبل الطعام وبعده

( ۱۲٦)

معجون نافع من البرص مجرب<sup>۳۲۴</sup> افثیمون اقریطی احمر ثلاثة عشر<sup>۲۲۰</sup> درهما اهلیلج اصفر اثنا وثلاثون<sup>۲۲۲</sup> درهما اهلیلج اسود وکابلی من کل واحد سبعة دراهم زبیب شدید الحلاوة منزوع العجم اثنا عشر<sup>۲۲۲</sup> درهما یدق الجمیع حتی یصیر مثل المخ ویسحق بدهن بنفسج او دهن لوز ویؤخذ منه فی کل غداة مقدار الجوزة وکذلك فی العشی

- <sup>۳۲۳</sup> بعسل: + منزوع C
- ۳۲۴ مجرب: B
- ۳۲۰ ثلاثة عشر: ۳۲۰
- <sup>۳۲۱</sup> اثنا وثلاثونّ: B ۲۳ <sup>۳۲۷</sup> اثنا عشر: ۲۰ B

(١٢٧) معجون نافع من التفزع والسوداء اهليلج اسود اثنا عشر <sup>٢٢٨</sup> افثيمون خمسة عشر حرمل وبزر الريحان ومرو ابيض وغاريقون وخربق اسود ولسان الثور من كل واحد خمسة عشر <sup>٣٢٩</sup> اسطوخوذس عشرة قرنفل درهمان باذرنجبويه وقسور الاترج وفرنجمشك من كل واحد ثلاثة دراهم جوز بوا وسك من كل واحد درهم يدق ناعما ويعجن بقشمش وعسل ويستعمل

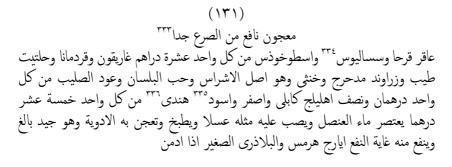
 $(17\Lambda)$ 

معجون نافع من اللقوة كمون كرمانى خمسة دراهم كندر مثقال زوفرا وهو الحزاء درهمان فلفل ابيض درهم قرنفل وجوز بوا وزعفران من كل واحد نصف مثقال يدق الجميع ناعما<sup>٣٣٠</sup> ويعجن بعسل منزوع الرغوة الشربة من درهم الى درهمين

(١٢٩) البلاذرى الكبير وهو ترياق الفالج والرعشة والسكتة خاصة وجميع العلل الباردة زنجبيل عاقر قرحا حبة السوداء قسط فلفل دار فلفل وج من كل واحد عشرة دراهم ورق السذاب وحلتيت<sup>٣٣</sup> وجنطيانا وزراوند وحب الغار وجندبيدستر وشيطرج وخردل من كل واحد خمسة دراهم عسل البلاذر خمسة دراهم وثلث يدق ناعما ويلت بدهن الجوز ويعجن بعسل منزوع الرغوة الشربة منه كالبندقة

(١٣٠) البلاذرى الصغير للبهق وضعف البصر والشيب والنسيان اهليلج اسود وبليلج واملج من كل واحد عشرة دراهم كندر وزوفرا<sup>٢٣٣</sup> وفلفل وزنجبيل وعسل البلاذر من كل واحد خمسة دراهم عسل النحل ما يجمعه الشربة كالاول وقد يزاد فيه وج وسعد وسنبل من كل واحد خمسة دراهم

- <sup>۳۲۸</sup> اثنا عشر: B ۲۰
- ۳۲۹ خمسة عشر: <sup>۵</sup> B
  - .rr ناعما: وىنخل B
- ۲۳۱ حلتیت: حلتیب C
  - <sup>۳۳۲</sup> زوفرا: زفرا B





وقشور الاترج الاصفر دون شحمه مجففا من كل واحد جزء خبث الحديد البصرى المدبر بالخل الثقيف<sup>٢</sup> والقلى ثلاثة اجزاء تدق هذه الادوية ناعما وتخلط وتؤخذ امثالها مجموعة من السكر الخوزى فيحل بماورد وتكشط الرغوة ويقوم حتى يلصق باليد قليلا وتنثر عليه الادوية ويساط<sup>٤٤</sup> حتى يتخذ الاجزاء ويدهن طبق فضة او رخامة<sup>٥٤</sup> بدهن ورد فائق ويبسط عليه الجوارشن ويقطع كالشوابير<sup>٢٤٦</sup> ويترك حتى يجف ويرفع في زجاج ويستعمل منه مثقال او<sup>٢٤</sup> مثقالان

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جوارشن السفرجل الممسك<sup>37</sup> يؤخذ سفرجل منقى الجوف مقشر وعسل منزوع الرغوة من كل واحد رطلان فلفل ودار فلفل وزنجبيل من كل واحد خمسة<sup>37</sup> دراهم هال<sup>60</sup> بوا درهم قاقلة وقرنفل وسنبل الطيب ودار صينى وزعفران من كل واحد درهمان تجمع هذه الادوية مدقوقة منخولة ويؤخذ السفرجل فيطبخ بشراب وهو الاصل او الجمهورى او مثلث او نبيذ الزبيب والعسل ومن الاطباء من يطبخه بخل عطر والشراب الريحانى هو اوفق ثم ينزل عن النار ويصفى حتى ينزل عنه ما فيه من الرطوبة ويدق ناعما ثم يؤخذ العسل الصعترى الفائق المصفى فيطبخ بنار لينة وتذر عليه الادوية ويخلط<sup>601</sup> حتى يستوى ويبسط<sup>601</sup> على رخامة<sup>601</sup> مدهونة بدهن ورد فائق ويقطع كالشوابير<sup>601</sup> كل واحد<sup>6001</sup> نحو اربعة مثاقيل ويدرج فى ورق الاترج ويرفع فى زجاج ومن

(170)جوارشن السفرجل المسهل يؤخذ سفرجل مقشر رطلان عسل منزوع الرغوة رطلان زنجبيل ودار فلفل منكل واحد اربعة دراهم دار صيني درهمان هال وقاقلة وزعفران من كل واحد ثلاثة دراهم مصطكي خمسة

۲۹۳ الثقيف: والتجفف B
 ۲۹۵ کند
 ۲۹۵ کند
 ۲۹۵ کنده کند
 ۲۹۵ کنده کنده
 ۲۹۵ کنده کنده
 ۲۹۵ کنده کنده
 ۲۹۵ کنده
 ۲۹۹ کنده
 ۲۹ کنده کنده
 ۲۹ کنده
 ۲۹ کنده</l

## ARABIC TEXT

دراهم سقمونيا عشرة دراهم تربذ ابيض ثلاثة عشر<sup>٣٥٧</sup> درهما تجمع مدقوقة منخولة ويطبخ السفرجل بالشراب او<sup>٢٥٨</sup> الجمهوري او نبيذ الزبيب و<sup>٣٥٩</sup> عسل ويفعل به كالذي قبله<sup>٣٦٠</sup> سواء ويرفع الشربة منه اربعة دراهم بماء حار

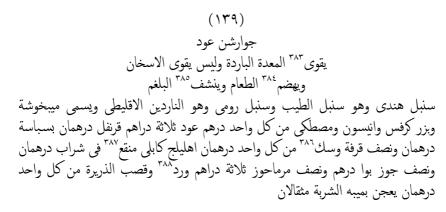
(١٣٦) جوارشن مفرح للكندى ورد ستة دراهم سعد خمسة قرنفل ومصطكى وسنبل واسارون من كل واحد ثلاثة دراهم<sup>٢٢٦</sup> قرفة وزرنب وزعفران من كل واحد درهمان هال وبسباسة و<sup>٢٢٦</sup> قاقلة وجوز بوا من كل واحد<sup>٢٢٦</sup> درهم يسحق وينخل بحريرة ثم يؤخذ املج رطل فيطبخ بتسعة ارطال ماء حتى يبقى ثلثه ويلقى عليه نصف رطل عسل النحل ويطبخ حتى يغلظ وتنثر عليه الادوية ويحرك بعود خلاف عريض ويرفع الشربة مثقالان ونصف وقد يلقى فى الادوية<sup>٢٢٦</sup> فرنجمشك وباذرنجبويه ولؤلؤ وساذج من كل واحد درهمان وقد يضاف اليه دانق مسك وقوم يجعلون البسباسة والقاقلة وجوز بوا درهمين درهمين

(۱۳۷) جوارشن ينفع<sup>٣٦</sup> من سلس البول وهو<sup>٢٢٦</sup> ماسك البول<sup>٢٣٧</sup> مارستاني سعد سنبل اسطوخوذس كندر قشار الكندر بلوط جفت البلوط كمون اجزاء سواء الشربة<sup>٣٦٨</sup> غدوة مثقال ومثله عشية

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(۱۳۸) دواء الخبث المسمى فنجنوش عن رجاء الاصفهانى<sup>۳۱۹</sup> نافع من<sup>۳۷۰</sup> ضعف المعدة والكبد

محسن اللون<sup>177</sup> محسن اللون<sup>177</sup> املي من كل واحد خمسة <sup>177</sup> املج منقى من كل واحد سبعة دراهم اميرباريس وسماق وورد وشاهترج من كل واحد خمسة <sup>177</sup> دراهم بزر الرازيانج والهندباء والكشوث المجفف البغدادى وكسبرة يابسة وكمون كرمانى من كل واحد ثلاثة قراريط<sup>07</sup> طراثيث وصندل مقاصيرى من كل واحد درهمان يدق الجميع جريشا ويصير<sup>177</sup> فى خرقة كتان مضاعفة ويؤخذ من خبث الحديد البصرى المتفتت<sup>177</sup> الهش<sup>177</sup> الخفيف المنقع فى الخل اربعة عشر يوما المجفف بعد ذلك المقلو نصف رطل ويسحق ويصير<sup>174</sup> فى خرقة مضاعفة وتعلق الخرقتان فى آنية غضار ويصب عليهما<sup>177</sup> من الرائب الطرى رطل ونصف وتلقى فيه<sup>171</sup> هذه البقول سذاب وكوفس ونعنع وباذروج ورازيانج رطب<sup>174</sup> من كل واحد باقة لطيفة ويترك يوما وليلة ثم يصفى عنه كل يوم نصف رطل بعد ان تمرس الخوتان فيه دفعات وتندر عليه هذه الادوية وهى طباشير ابيض وعصارة الاميرباريس الهشة وريوند صينى من كل واحد درهم لك منقى وجلنار فارسى من كل واحد نصف مثقال تسحق ويذر عليه من كل نصف مثقال كل يوم ويتناول وتجدد البقول فى كل ثلاثة ايام والرائب كل يوم بدل المشروب نصف مثقال كل يوم ويتناول وتجدد البقول فى كل ثلاثة ايام والرائب كل يوم بدل المشروب نصف مثقال كل يوم ويتناول موجدد البقول فى كل ثلاثة ايام والرائب كل يوم بدل المشروب نصف مثقال حل يوم يونياول وتجدد البقول فى كل ثلاثة ايام والرائب كل يوم بدل المشروب نصف مثقال كل يوم ويتناول وتجدد البقول فى كل ثلاثة ايام والرائب كل يوم بدل المشروب نصف مثقال حل يومين او ثلاثة بالرائب حتى لا يتكرج وينظف راس الاناء من المشىء نصف مثقال مرات فى اليوم ويكون موضعه بالنهار فى مكان ريح وفى الليل مكشوفا اناءه للهواء مستورا بخرقة



 $(1 \epsilon \cdot)$ 

جوارشن عود لابن سینا هال وزنجبیل ودار صینی وسلیخة وزعفران وفلفل وفلنجمشك وزرنباذ من كل واحد خمسة دراهم سعد وزرنب وساذج<sup>۳۸</sup> هندی وقرنفل من كل واحد ثلاثة دراهم عود خام سبعة دراهم عنبر مثقال لازورد مثله كافور دانقان تربذ اربعة دراهم ملح هندی درهم<sup>۳۹</sup> يسحق الجميع ويتخذ جوارشن بعسل او<sup>۳۹1</sup> سكر

سكر ابيض نصف رطل يدق الجميع وينخل بمنخل صفيق ويعجن بعسل منزوع الرغوة ويستعمل عند الحاجة الشربة اربعة مثاقيل

(۱٤۲) جوارشن عود عود هندی ثلاثة دراهم قشور الاترج الاصفر بشحمه درهمان دار صینی وانیسون من کل واحد درهم زعفران نصف درهم سکر منا

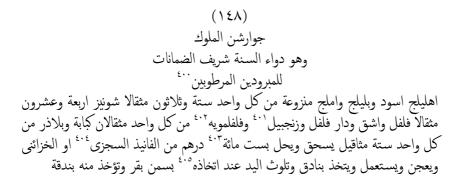
(١٤٣) جوارشن عود آخر زنجبيل درهمان دار صينى ثلاثة دراهم مرماحوز ثلاثة دراهم انيسون ثلاثة دراهم مصطكى درهمان زعفران درهم عود خمسة دراهم بسباسة درهمان زرنباذ درهمان سكر منا شراب ريحانى رطل يطبخ وتجمع الادوية مسحوقة وتتخذ وتلف فى ورق الاترج

<sup>۳۹٤</sup> ثلاثون: ثلاثة عشر C

۳۹۰ للحصر: للخصر B

(۱٤٦) جوارشن لضعف المعدة مع برد<sup>۳۹٦</sup> نانخواه كندر<sup>۳۹۷</sup> دار صينى مصطكى عود نىء قشور فستق يعجن بعسل وماء الاملج المطبوخ

(١٤٧) جوارشن البزور النافع من نفخ المعدة كروياء<sup>٣٩٨</sup> وانيسون وكمون كرمانى وقاقلة كبار وقرفة ونانخواه وبزر كرفس من كل واحد درهمان قرنفل وقاقلة صغار من كل واحد نصف درهم زنجبيل ودار فلفل من كل واحد<sup>٣٩٩</sup> دانقان سكر عشرون مثقالا يجمع ويستف عند الحاجة درهمان



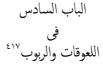
(١٤٩) جوارشن المسك<sup>٢٠٦</sup> لبرد الاحشاء ولخفقان القلب<sup>٢٠٢</sup> مسك نصف مثقال دار صينى وجوز بوا وقرفة وقاقلة صغار وقرنفل وخولنجان ودار فلفل وعود هندى من كل واحد نصف اوقية زعفران درهمان سكر طبرزذ نصف رطل يجمع الجميع ويدق وينخل ويؤخذ عسل مقدار الحاجة ويغلى وتنزع رغوته وتذر الادوية عليه ويلقى على رخامة<sup>٢٠٢</sup> ويبسط ويقطع شوابير

(۱۵۰) جوارشن طیب مسهل تربذ درهمان قرنفل وجوز بوا وزعفران وعود من کل<sup>۰۰۰</sup> واحد دانقان سقمونیا قیراط یدق وینخل ویعمل جوارشن بعسل الطبرزذ وهو شربة واحدة

- <sup>٤٠٦</sup> المسك: الممسك B
  - <sup>٤.۷</sup> القلب: الفواد C
  - <sup>۲۰۸</sup> رخامة: زجاجه C ۲۰۹ کل: – A
- دري النانخواه: النخواه C
  - <sup>٤١١</sup> ينفع: تنفع A
- یسی سے در ۱۲ درهمان: ۲۰ B، اثنی عشر درهم C
  - <sup>٤١٣</sup> عَسَل: بعسل A

ويلقى على رخامة ويبسط ويقطع شوابير ويرفع فى اناء خزف جديد الشربة ثلاثة مثاقيل الى خمسة

(۱۵۳) جوارشن يسهل<sup>٤١٤</sup> البلغم هال وانيسون من كل واحد درهم دار صينى وملح هندى وسقمونيا من كل واحد نصف درهم<sup>٢١٥</sup> دار فلفل خمسة قراريط سكر اربعة دراهم يدق ويعمل جوارشن الشربة اربعة دراهم بماء فاتر<sup>٢١٦</sup>



(١٥٤) مطحثا<sup>٢١٩</sup> اللوز للسعال وخشونة الحنجرة صمغ عربى ونشاء وكثيراء ورب السوس وفانيذ سجزى<sup>٢١٩</sup> من كل واحد جزء لب حب السفرجل ولب حب القرع الحلو ولوز حلو مقشور من كل واحد نصف جزء يدق نعما ويعجن بجلاب ويستعمل عند الحاجة مع دهن لوز حلو

(۱۵۵) دیاقوذ<sup>۲۰</sup> لسابور<sup>۲۱</sup> بن سهل<sup>۲۲۲</sup> خشخاش ابیض عشرة دراهم خشخاش اسود عشرة دراهم بزر خطمی وکثیراء وصمغ عربی وبزر خبازی<sup>۲۳۵</sup> وبزرقطونا وحب السفرجل من کل واحد خمسة دراهم اصل السوس محکوك

مرضوض درهمان<sup>٢٢٤</sup> ينقع الجميع بخمسة ارطال ماء المطر يوما وليلة ويطبخ حتى يذهب نصف<sup>٢٢٤</sup> الماء ويصفى على رطلين سلافة ورطل فانيذ خزائنى ويعقد بنار لينة حتى يصير له قوام اللعوق ويرفع ويستعمل

(١٥٦) لعوق العنب خشخاش ابيض خمسون<sup>٢٢</sup> درهما يدق يسيرا ويطبخ مع برشياوشان عشرون<sup>٢٢3</sup> درهما رازيانج ربع<sup>٢٢</sup> بزر الخبازى وبزر الخطمى من كل واحد نصف ربع<sup>٢٩</sup> سبستان ربع<sup>٢٠</sup> اصل السوس<sup>٢١</sup> عشرة دراهم حب السفرجل عشرة دراهم يطبخ الجميع بعشرة ارطال ماء المطر بعد انقاعه فيه يوما وليلة حتى يذهب النصف ويصفى على سلافة العنب النضيج بوزنه وفانيذ خزائنى مثل نصف السلافة ويعقد حتى يصير له قوام اللعوق ويلقى عليه بعد الطبخ كثيراء<sup>٢٠</sup>

(۱۵۸) لعوق نافع من الربو لوز مقشر خمسة دراهم برشياوشان درهمان<sup>٢٢</sup> رب السوس درهم حب الصنوبر الكبار<sup>٢٣٤</sup> وفستق من كل واحد ثلاثة دراهم بزر الرازيانج وزوفا يابس من كل واحد مثقال حب<sup>٣٣٤</sup>

## ARABIC TEXT

الكرسنة والحلبة من كل واحد درهمان تجمع مدقوقة<sup>٣٦</sup> بعسل او طبيخ التين ويستعمل ذلك بماء الزبيب او بماء العسل من مثقال الى مثقالين من المعجون وليكن ماء الزبيب و<sup>٣٢</sup> العسل حارا

(١٥٩) لعوق الزوفا لاصحاب الربو<sup>٢٦</sup> زوفا يابس وفراسيون وبزر الرازيانج من كل واحد ثلاثة دراهم برشياوشان ورب السوس من كل واحد سبعة دراهم صمغ البطم وحلبة من كل واحد درهمان زبيب منزوع العجم عشرون<sup>٢٦</sup> درهما تستحق الادوية وينقع الزبيب والصمغ بميفختج ويسحق في الهاون ويعجن بعسل منزوع الرغوة رطل يستعمل عند الحاجة الشربة وزن مثقال مع طبيخ التين ودهن اللوز المر له الشربة لاصحاب الخلط الغليظ أكثر مما ذكرنا <sup>٢٤</sup> بكثير

(١٦٠) لعوق ينقى البلغم الغليظ من الصدر مر صاف وعسل اللبنى واصل<sup>نئ</sup> السوسن الآسمانجونى من كل واحد ثلاثة دراهم عسل الزبيب المنقى والتين والسكر يصفى من مجموعها نصف رطل يخلط وتؤخذ منه ملعقة ليلا

(١٦١) رب السفرجل يطبخ ماء السفرجل حتى ينقص<sup>٢٤٢</sup> الربع ويصفى ويترك حتى يتم صفاؤه ويعاد طبخه حتى يبقى النصف اعنى من الماء الاول

> (۱٦٢) رب التفاح يغلى ماؤه حتى يبقى الربع ثم يرفع وقد يحتاج<sup>٤٤؟</sup> ان يشمس اذاكان رقيقا

> > <sup>۲۳۱</sup> مدقوقة: مسحوقه C <sup>۲۳۷</sup> و: او C <sup>۲۳۸</sup> الربو: السعال C <sup>۲۹۸</sup> عشرون: اثنی عشر C <sup>۱۹۵</sup> نخر AB <sup>۲۹۱</sup> ینقص: یبقی AB <sup>۲۹۱</sup> یحتاج: + الی B

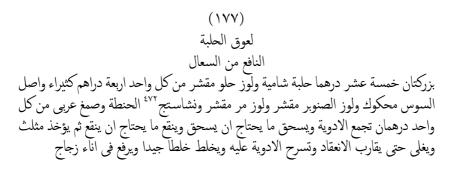
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(۱٦٣) رب الرمان الساذج يعتصر<sup>يي</sup> الرمان المز النضيج ويغلى ماؤه حتى يبقى الربع ويشمس وكذلك<sup>مي</sup> رب الحصرم فاذا اردت اخذ هذه الربوب محلى فاطبخ الماء حتى يبقى النصف والق على ما يبقى مثله من السكر وقومه

(١٦٩) رب الخشخاش الابيض يرض الخشخاش الابيض<sup>٢٥٢</sup> كما هو بقشره ويعتصر ويصفي<sup>٢٥٣</sup> ويسبك بذلك الماء<sup>٤٥٤</sup> مثل نصفه سكر ويقوم

لعوق عنب للربو<sup>60ئ</sup> بزر الرازيانج خمسة دراهم سساليوس درهمان تين شاهنجير خمس عشرة حبة عددا يطبخ ذلك في منا سلافة عنب نضيج مع نصف رطل من سكر خوزي حتى يبقى النصف ويصفى ويضاف اليه رب السوس مسحوقا عشرة دراهم ويقوم

 $(1 \vee 1)$ 



(NVA)

لعوق المنجح ورد وسويق الغبيراء<sup>٢٧٦</sup> وقشور الفستق الاعلى وحب الرمان وحب الاميرباريس من كل واحد خمسة عشر<sup>٢٧٤</sup> درهما سماق سبعة دراهم نعنع<sup>٢٧٥</sup> وآس طاقتان<sup>٢٧٦</sup> يطبخ بثلاثة ارطال ماء الى ان يبقى رطل ويصفى ويضاف اليه ماء التمرهندى وماء الليمو وماء الحصرم وماء السفرجل وخل خمر من كل واحد خمسة عشر درهما يجمع ويضاف اليه منوان سكر طبرزذ ويغلى حتى يصير له قوام ثم يرفع الى الشمس حتى يصير له قوام<sup>٢٧٩</sup> اللعوقات ويرفع

## (۱۷۹) لعوق للصبيان ويسقون منه مع لبن النساء للحرارة والخشونة في الصدر رب السوس وكثيراء وصمغ عربي وفانيذ من كل واحد ثمانية<sup>٢٧٩</sup> دراهم لعاب حب السفرجل.

درهمان سكر طبرزذ خمسون درهما يحل الفانيذ والسكر بماء عذب ويطبخ حتى ينعقد ويدق ما يجب دقه من الادوية ويلقى عليه ايضا قليل دهن لوز حلو ويضرب حتى يختلط ويرفع

> <sup>۲۷۲</sup> نشاستج: نشاشیح B <sup>۲۷۲</sup> الغبیراء: الغنیرا B <sup>۲۷۶</sup> عشر: – A <sup>۲۷۲</sup> نفج: – A <sup>۲۷۲</sup> طاقتان: طاقات B، من کل واحد طاقه C <sup>۲۷۷</sup> حتی یصیر له قوام: – C <sup>۲۷۷</sup> ثمانیة: سبعة C

 $(\Lambda \cdot)$ لعوق الرمان الامليسي يؤخذ ماء الرمان ويغلى وتنزع رغوته فاذا نقى يلقى عليه النصف من وزنه سكر طبرزذ ويوقد تحته بنار لينة الى ان يصير له قوام اللعوق وربما اضيف اليه صمغ عربي ونشاء وكثيراء من كل واحد نصف العشر ٤٧٩ من ماء الرمان

 $(1 \land 1)$ لعوق للسعال القديم والبحوحة بم سليخة ولبان من كل واحد عشرة دراهم اصل السوس درهمان مر وسنبل وكثيراء من كل واحد اربعة دراهم عسل بقدر الحاجة (٢٠ يدق ناعما ويعمل كاللعوقات

 $(1\Lambda T)$ لعوق للسعال اليابس لوز حلو ولوز مر مقشران وميعة سائلة وبزركتان وانيسون وكثيراء وصمغ عربي من كل واحد اربعة دراهم سكر وفانيذ منكل واحد خمسة دراهم يدق ويعجن بماء الرازيانج الطري ويرفع

- <sup>٤٧٩</sup> العشر: للعشر B
- <sup>٤٨.</sup> البحوحة: البحبوحه C
- ٤٨١ الحاجة: الكفاية BC
  - <sup>٤٨٢</sup> عمل: عمله C
- <sup>۸۸۳</sup> زهرون: + القس C، بهرون E <sup>۸۸۴</sup> مکی: A

  - ۵۸۰ منقی: + من خشبه BC

ARABIC TEXT

اربعة دراهم صندل غير محكوك احمر وابيض مقاصيرى من كل واحد اربعة دراهم يجمع ويرض ما يرض منه وتنقع في اربعة امثالها ماء عذبا يوما وليلة ثم يطبخ بنار لينة<sup>٢٨3</sup> حتى يبقى الربع ويمرس ويصفى بخرقة كتان صفيقة ويرد الى القدر ويلقى عليه خل خمر مقدار رطلين ومن ماء الرمان<sup>٢٨4</sup> الحامض والحلو من كل واحد رطل ويطبخ بنار هادئة حتى يصير له قوام ما ويلقى عليه منا سكر طبرزذ ويترك على الجمر<sup>٢٨4</sup> حتى تعلو رغوته فتنزع ويحط عن النار ويذاف<sup>٢٨4</sup> فيه ثلاثة دراهم كافور فنصورى وثلاثة دراهم زعفران شعر<sup>٢٩4</sup> مسحوقين نعما ويرفع في اناء زجاج الشربة من درهم الى ثلاثة دراهم

( ) ) ( )

شراب الورد يؤخذ من الورد الاحمر<sup>611</sup> جزء فيطبخ في عشرة اجزاء ماء حتى يذهب من الماء جزء ويعصر الورد ويعاد غوصه<sup>611</sup> كذلك عدة نوب على حسب ما يراد قوة اسهاله فاكثره ان يبقى عشر الماء واقله ان يبقى نصفه ثم يؤخذ<sup>611</sup> من الماء الذى كرر فيه الورد فيسبك به مثله سكرا نتيا ويعطى قوام السكنجبين الشربة اربع اواق مع ثلاثين درهما من الثلج<sup>611</sup> فيسهل الصفراء بالعصر ويعين<sup>613</sup> عصره الثلج<sup>611</sup> ويسهل اخلاطا رقيقة من غير الصفراء



(۱۸۷) شراب<sup>۲۰۰</sup> اللیمو<sup>۷۰۰</sup> یغلی ماء اللیمو حتی یذهب نصفه<sup>۸۰۰</sup> ویطرح علی ما بقی مثله سکر ویحکم ویرفع فی اناء<sup>۰۰۰</sup> زجاج

 $(\Lambda \Lambda \Lambda)$ 

<sup>۱۵</sup> ينحكم: + ويرفع C

(۱۸۹) السکنجبین البزوری بزر الکرفس والرازیانج وانیسون من کل واحد جزء یرض ویغلی بعشرة اجزاء خل حاذق حتی یذهب النصف ویصفی ویسبك بکل ثمانی اواق من الخل منا سکر

يتخذ من بزر الهندباء على تلك النسبة بان يغلى جزء منه مرضوضا في ثلاثة امثاله او زيادة من الخل حتى يتنصف ويصفى<sup>٢١°</sup> ويسبك به السكر<sup>٧١°</sup> وقد يضاف الى ذلك اصول الهندباء مرضوضة بعد غسلها وقد يستخرج ماء الهندباء المرة غير المغسولة فيسبك ثمانى اواق منه بعد صفائه واضافة اوقيتين من الخل الحاذق منا سكر

(۱۹۱) شراب خشخاش يؤخذ بزر الخشخاش الابيض خمسون درهما فيسلق في منا ماء حتى يبقى<sup>١٠</sup>° رطل ويصفى ويسبك به منا سكر

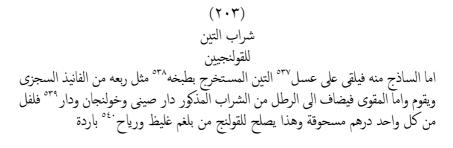
(۱۹۳) شراب الريباس منه من عشرين جزء من مائه ولا يكاد يتربب<sup>٢١</sup> الا بقليل سكر وقوم يصنعونه بغير نار حتى ينحل السكر ثم يطبخونه ويزعمون انه اجود<sup>٢٢</sup> م<sup>١١</sup> الدينارى: الشراب الدينارى B، شراب الدينارى C الدينارى: الشراب الدينارى BC م<sup>١١</sup> ويصفى: - A منتى يتى: + ريع A منتى يتربب: ترتب B م<sup>١٢</sup> وقوم يصنعونه بغير نار حتى ينحل السكر ثم يطبخونه ويزعمون انه اجود: - B (١٩٤) شراب الرمان يؤخذ لكل منا من السكر رطل او عشر اواق من ماء الرمان الحامض ويعمل كالاول وان اضيف الى ماء الرمان الحلو والحامض شىء من النعنع فهو شراب الرمان المنعنع"<sup>٢٥</sup> يصلح للغثيان وهذا لا يتخذ بخل

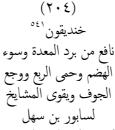
(۱۹٦) شراب التفاح يؤخذ من ماء التفاح المنقى الجوف المقشر جزء ومن السكر الطبرزذ او<sup>٢٢٥</sup> العسل المصفى جزء ومن ماء المطر جزآن يطبخ

(۱۹۹) شراب<sup>۳۰</sup> الآس المتخذ بحبه يرض حب الآس وينقع في شراب جيد الجوهر سبعة ايام ويطبخ برفق ويصفى ويقوم قليلا<sup>۳۰</sup>

(۲۰۰) شراب الرمان المنعنع يقشر الرمان الحلو والمز ويدقان بشحمهما ويعتصر ماؤهما ويترك حتى يصفو وتؤخذ منه اربعة ارطال فيطبخ مع باقة نعنع حتى يبقى نصف الماء ويطبخ بعد تصفيته مع رطل سكر حتى يبقى النصف ويرفع

يؤخذ سفرجل كبار طيب الرائحة فيقشر من خارج وينقى من داخل ثم يدق ويعتصر<sup>عro</sup> من مائه ثلاثة ارطال ويخلط معه من العسل الجيد الفائق مثله ومن اراد ان يجعل مكان العسل سكرا فليفعل ذلك ويخلط معه من الخل الثقيف رطلان ويرفع على نار جمر وتؤخذ رغوته كلما ارتفعت حتى يصير فى قوام العسل ويستعمل فان كان مزاج الكبد والمعدة الى البرد فليخلط معه<sup>oro</sup> زنجبيل ثلاثة دراهم فلفل ابيض درهمان ويطيب بقليل مصطكى وعود ومسك ونحو ذلك والشربة قبل الطعام من ثلاثة مثاقيل الى ستة وقد يتناول هذا المقدار عند النوم ايضا





يؤخذ عسل النحل منزوع الرغوة ثلاثة امناء ويلقى عليه شراب صاف عتيق جيد الجوهر وهو الاصل او جمهورى عشرة امناء ونصف ويصير فيه زنجبيل خمسة دراهم قاقلة كبار وصغار من كل واحد نصف درهم قرنفل دانق دار صينى نصف درهم زعفران غير <sup>٢٥°</sup> مسحوق <sup>٢٥°</sup> نصف درهم دار فلفل دانق ونصف تسحق الادوية جريشا ما خلا الزعفران فانه لا يسحق ويترك في خرقة في الشراب ثلاثة ايام في موضع دفيء ويحرك كل يوم ثلاث مرات وبعد ذلك يصفي تصفية جيدة ويصير فيه مسك مسحوق دانق ويرفع في اناء زجاج

(۲۰۰) خبث الحديد بالشراب لضعف المعدة مع برد بزر كرفس رازيانج انيسون كمون<sup>ئةه</sup> انجذان نانخواه صعتر كاشم كروياء كزيرة دار فلفل فلفل دار صينى كندر <sup>مءه</sup> سنبل قرنفل جوز بوا سعد زنجبيل مثقال مثقال خبث الحديد البصرى<sup>230</sup> عشرة

#### ARABIC TEXT

مثاقيل تطبخ الجملة بستة امثالها شرابا حتى يبقى نصف الشراب ويشرب كل يوم من ذلك الشراب ثلاثون درهما ويخفف الغذاء ويشرب ثلاثة اسابيع ويمنع من الحامض والفاكهة الرطبة (۲۰٦) مسه مطبب<sup>۷٤۰</sup> ماء السفرجل الحامض مروقا يومين جزء شراب عتيق جزء يطبخان برفق وتؤخذ الرغوة ويضاف الى كل رطل منها زنجبيل درهم قرفة درهم مصطكى درهمان يرض ويصير في صرة ويلقى آخر الطبخ ويغلى غليتين او ثلاثة ويصفى ويرفع  $(\mathbf{Y} \cdot \mathbf{Y})$ الميسوسن النافع من الاعياء والفتور <sup>٤٥</sup> والضعف والقيء وضعف المعدة والكبد من برد تغمس فيه ٥٤٩ خرقة وتوضع <sup>٥</sup> على اليدين والرجلين والعنق ويوضع<sup>٥</sup> على المعدة وبين<sup>٥</sup> الكتفين وعلى المفاصل ومجامع العروق والعصب يؤخذ قسط وقصب الذريرة وسليخة وقرنفل منكل واحد اربع اواق سنبل اوقيتان ملح نفطي ست اواق زعفران اوقية حماما وبسباسة وعلك رومي منكل واحد اوقيتان عسل لبني ست اواق تدق اليابسة وتنخل ويسحق الزعفران و"٥٥ العلك واللبني بالطلاء العتيق ثم يجمع جمعا ويؤخذ من السوسن الآزاد الابيض ثماني مائة راس وتمسح صفرته بخرقة كتان "\*\* ويجعل في برنية قوارير ساف من السوسن وساف من الافاويه حتى ينفد ثم تصب عليه من الطلاء عشرة دواريق ويسد<sup>000</sup> راسه ويطين<sup>000</sup> ويوضع في بيت ستة اشهر<sup>000</sup> وقد يضاف اليه مسك قليل C مطبب: مطببه C ۵٤ الفتور: البثور C <sup>620</sup> تغمس فيه: يغمس في C ۰۰° توضع: يوضع C يوضع: توضع B 005 بين: – A 005 و: او A ۵۰۶ کتان: + بیضا BC °°° یسد: یشد C ويطين: بطين C ٥٥٧ اشهر: + ويعمل مع ذلك عود بلسان ستة اواق مشكطرامشيغ ستة اواق دار صيني مثقال مصطكا وقرنفل من كل واحد مثقالين قرفه ثلاثة مثاقيل يدق C

لاستطلاق البطن ويبس اللهوات زعم

يؤخذ من السفرجل في اول الشتاء فينقى من قشره وحبه وينقع في الطلاء العتيق يوما وليلة ثم يدق ناعما وتؤخذ من عصيره اربعة دواريق فيطبخ حتى يصير على النصف ثم يصفى ويعاد في القدر ويطرح عليه من العسل المنزوع الرغوة دورق ومن القاقلة ومن الهيل من كل واحد اربعة مثاقيل دار صينى مثقال علك رومى وقرنفل من كل واحد مثقالان قرفة ثلاثة مثاقيل تدق الادوية وتصير في خرقة كتان رقيقة وتصر وتلقى في القدر ثم يطبخ حتى يغلظ قليلا ثم يصفى في اناء زجاج ويسحق من المسك ربع مثقال ومن الكافور نصف مثقال ويذر عليه ويساط حتى يتخذ<sup>400</sup> الشربة ملعقة بماء بارد

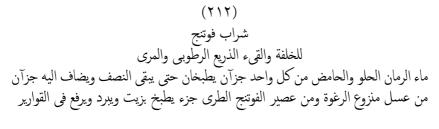
(۲۰۹) ميشاب قريب المنفعة من الميبه يؤخذ عصير التفاح المز دورقان عسل منزوع الرغوة نصف دورق يطبخان حتى يمضى<sup>٥٥٩</sup> الثلث ثم يوضع في اناء زجاج ويسحق قرنفل ودار صينى من كل واحد اربعة مثاقيل ويذر عليه ويسد راسه ويطين ويستعمل بعد ستة اشهر

### $(\mathbf{7}\mathbf{)}\mathbf{\cdot})$

خنديقون طلاء عتيق اربعة دواريق عسل منزوع الرغوة دورق يخلط وتسحق<sup>٢٠</sup> اوقية فلفل ونصف اوقية سك ومثله قرفة وسنبل ويخلط<sup>٢٦</sup> ويكون زعفران<sup>٢٢°</sup> ويصير في اناء مقير ويطين راسه ويترك حتى يطيب ويستعمل ومن احب ان يصير<sup>٢٣°</sup> فيه نحو مثقال من مسك<sup>٢٥</sup> وزعفران<sup>٥٣°</sup> فعل

- ۵۰۸ يتخذ: ينحل C
- °° يمضى: يذهب BC
- <sup>۵۰۰</sup> تسحق: + نصف B ۵۲۱ یخلط: + به BC
- <sup>٥٦٢</sup> زعفران: بزعفران C
  - <sup>٥٦٣</sup> يصير: يصر C
  - <sup>٥٦٤</sup> مسك: سك A
  - <sup>٥٦٥</sup> وزعفران: C

(۲۱۱) شراب الاسقيل<sup>٢٦٥</sup> تاخذ من اصول السوسن اربعة ارطال ومن الافثيمون رطلان ومن الغاريقون رطل واحد ومن الاسقيل رطل ومن الفوتنج البستانى سبعة عشر استارا يجعل فى قدر خزف جديد<sup>٢٥</sup> ويصب عليه دورقان ماء ويطبخ حتى يصير على النصف بعد انقاعه<sup>٢٠</sup> قبل طبخه ويستعمل بعد شهر<sup>٢٥</sup> الانبذة<sup>٢٠٥</sup> عيار اتخاذ الانبذة<sup>٢٩٥</sup> التمرية والزييبية والقشمشية للواحد ثلاثة امثاله ماء يطبخ حتى يمضى ثلثا الماء ويبقى الثلث ويصفى ويفوه وينبذ مطيبا حتى يطيب والافاويه مختلفة<sup>٢٩٥</sup> بحسب الحاجة سعد قرنفل دار صينى خولنجان كشوث ورق السوسن زنجبيل افسنتين مصطكى سنبل الطيب ورد جوز بوا قسط ششقاقل زعفران عود هندى يتخير<sup>٢٩٥</sup> ويقدر وقد يحلى بسكر او بعسل



(۲۱٤) انجور<sup>۷۷۰</sup> افشرج<sup>۷۷۷</sup> يؤخذ من عصير العنب الحلو والمنصف اى الذى فيه بقية<sup>۷۷۰</sup> حموضة عشرة دواريق<sup>۷۷۰</sup> ومن العسل المنزوع الرغوة دورقان يطبخ برفق حتى يثخن ويستعمل تجلو<sup>۵۰۰</sup> المعدة ملعقة منه بماء بارد ويقويها ايضا

(۲۱٦) شراب الآس يؤخذ آس طرى وفيه حبه ويخرط ويرش عليه الماء ويدق ويعتصر ويؤخذ جزآن من مائه ومن العسل المنزوع الرغوة<sup>٩٨٥</sup> جزآن ونصف يصيران في قدر ويطبخان حتى ينعقدا<sup>٥٨٥</sup> ثم يطيب بسنبل وقرنفل ودار صينى وجوز بوا على نسبة<sup>٨٨٥</sup> الافاويه فيما تقدم فاذا برد صفى وجعل في القوارير<sup>٩٨٥</sup>

۲۷۰ انجور: الحور C
 ۹۷۷ انشرچ: اقشرچ A
 ۹۷۸ بقیة: – C
 ۹۷۹ دواریق: دوانیق C
 ۹۷۹ دواریق: دوانیق C
 ۹۷۹ دواریق: دوانی C
 ۹۷۹ دواری C
 ۹۷۹ دولی C
 ۹۷



قشور اصل الكبر خمسة <sup>٥</sup> دراهم اسقولوفندريون <sup>٥</sup> خمسة دراهم افثيمون خمسة دراهم ثمرة الطرفاء ثلاثة دراهم فوة ثلاثة دراهم <sup>٥</sup> اسارون ثلث <sup>٥</sup> درهم وج ثلاثة دراهم لحى شجرة الخلاف ستة دراهم يغلى اذاكانت الاوزان دراهم فى رطل واحد من خل خمر حتى يذهب عنه ثلثه ويصفى ويسبك بالباقى منا سكر الاشربة الشراب الصافى الجيد الجوهر اعنى الخمر الفائق يسمى الطلاء والجمهورى هو نوع من الميفختج <sup>٥</sup> لم <sup>٥</sup> يخرج عن الشرابية الى الدوشابية والميفختج معناه النبيذ المطبوخ ويسمى بالعربية الطلاء والمثلث نوع من الميفختج طبخ حتى مضى ثلثاه ونبيذ الزيب والعسل متخذ منهما والخنديقون شراب معسل مفوه<sup>٢</sup> ميبه فارسى اى شراب سفرجل اى خمر سفرجل وكان يجب بحسب التسمية ان يكون مكان الخل فيه خمر



(777)

جزر مربی یؤخذ جزر احمر فیشوی ویقشر ویسل جوفه جزء ومن العسل المصفی جزء ویتعاهد عسله<sup>۲۰۲</sup> فی کل خمسة ایام بان یغلی ویعاد علیه

(777)

زنجبيل مربى زنجبيل صينى يقطع كبارا وينقع في ماء عشرين يوما وينشف من الماء ويلقى عليه ماء وعسل ما يغمره ويصير في قدر حجر^`` ويغلى عليه'`` غليانا جيدا ثم يخرج عن ذلك الماء والعسل ويقرص صغارا ويلقى عليه عسل منزوع الرغوة ما يغمره ومن الافاويه ما يلقى على الاهليلج'`` المربى ويستعمل

> الباب التاسع في المطبوخات

 $(\gamma\gamma\xi)$ طبيخ الزوفا

للربو في الامزاج الحارة زبيب رازقي خمسة عشر درهما عناب وسبستان <sup>١١</sup> من كل واحد عشرون حبة شعير مقشور عشرة دراهم خشخاش ابيض اربعة دراهم بنفسج ونيلوفر وبزر الخيار وبزر بقلة وبرشياوشان واصل السوس محكوك مرضوض وزوفا يابس من كل واحد ثلاثة دراهم تين لحيم اصفر وهو الشاهنجير<sup>١١</sup> سبعة عددا صمغ عربي درهمان يطبخ الجميع في خمسة ارطال ماء حتى يبقى الثلث ويصفى الشربة<sup>١١٣</sup> اربع اواق مع خمسة دراهم سكر طبرزذ ودرهم دهن لوز حلو وقد يعمل بغير صمغ اذا كان النفث عسر البروز منعقدا

(٢٢٥) ماء الاصول المفتح للسدد الملطف للاخلاط الغليظة<sup>٢١٢</sup> قشور اصل الرازيانج وقشور اصل الكرفس واصل الاذخر وبزر الرازيانج وبزر الكرفس وانيسون وسنبل الطيب ومصطكى وفوة الصباغين من كل واحد جزء زبيب منزوع العجم جزآن

تطبخ ويصفى ماؤها بعد اكتسابة قواها ويؤخذ منه اربع اواق فيشرب حاره باعتدال وقد يضاف اليه<sup>٢١٠</sup> دهن الخروع درهمان ودهن لوز حلو درهم<sup>٢٦</sup> وقد يستعمل مكان الدهنين المذكورين دهن اللوز المر وحده بوزنهما وقد يستعمل ماء الاصول في تفتيت الحصي فيضاف في طبيخه اسقولوفندريون "" ويشرب بالحجر اليهودي وقد يستعمل في الاسترخاء والرعشة والامراض البلغمية مع بعض المعاجين كدواء الكركم والامروسيا ١٢ على ما يوجبه حال المريض

# (777)ماء الجين ويستعمل ٦٠٩ في الربيع يتخذ من لبن ``` الماعز'``` الفتية التي عهدها بالولادة ``` نحو شهر وتختار الشاة حمراء

زرقاءتنت فتواء فهو صنف جيد المزاج وتعلف قبل استعمال لبنها اياما شعيرا مجروشا مبلولا مع نخالة وثيَّل؟" وهندباء وشاهترج ثم يحلب رطلان من لبنها كل يوم ويطبخ في طنجير حجر بنار هادئة ويحرك بخشبة من خشب التين رطبة ٢٠ ماخوذ عنها لحاؤها مرضوضة يقصد بذلك ان يعلق بماء الجبن من اللبنية اليتوعية التي في خشب التين الرطب قوة تعينه على الاسهال في رفق وقد يعتاض عنه بخشبة خلاف رطبة اذا لم يقصد ما ذكر من خشب التين وكان سقى ماء الجبن للترطيب دون الاسهال ويمسح حول القدر اعنى حافاتها أتأ بخرقة مبلولة بماء عذب فاذا غلى اللبن فلينزل ٢٣٧ الطنجير عن ٢٨ ناره ويرش على اللبن الذي فيه ثلاثون درهما من السكنجبين الساذج السكري وربما رش معه نحو ثلاثة دراهم من خل الخمر الحاذق الصافي وليكن السكنجبين والخل باردين جدا يسرع بالقائهما عليه لتتميز وتته الجبنية من المائية ويحرك بالعود المذكور "" ويترك هنيهة حتى يجمد وتتميز المائية "" ثم يصفى في خرقة كتان

### ARABIC TEXT

صفيقة او زنبيل خوص صفيق النسج ويعلق حتى ينقطع سيلان الماء<sup>٢٣٢</sup> عنه وتبقى فيه الجبنية وتعاد المائية الى الطنجير بعد غسله ويغلى برفق ويلتى عليها<sup>٢٣٢</sup> نصف درهم من ملح ذرآنى مسحوق<sup>٢٣</sup> ويصفى ثانيا<sup>٢٣</sup> ويؤخذ من ماء الجبن المذكور من نصف رطل الى ثلثى رطل على تدريج بسكر طبرزذ وقد يؤخذ فى وقت بسفوف<sup>٢٣</sup> مسهل وفى وقت<sup>٢٣</sup> بسفوف<sup>٢٣</sup> مبدل

(۲۲۷) ماء الهندباء تؤخذ هندباء طرية غير مغسولة<sup>٦٣٩</sup> فتقطع اسافلها<sup>٦٤٠</sup> ويستخرج ماؤها ويشرب من ثلاثين درهما الى نصف رطل مع سكنجبين ساذج لتفتيح<sup>٦٤١</sup> السدد وقد يعطى مع بعض الاقراص النافعة فى ذلك كقرص الافسنتين

(۲۲۸) ماء البطيخ الهندى وهو الرقى والفلسطينى<sup>٢٤٢</sup> يؤخذ البالغ منه وهو ما اسود حبه<sup>٢٤٣</sup> فتقطع البطيخة نصفين ويقطع شحمها ولا يخرج حتى ترشح مائيته ويصفى ويؤخذ من خمسين درهما الى نصف رطل مع ما يقتضيه الحال من الاشربة كشراب الرمان او غيره من الاشربة المبردة

يتعدى ذلك الى ثخانة اكثر فيمنع باطنها ان ينضج وتحط الى تنور قد هدات<sup>٢٤٨</sup> ناره ووضع فى اسفله طاقتان<sup>٢٤٩</sup> من طين احداهما<sup>٢٥٠</sup> فوق الاخرى فتوضع اليقطينة المطينة عليهما فاذا جف الطين جفوفا<sup>٢٥٢</sup> محكما رفعت وتركت حتى تبرد وقشرت ونزل<sup>٢٥٢</sup> ماؤها واخذ منه من خمسين درهما الى ستين درهما مع بعض الاشربة المبردة كشراب الرمان والخشخاش

### ARABIC TEXT

من كل واحد مناكسفرة مكوك لسان الثور خمسة ارطال افثيمون اقريطي مصرور في خرقة كتان يلقى آخر الطبخ<sup>٢٧٦</sup> رطل هندباء ونعنع من كل واحد باقة بزر الفرنجمشك<sup>٢٧٢</sup> منا ورق الغافت رطل ونصف تربذ وغاريقون من كل واحد منا يطبخ الجميع بالف رطل ماء عذب حتى يبقى الثلث ويصفى

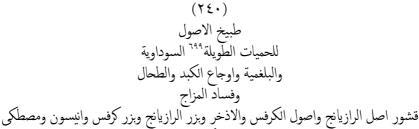
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وتختلف مقاديرها بحسب الحاجة امالا الكثيراء والصمغ والسبستان ونحوها فلا تستعمل هاهنا

(۲۳۷) ومن مسهلاتهم<sup>۲۹۲</sup> غاریقون وشحم حنظل ورب السوس وفراسیون وتربذ وایارج فیقرا یقدر ویحبب بمیفختج وتتخذ لهم لعوقات<sup>۱۹۲</sup> من اسقیل مشوی<sup>۹۵۰</sup> وفراسیون وایرسا وزراوند طویل وشیح وراوند<sup>۲۹۲</sup> ومر<sup>۹۷۲</sup> وزعفران یقدر بحسب الحاجة ویعقد بعسل او طبیخ تین او عقید عنب ویستعمل

(۲۳۸) ولذلك<sup>۲۹۸</sup> رئة الثعلب مجففة وفوذنج وبزر كرفس وساذج وحماما يجمع بعسل التين ويحبب ويستعمل عند النوم



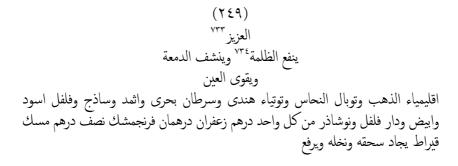


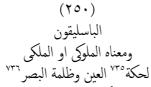
فشور اصل الرازياج واصول الكرفس والادحر وبزر الرازياج وبزر كرفس واليسون ومصطلى وسنبل الطيب وورد احمر منزوع الاقماع وشكاعى وباذاورد وورق الغافت وورق الافسنتين وفوة عيدان <sup>٢٠٠</sup> ولك منتى <sup>٢٠٢</sup> وراوند صينى وزبيب منزوع العجم بقدر الحاجة تطبخ بماء عذب ويستخرج ماؤها ويسقى مع دهن لوز حلو او مر

> <sup>۱۹۲</sup> مسهلاتهم: مسهلاته E <sup>۱۹۴</sup> لعوقات: لعوقا C <sup>۱۹۵</sup> مشوی: – C <sup>۱۹۲</sup> راوند: زراوند A <sup>۱۹۲</sup> شیج وراوند ومر: شیخ C <sup>۱۹۸</sup> لذلك: كذلك C <sup>۱۹۹</sup> الطویلة: + و B <sup>۱۹۰</sup> فوة عيدان: عيدان الفوه C ۷۰۰ منتى: – C

 $(7 \xi \xi)$ 

نقوع مشمس<sup>(<sup>1</sup>)</sup> لصاعد عناب واجاص من كل واحد ثلاثون درهما<sup>(۱)</sup> تمرهندى منزوع<sup>۱۱</sup> عشرون شاهترج<sup>۱۱</sup> عشرون درهما نيلوفر خمسة دراهم ورد عشرة دراهم <sup>۱</sup>صل السوس وبسبايج وبليلج واملج وكشوث ولسان الثور من كل واحد ثلاثة دراهم اصل السوس وبسبايج وبليلج واملج مرضوضة من كل واحد ثلاثة دراهم<sup>۲۱</sup> بزر قثاء وخيار وقرع وبقلة مرضوضة من كل واحد<sup>۱۱</sup> عشرة دراهم حب الاميرباريس عشرة دراهم حب رمان خمسة دراهم كمنفرة خمسة دراهم اهليلج اصفر وكابلى منزوعة من كل واحد خمسة دراهم لسان الحمل خمسة دراهم<sup>۱۱</sup> يجمع وزلك وينقع فى عشرة ارطال ماء<sup>۱۱</sup> ويغلى اغلاءة<sup>۲۰</sup> خفيفة ويحط عن النار ويترك فى اناء زرجاج واسع الراس ويشد راسه جيدا ويوضع فى الشمس ويحرك غدوة وعشية مدة السبوع او ويقى عليه وقت الشرب مثقال لب بزر يقطين<sup>۲۰</sup> مدقوقا ودانقان حجر ارمنى مغسول ونصف درهم عصارة الاميرباريس وربع درهم طباشير واوقية سكنجبين الرمان بغير خل واوقية جلاب ودرهم دهن اللوز والغذاء من مزورة بماء الحصرم او فروج وقت العصر ويستعمل من خمسة الإم الى اسبوع<sup>۲۲</sup>





اقليمياء الفضة وزبد البحر مقشر من كل واحد عشرة دراهم نحاس محرق خمسة دراهم اسبيذاج الرصاص وملح ذرآني<sup>٧٣٧</sup> ونوشاذر وجعدة وفلفل اسود ودار فلفل من كل واحد درهمان ونصف قرنفل واشنة من كل واحد درهم يدق الجميع وينخل ويستعمل

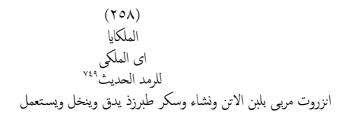
<sup>۲۷۲</sup> العزیز: العزیزی B <sup>۷۲۴</sup> الظلمة: ظلمة البصر C <sup>۱۷۳</sup> لحکة: لحدة A <sup>۱۷۳</sup> البصر: + والسبل والجرب العتیق B <sup>۷۷۷</sup> ذرآنی: اندرانی DE <sup>۱۷۸</sup> نیلنج: لیلنج B <sup>۱۷۹</sup> یجمع: + تجمع مسحوقه B

(٢٥٥) برود حصرم للامزاج الحارة والسلاق وحمى العين توتياء مربى بماء الحصرم الطرى<sup>٢٤٢</sup> المروق سبعة ايام ويستعمل

(۲۵٦) كحل للبياض انزروت مربى بلبن الاتن سبعة دراهم زعفران دانقان شياف ماميثا دانقان يسحق ويستعمل

> <sup>۷۷۰</sup> البستج: الشیح A <sup>۷٤۱</sup> مسحقونیا القواریر: القزاز البکر الابیض E <sup>۷٤۲</sup> الطری: – B

(٢٥٧) كحل آخر للبياض في العين قشور بيض النعام وخزف الغضار الصيني وتوتياء وزنجار<sup>٢٤٣</sup> وكحل شلوذى وهو ضرب من الاثمد مدمج يضرب الى الحمرة يشبه الخماهن خمسة خمسة سرطان بحرى وتوتياء هندى وطباشير من كل واحد درهمان بعر الضب وتغيرا<sup>٤٢٧</sup> وهو حجر ابيض مدمج يشبه الرخام الابيض الا انه اعنى<sup>٥٤٧</sup> التغيرا اخف واشد بياضا واندماجا وليس فيه اشفاف ويكون في بعض الرخام من كل واحد درهم فلفل اسود نصف درهم سكر العشر ثلاثة دراهم شاذنج مغسول ثلاثة دراهم حجر المسن الجديد ومارقشيثا<sup>٢٤٧</sup> درهمان درهمان تجمع مصولة وتستعمل كحلا ويخص بامرار الميل<sup>٧٤٧</sup> موضع البياض فانه نافع له جربته<sup>٨٤٧</sup> مجرب



- <sup>۷٤۳</sup> وزنجار: زنجاری B
  - <sup>۷٤٤</sup> تغيرا: ىعسرا E
  - <sup>۷٤٥</sup> اعنى: A
- <sup>۷٤٦</sup> مارقشيثا: مرقشيثا E
  - <sup>۷٤۷</sup> الميل: + بها B
  - B بنه: B
- <sup>۷٤٩</sup> الحديث: + منسوب الى الملايكه لسرعه اثره في العلاج ينفع من الوردسح وىحلل ىقايا الرمد B

- <sup>۷۰۰</sup> ثفانیة: ۹ B ۲۰۰ شیاف: اشیاف CDE ۲۰۰ وینخل: C ۱۰۰ مسن: + بلبن جاریه B

- ۲۰۰ الدیزج: الذیرج E ۲۰۰ تکن: یکن A ۲۰۰ درهمان: ۲ B ۲۰۰۷ بارزذ: قنه E ۲۰۰۷ لین لبقایا الرمد: C

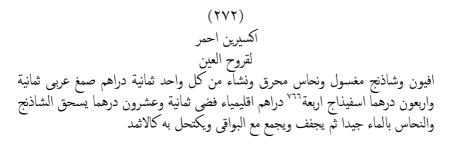
صبر وكندر ذكر وانزروت ودم الاخوين وجلنار وكحّل اعنى الاثمد وشب اجزاء سواء زنجار ربع جزء يدق الجميع وينخل بحريرة ويشيف واستعماله يكون بان ينوم العليل على الجانب الصحيح ويعصر الناصور اعنى ناصور الماق الاكبر عصرا جيدا ويقطر فيه من هذا الشياف ثلاث قطرات بين كل قطرتين ساعة وينام ساعتين ويواصل استعمال ذلك اسبوعا<sup>٢٧</sup> حتى اذا عصر لم يخرج منه شيء ثم يقطع علاجه

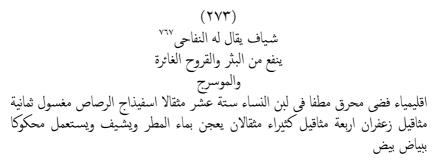
مرارة البقر والشبوط والكركي والبازي والعقاب والحجل يجفف ويؤخذ لجزء منها<sup>٢٢٢</sup> مثل عشره فربيون ومثل العشر ايضا شحم الحنظل ومن السكبينج كذلك يجمع بماء الرازيانج ويشيف

- <sup>۷۵۹</sup> درهمان: ۳ B
- ۳۰۰ اذ يقول لي: BC
- <sup>۷۲۱</sup> ذلك أسبوعا: سبعة ايام C

<sup>۲۲۲</sup> منها: منه A

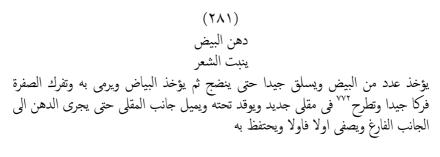
(۲۷۱) كحل التوتياء الهندى للبياض زبد البحر واقليمياء الذهب وبعر الضب وزبد القوارير ومسن جديد وسرطان بحرى ومرقشيثا ذهبى من كل واحد اربعة دوانيق<sup>۲۲</sup> كحل شلوذى<sup>۲۲</sup> وشاذنج مغسول ولؤلؤ غير مثقوب من كل واحد نصف درهم سكر العشر درهم زنجار ونشاذر<sup>۲۰۰</sup> وفلفل ودار فلفل وقرنفل وسنبل الطيب من كل واحد دانق ونصف ماميران صينى دانقان خزف الغضار الصينى وقشر بيض النعام من كل واحد درهم ملح هندى دانقان زجاج شامى نصف درهم توتياء هندى درهم يدق الجميع نعما ويسحق وينخل بحريرة ويكتحل به غدوة وعشية





<sup>۲۲۳</sup> دوانیق: دواریق A <sup>۷۲۴</sup> شلوذی: شلوری وهو کحل عتیق E <sup>۲۲۹</sup> نشاذر: نوشاذر BE <sup>۲۲۷</sup> اربعة: ٤٠ B <sup>۷۲۷</sup> النفاحی: التفاحی B (۲۷۵) برود الآس توتياء عشرة دراهم كحل ثلاثة دراهم اقليمياء الذهب وقاقيا وماميران من كل واحد درهمان شب يماني ثمانية دراهم اهليلج اصفر ستة دراهم شاذنج مغسول خمسة دراهم يدق الجميع نعما ويربى بماء الآس وماء السماق سبعة ايام في الشمس

الباب الحادى عشر فى الادهان دهن الآس دهن الآس يوخذ املج منزوع النوى ثلاث اواق يطبخ بثلاثة ارطال ماء حتى يبقى النصف وقوم يجعلون عوض الماء شرابا ويصفى ويلقى عليه ماء الآس الرطب رطل يطبخ حتى يتنصف ويلقى عليه دهن بنفسج رطل ويطبخ ثالثة حتى يذهب الماء ويبقى الدهن وعلامة ذلك ان تغوص فيه خشبة وتشعل فان نشت فقد بقى من الماء شىء وان لم تنش فيحط عن النار وقبل نزوله عن النار يلقى فيه خمسة دراهم لاذن خالص وفى بعض النسخ ماء الآس حسب يطبخ مع مئله دهن حل



(۲۸۲) دهن المصطکی النافع من ضعف المعدة يؤخذ دهن حل<sup>۷۷۳</sup> ثلاثة ارطال مصطکی ست اواق يطبخ بنار لينة فی قدر مضاعفة حتی يذوب المصطکی فی الدهن ويتخذ<sup>ع۷۷</sup> به وينزل عن النار ويبرد ويرفع

> <sup>۷۷۲</sup> وتطرح: - C ۷۷۳ حل: خل C <sup>۷۷۴</sup> یتخذ: ینحل C

(YAY)

دهن الافسنتين

دهن حل<sup>^۸۰</sup> منا يوضع في اناء زجاج ويلقى عليه من فقاح الافسىنتين اوقيتان ويصير في اناء زجاج او غضارة<sup>٢٨</sup> ويترك في الشمس اربعين يوما ويصفى الدهن ويستعمل وكذلك دهن الشبث المعمول من بزره

## $(\Lambda\Lambda)$

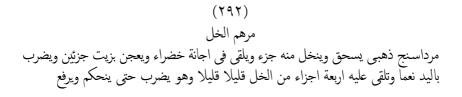
دهن الحسك حسك مرضوض عشرة دراهم زنجبيل اربعة دراهم دهن حل اسكرجة<sup>۷۸۷</sup> ماء عذب خمس عشرة اسكرجة<sup>۸۸۸</sup> يطبخ في قدر<sup>۸۸۹</sup> بنار لينة حتى يذهب الماء ويبقى الدهن وينزل<sup>۹۰۰</sup> عن النار ويصفى ويحتقن<sup>۹۷۱</sup> به من خلف ومن قدام بالتزريق في الاحليل واذا مرخ به نحو<sup>۹۲۲</sup> العانة حل<sup>۹۷۲</sup> اسر البول

يؤخذ شعير حديث مقشر ابيض فينقع في ماء حار حتى يربو وينتفخ فاذا امكن ان يعتصر عصر واخذ نشاستجه فيؤخذ منه جزء ومن اللاذن القبرسي جزء ومن ماء<sup>404</sup> الشيراملج بعد ان ينقع ثلاثة ايام جزء<sup>٥٩0</sup> ويؤخذ من دهن البان مثل وزن الجميع ويغلي بنار لينة حتى تذهب المياه ويبقى الدهن ويبقى شبيها<sup>٢٩٢</sup> بالغرا ثم يصفى الدهن ناحية<sup>٩٩٧</sup> ويغلف<sup>٩٩٨</sup> بالثفل من الليل<sup>٩٩٩</sup> ويغسل بالغداة<sup>٢٠٠</sup>

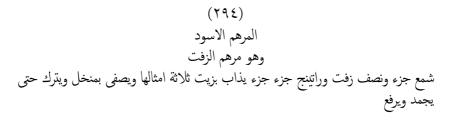
دهن البنفسج دهن البنفسج يؤخذ سمسم مقشور مخلوع غير مقلى<sup>١٠</sup> مجفف ويجعل في كيس كرباس جديد ساف سمسم وساف زهر بنفسج<sup>١٠</sup> منقى مقطوع الساق غير مبلول لا كثير التندية فيعفن ولا قليلها بل متوسط ويشد راس الكيس ويغطى الكيس<sup>١٠</sup> بخرقة كرباس ويترك ثلاثة ايام او اربعة ويخرج ويبسط على ازار كرباس في غرفة لا يقربه دخان البتة حتى يجف ويرمى عنه<sup>٥٠</sup> البنفسج يفعل به ذلك ثلاث مرات او اربع او أكثر<sup>٢٠</sup> على قدر ما يقيم البنفسج ثم يبسط ويجفف تجفيفا جيدا ويطحن ويستخرج<sup>٢٠</sup> دهنه ويجعل في اناء زجاج وكلما ركد في اسفل الاناء شيء روق الى اناء آخر يفعل به ذلك<sup>٢٠</sup> مرارا عدة حتى يصفو<sup>٢٠</sup> وعلى هذا المثال يتخذ دهن البنفسج بلب اللوز<sup>١٠</sup> وكذلك يفعل بدهن الورد والنيلوفر<sup>١٠</sup> والنرجس وغيره من الادهان<sup>١١</sup>

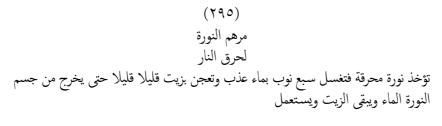
 $(\Upsilon 91)$ 

مرهم ابيض اسفيذاج الرصاص نصف رطل شمع<sup>١٢</sup> مصفى نصف رطل فى زمان الصيف وخمس اواق فى الشتاء دهن بزجى<sup>١٢</sup> منا يذاب الشمع بالدهن بنار لينة ويضرب جزء<sup>١٠</sup> مع الاسفيذاج فى الهاون ولا يزال يحرك اولا فاولا حتى يبرد ويجمد مع التحريك لئلا يرسب الاسفيذاج ويرفع ويستعمل



(۲۹۳) مرهم الزنجار شمع ربع<sup>۲۱۸</sup> رطل علك اوقية اشق اوقيتان يحل الاشق بخل<sup>۱۱۷</sup> خمر وزيت رطلين يذاب به الشمع على النار ويخلط مع البواقى ويلقى عليه زنجار مسحوق اوقيتين ونصف قليلا قليلا ويضرب جيدا ويترك حتى يبرد ويستعمل





۲۱۸ ربع: – C ۱۷۷ اشق اوقیتان یحل الاشق بخل: زیبق اوقیتین خل C ۱۸۸ الدیاخلون: الدیاحولون B، الدیاخیلون C، الداخلیون E ۱۹۹ بزرکتان: بزرقطونا C ۱۹۳۰ ویرفع: عتیق وکلما تقادم عهد الزیت کان اجود C (۲۹۷) مرهم نافع لقروح الراس وابتداء السعفة نوى الاهليلج وعفص من كل واحد خمسة اجزاء يرض<sup>٢٢</sup> الجميع ويحرق بشيرج فى طنجير ثم يسحق فى الهاون ويلقى عليه جزآن من الآس المسحوق ونصف جزء<sup>٢٢</sup> من الملح الذرآنى<sup>٢٢</sup> ثم يلقى عليه شمع ودهن بزجى قدر الكفاية اعنى من جملتها خمسة امثال الادوية ويكون من تلك الخمسة الامثال مثل واحد من الشمع واربعة امثال من دهن ويوضع على القروح ويوضع عليه السلق والهندباء<sup>٢٢</sup>



دهن بنفسج وورد من كل واحد اوقية شمع مصفى مغسول خمسة دراهم<sup>٢٢٨</sup> يذاب الشمع ويلقى فى الهاون على هذه الادوية وهى مسحوقة وهى اسفيذاج الرصاص ثلاثة دراهم شاذنج مغسول طين ارمنى طين قبرسى<sup>٢٢٨</sup> من كل واحد درهمان عصارة لحية التيس ثلاثة دراهم افيون خمسة دوانيق زعفران<sup>٢٢٨</sup> درهم<sup>٢٢٨</sup> يخلط جيدا

<sup>۸۲۱</sup> يرض: يدق C <sup>۸۲۲</sup> نصف جزء: جرء ونصف B <sup>۸۲۲</sup> الذرآنی: الدارانی C <sup>۸۲۴</sup> الشقوق للصبيان: الشقاق بالصبيان C <sup>۸۲۸</sup> خمسة دراهم: – A <sup>۸۲۸</sup> قبرسی: قبرصی B <sup>۸۲۸</sup> افيون خمسة دوانيق زعفران درهم: – C <sup>۸۲۸</sup> الشمع: + وكذلك مغسل الزفت ونحوه B (۳۰۰) غسل الزفت

لتقل حدته واسخانه يضرب كما قلنا بماء صاف زمانا طويلا ضربا جيدا ويسكن فاذا طفا اخذ و<sup>٣٣٨</sup> قلب ذلك الماء وطرح الزفت في ماء آخر<sup>٣٣٨</sup> ويفعل<sup>٣٣٢</sup> به ذلك دفعات حتى يرى لونه قد نقى وطاب طعمه واذا عتق اعيد غسله واستعمل

(۳۰۱) غسل الزيت يؤخذ من الزيت اصفاه مقدار ما يراد فيجعل في طنجير ويصب عليه قليل ماء قراح وتلقى فيه تمرتان ومقدار كف سويق مصرور في خرقة كتان ويغلى غليانا رفيقا<sup>عnہ</sup> بنار لينة<sup>مnہ</sup> حتى يذهب الماء ويبقى الزيت صافيا ثم يخرج عنه السويق والتمر ويبرد الزيت ويستعمل عند الحاجة

> (۳۰۲) غسل اللك

يؤخذ اللك المنقى من عيدانه ويسحق ويصب عليه ماء لتقل حدته واسخانه<sup>٣٣</sup> مغلى قد طبخ فيه ريوند واصول الاذخر ويحرك بدستج الهاون نعما ويصفى فى منخل ويرمى بالثفل ثم تعاود<sup>٣٣</sup> عليه التصفية ويؤخذ الرائق منه ويجفف ويستعمل فى دواء اللك

(۳۰۳) مرهم للبرص الابيض الحديث<sup>٣٨</sup> نحاس محرق وهو <sup>٣٦٨</sup> الروسختج وزرنيخ اصفر وشيطرج ونورة لم تطفا وقلى <sup>٤٠</sup> اجزاء متساوية تربى مدقوقة ببول الصبيان في الشمس او بخل خمر <sup>٤٢</sup> ويحرك كل يوم يفعل ذلك به اربعة ايام ويرفع ويستعمل بعد ان يغسل الموضع<sup>٤٢</sup> قبل الاستعمال ببول الصبيان او بخل خمر

شحم خنزير عتيق غير مملوح مذاب بعد تنقيته من اغشيته رطلان وزيت عتيق <sup>٢٢</sup> صاف ثلاثة ارطال مرتك ثلاثة<sup>٢٢</sup> قلقطار وهو نوع من الزاج الاصفر اربع اواق يسحق القلقطار والمرتك في طنجير ويحرك باصل سعفة مقشورة وتقطع بقية السعفة قطعا صغارا وتلقى في طبيخ <sup>٢٨</sup> المرهم ليمتص المرهم رطوبة السعفة مقشورة وتقطع بقية السعفة قطعا صغارا وتلقى في طبيخ <sup>٢٨</sup> المقطع <sup>٢٢</sup> ثم يرفع جرم السعفة من الخوص <sup>٢٢</sup> المتخذ<sup>٢٢</sup> من اصلها وسائرها المقشور الصلبة اوقية اخرى من القلقطار او <sup>٢٧</sup> اوقيتان حتى يبلغ نصف رطل فينبغى ان تكون السعفة رطبة لترسل رطوبتها في الطبخ قال اذا كانت الاورام المذكورة مبتدئة او متزيدة رقق المرهم بشراب قابض شديد القبض غير شديد العتق ولا قريبا من العصير <sup>٢٧</sup> طراة وليكن شرابا صافيا لطيف الجوهر يغوص بقوة الدواء وليرش منه ويخلط بالمرهم مقدار ما ينشفه واذا كانت في المنتهى فليترك ويسقط الشراب بالواحدة ويجعل مكانه الزيت العتيق في ترقيق المرهم المذكور اعنى المنتهى فليترك ويسقط الشراب بالواحدة ويجعل مكانه الزيت العتيق وفي ترقيق المرهم المنتهى فليترك ويسقط الشراب بالواحدة ويجعل مكانه الزيت العتيق في ترقيق المرهم المذكور اعنى الحروع<sup>٢٧</sup> ويتق المراب بالواحدة ويجعل مكانه الزيت العتيق دفى ترقيق المرهم المذكور معن الحروع<sup>٢٧</sup> ويتقع الدوا أكانت الأورام المزم مقدار ما ينشفه واذا كانت في المنتهى فليترك ويسقط الشراب بالواحدة ويجعل مكانه الزيت العتيق فى ترقيق المرهم المذكور العيفي الدهن<sup>٢٧٢</sup> الذى يرقق الدول اريد<sup>٢٧٢</sup> بقبضه الردع وقد يجعل مكان الزيت العتيق عنى الدهن<sup>٢٧٢</sup> الذى يرقق به للتحليل هذا صيفا وربيعا وفى الشتاء يكون الدهن مع عشرة اجزاء من المرهم سبعة<sup>٢٨٢</sup> ليظهر قوة الدواء فيقاوم الشتاء واذا جعل الدهن مع عشرة مكثير الحس وفيه كيموسات رديئة اضيف الى هذا المرهم في علاج التفين خاصة واذا كان البدن مسكنا للوجع مجففا وقد يحل بخل فيكون<sup>٢٧٢</sup> ابلغ في علاج حرق النار خاصة واذا كان البدن مسكنا الوجع مجففا وقد يحل بخل فيكون<sup>٢٧٢</sup> ابلغ في علاج حرق الدار خاصة واذا كان البدن معنى الخري منار المار عصارة البدن الماري المالمرهم في علاج التفسخ الم والكان البدن

ARABIC TEXT

الخس والهندباء<sup>٢٨</sup> وعصارة عصا الراعى وعصارة آذان الفار<sup>٢٨</sup> والطحلب الا ان عصارة آذان الفار ضعيفة التبريد فان لم تحضر هذه العصارات فخل وماء ويبرد فى هذا المقام الدواء بالثلج او<sup>٢٨</sup> بالماء البارد الا ان تكون هناك خضرة لكل رطل من المرهم اوقية من العصارة وتزيد وتنقص بحسب الدواعى وبدهن ورد ايضا يوافق<sup>٢٨</sup> مثل هذه الحال ويستعمل للاورام الحارة الدموية المائلة الى طبيعة الورم المسمى حمرة بدهن ورد وعصارة عنب الثعلب او<sup>٢٨</sup> عصارة حصرم او<sup>٢٨</sup> البقلة الحمقاء او حى العالم الا ان عصارة الحمواء فى ذلك وحدها لئلا تحضر فلتستعمل<sup>٨٨</sup> مع عصارة البقلة الحمقاء

(۳۱۰) ضماد<sup>۹۰۰</sup> للفتق مارستانی مصطکی وقشار الکندر وجوز السرو وورقه ومر وانزروت<sup>۹۰۱</sup> وغرا السمك اجزاء متساویة یسحق سوی الغرا فانه یحل بخل خمر وماء فاتر فاذا انحل خلط<sup>۹۰۲</sup> بالادویة ویبسط الجمیع علی صلایة فاذا جف سحق وبل بماء<sup>۹۳</sup> واستعمل

(۳۱۱) ضماد الجبر<sup>۹۴۰</sup> اقاقیا ومغاث وصبر وطین ارمنی وخطمی واشراس<sup>۹۹۰</sup> وهو اصل الخنثی ویسمی شراس<sup>۹۹۰</sup> الاساکفة من کل واحد جزء یدق ویبل بماء الآس<sup>۹۹۷</sup> ویستعمل

(۳۱۲) ضماد آخر للجبر مغاث خمسة امناء طين<sup>۹۰۸</sup> ارمنی منا<sup>۹۰۸</sup> ونصف خطمی ابیض منا<sup>۹۰۰</sup> آس وماش<sup>۹۰۰</sup> من کل واحد منا اقاقیا واشراس<sup>۹۰۴</sup> من کل واحد رطل واحد ومن الصبر ست اواق یدق الجمیع وینخل ویستعمل

 $(\mathbf{T}\mathbf{T}\mathbf{\cdot})$ ضماد لنفور العصب وتعقده ٩١٤ سمسم مقشور وورق المرزنجوش"" الرطب يدعكان في الهاون ويطلى ذلك على خرقة ويوضع عليه

- <sup>۹۱٤</sup> تعقده: تغقره C <sup>۱۱۲</sup> تعقده: تغقره C ۱۹۰ المرزنجوش: المردقوش C ۱۹۲ یاقلی: دفلا C ۱۹۸ این ینحل C ۱۹۹ النرد: بالمبرد C ۹۲۰ قاقیا: اقاقیا BC ۱۹۲۰ کالنرد ویحك: کالبرد ویحل C

(TTE)

طلاء للوضح شيطرج وقشور اصل الكبر وخربق<sup>۲۲۴</sup> اجزاء متساوية يدق ويعجن<sup>۹۲۳</sup> ويبل بخل خمر وعسل ويطلى في الحمام

۹۲۲ خربق: + اسود B ۹۲۳ یعجن: سخل B، سحل C ۹۲۴ وطرائیث: – BC ۹۲۰ عروق: + مرداسنج B ۹۲۱ طویل: صینی A

(TT9)

طلى للجرب مارستانى النسخة التامة وقلى وعروق وزئبق مقتول وكبريت ابيض من كل واحد جزء دفلى اربعة اجزاء يدق الجميع ويربى بالشيرج ويستعمل فى الحمام ويصبر <sup>٢٢</sup> حتى ينصب<sup>٢٣</sup> العرق ثم يغسل بالاشنان ثم بعده<sup>٣٢</sup> بالغسولات اللينة<sup>٣٢</sup> كدقيق الشعير والعدس قال الزئبق المقتول هو الزئبق المذوف فيه ملح ورماد زمانا طويلا حتى يتماسك<sup>٣٢</sup>

(۳۳۲) طلى آخر<sup>۳۳</sup> للجرب زرنيخ احمر درهمان مرداسنج مثله كندس اربعة دوانيق زئبق مقتول درهمان ونصف<sup>۹۳</sup> ميعة سائلة درهم وثلث كبريت درهم ونصف يقتل الزئبق كما ذكرنا ويربى الجميع بخمسة عشر درهما زيتا خالصا ويطلى فى الحمام باشنان اخضر وملح يسير يصبر عليه هنيهة ثم يغسل بالغسولات المسكنة للذع كدقيق الشعير والعدس وبزر البطيخ ونحوها

(۳۳۳) طلی<sup>۹۳۹</sup> للجرب الیابس عروق وبورق<sup>، ۹</sup>۴ وملح العجین ومر وقسط حلو وکندس درهمان درهمان میعة سائلة خمسة دراهم یربی بدهن ورد ویصبر علیه ثلاث ساعات ویغسل بماء فاتر

### (۳۳٤)

#### خضاب يسود الشعر

يؤخذ دقيق الشعير فيخمر تخميرا جيدا حتى يحمض ويضاف الى كف منه اوقية روسختج وهو<sup>49</sup> النحاس المحرق فيدق وينخل بحريرة ويماع قليلا قليلا بخل خمر حاذق حتى يصير اعنى ذلك الخمير المخلوط بالروسختج<sup>49</sup> فى قوام السدر المضروب ثم يغلف به ويحشى الشعر<sup>49</sup> بورق السلق او الخس<sup>49</sup> او ورق الكرم<sup>64</sup> او ورق القرع بحيث يمنع ان ينشف<sup>43</sup> الخضاب ويترك عليه اثنتا عشرة ساعة ويحل بعد ذلك وينفض عن الشعر ويكون قد اعد له عشرون عفصة غير مثقوبة تحرق حتى اذا قاربت تمام الاحتراق<sup>49</sup> اطفئت بان تداس وفيها بعض القوة وتسحق وتنخل بحريرة وتبل بماء ويغلف الشعر ويورق ويترك اثنتا عشرة ساعة كالاول ثم يحل ويغسل فانه يخرج مليح السواد بعيد النصول

(۳۳۵) طلى للبهق الابيض شيطرج هندى اربع اواق زرنيخ احمر اوقية كمدس اوقيتان<sup>٩٤٨</sup> نحاس محرق ونورة وقلى من كل واحد اوقية تجمع مدقوقة وتبل بخل خمر

(٣٣٦) ضماد<sup>629</sup> للديدان في البطن اما الضماد لقتلها<sup>٥٠</sup> فالقلقنت والترياق بماء الشيح وماء القسط المر وماء القيصوم<sup>٥٥</sup> واما<sup>٥٥</sup> المستفرغ لها فالترمس معجون بالقطران وشحم الحنظل والصبر يوضع على السرة

(۳۳۸) ضماد<sup>۹۰۷</sup> للمفاصل وعرق النسا تؤخذ حلبة وتطرح فی اناء خزف ویطرح علیها خل خمر ممزوج<sup>۰۰۰</sup> وتطبخ علی الجمر الی ان تتهرا ثم یطرح علیها عسل ویغلی ثانیا علی الجمر ویرفع<sup>۹۰۰</sup> ویضمد به

> <sup>444</sup> اوقيتان: اوقيه C <sup>446</sup> ضماد: طلا B <sup>407</sup> لقتلها: الذي يقتلها C <sup>407</sup> القيصوم: القيسوم D <sup>407</sup> اماد: + الضماد B <sup>407</sup> ضماد: طلا B <sup>408</sup> وبورق: – A <sup>409</sup> بخل: يحلى B <sup>404</sup> ضماد: طلا B <sup>404</sup> بخل: يحلى B <sup>404</sup> ويوفي: – C

(۳٤٠) ضماد يفجر<sup>٢٢</sup> الدبيلات بابونج دقيق شعير شبث خطمى كف كف مقل اليهود عشرون درهما يحل المقل بلعاب بزركتان ولعاب بزر مرو ويسحق مع الادوية بعد دقها ويوضع عند<sup>٢٢</sup> خلو المعدة ويرفع وقت الاغتذاء الى ان يتم الاستمراء

ودقيق شيلم من كل واحد عشرة دراهم ومن التين عشرة عددا ومن ورق الطرفاء خمسة دراهم يدق ويعجن بذلك الخل ويضمد به بعد ان يكمد الطحال بلبد مغموس<sup>۹۷</sup> في خل مسخن ثم يوضع<sup>۷۷</sup> الضماد على هذه الصلابة الليل اجمع

(۳٤٥) وللحكة

ماء الكرفس وخل في الحمام

كبريت زرنيخ اصفر<sup>عve</sup> زرنيخ احمر نوشاذر معدنى نوشاذر مصنوع<sup>ove</sup> ملح باصنافه<sup>vve</sup> بزر ريباس زئبق مقتول رماد الكرم اقليمياء فضى<sup>vve</sup> اقليمياء ذهبى مرداسنج ورق دفلى كندس بورق شب الحمرة قلى شونيز عروق قنبيل ميعة سائلة ماميران ماميثا قسط حب المحلب يستعمل من الادهان بالزيت او<sup>4ve</sup> الشيرج او دهن البنفسج والورد ومع الخل وبحماض الاترج ويتبع<sup>vve</sup> باشنان وصنوف الغسولات وقد تكسر قوة بعضها بكافور فى الجرب المتقرح الحاد<sup>4ve</sup> للمترفين والشباب فى الصيف

(۳٤۷) للثآلیل اختیار حنین ثمرة الطرفاء مدقوقة بخل یضمد بها او مقل ازرق وراتینج وقشور اصل الکبر بخل'^ ایضا



(۳۵۰) للخیلان فی الوجه کندس ابیض<sup>۹۸۳</sup> مثقال ست لوزات مقشورة سکر ابیض مثقال ونصف یطلی به ویواصل عشرة ایام

- <sup>۹۸۱</sup> بخل: نخل A ۹۸۲ کفوفة: لقوبه B، لفوفه D
  - <sup>۹۸۳</sup> ابیض: B <sup>۹۸۴</sup> یذاف: یذاب BC
  - يدات. يداب DC ۱۸۰ للحمام: الحمام B

(302) للآثار السود في الوجه دقيق الشعير والباقلي واصول السوسن الآسمانجوني درهم درهم نوشاذر واشق منكل واحد درهمان يحل بماء حار ويعجن مع البواقي ويتخذ أقراصا وعند الحاجة يحل ببياض البيض ويطلى

رماد حافر البرذون بزيت ويضمد به

ودهن الشونيز اقوى منه فيما زعموا

- ۲۸۸ یذاب: یداف C ۸۸۷ بالوسمة: ىالوشمه B ۱۹۸۷ او: و A ۱۹۸۹ یخضب: یختضب C ۹۹۰ ویخضب به: B

(٣٥٩) طلى للوضح " ذراريح زرنيخ شيطرج يسحق بخل وعسل ويطلى به ( 77.) دواء من تآليف الرازي لثقل اللسان

نوشاذر وعاقر قرحا ووج وفلفل وخردل بالسوية يسحق ويدلك به تحته وفوقه في اليوم مرات

(٣٦٢) طلى يذهب آثار الجدري مرداسنج مربى واصل القصب اليابس ودقيق الحمص وعظام بالية ودقيق الارز وبزر بطيخ وحب البان وقشور الرمان الحلو منكل واحد بقدر الحاجة يجمع ويسحق ويطلى ليلا بمآء بزر البطيخ ويغسل في الغد<sup>٩٩٣</sup> في الحمام



- ۹۹۱ للوضح: الوصح B ۹۹۲ عليه: C

- عديه. ع <sup>۹۹۴</sup> في الغد: مالغداه B ميويزج: مبوزج B <sup>۹۹۵</sup> الذراريح: الرازيانج C <sup>۹۹۲</sup> خمر: ويطلى به C

(٣٦٤) طلى للقمل والقمقام فى اللحية زبيب جبلى<sup>٩٩٧</sup> درهمان بورق وسماق وقسط وخرنوب وشياف<sup>٩٩٨</sup> ماميثا من كل واحد درهم يدق وينخل ويعجن بدهن بنفسج وخل خمر ويطلى به

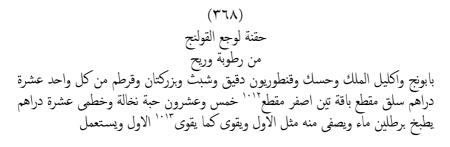
(۳٦٥) طلى للبهق الابيض له<sup>٩٩٩</sup> بزر الفجل بزر الرشاد من كل واحد خمسة دراهم اشنان اخضر عشرة دراهم بورق درهمان تدق وتعجن بخل خمر وعسل ويطلى بها<sup>....</sup> قبل دخول الحمام



(٣٦٦) حقنة لينة معنة لينة شعير مقشور مرضوض كف بنفسج يابس ونيلوفر'`` وخطمى مصرور<sup>```</sup> فى خرقة كتان ونخالة مصرورة فى خرقة كتان<sup>```</sup> من كل واحد خمسة دراهم يطبخ برطلين ماء حتى يبقى ثمانى اواق ويصفى ويؤخذ من جملته خمسون درهما تحل فيه اوقية ونصف دهن بنفسج او دهن لوز واوقية ونصف سكر مع مثقال ملح العجين ويستعمل فان اجاب الطبع والا اعيد

> <sup>۹۹۷</sup> جبلی: جبل C <sup>۹۹۸</sup> شیاف: اشیاف B <sup>۹۹۹</sup> له: – B ۱۰۰۰ بها: به B ۱۰۰۰ نیلوفر: لینوفر E ۲۰۰۰ کتان: – A

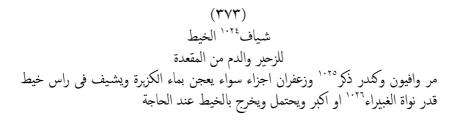
(٣٦٧) حقنة اقوى من الاولة <sup>٢</sup> ... مسهلة متوسطة سلق باقة يقطع صغارا تين اصفر عشرون عددا بنفسج ونيلوفر <sup>٢</sup> وشعير مرضوض من كل واحد قبضة خطمى اخضر <sup>٢</sup> ونخالة مصرورة فى خرقة كتان من كل واحد خمسة دراهم بابونج سبعة دراهم يطبخ الجميع باربعة ارطال ماء حتى يبقى الثلث <sup>٢</sup> ... ويؤخذ منه مصفى ثمانى اواق وتمرس فيه <sup>٢</sup> اوقية ونصف فلوس خيار شنبر واوقيتان سكر احمر وخمسة دراهم دهن بزجى <sup>٢</sup> وخمسة دراهم مرى نبطى ودرهمان ملح العجين ويستعمل فاترا فان اجابت الطبيعة والا اعيد كالاول <sup>١</sup>



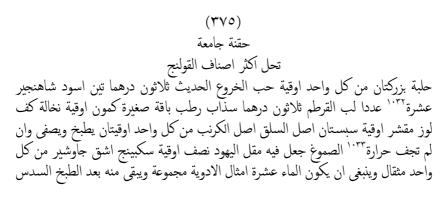
دهن بنفسج ودهن الدجاج وشحم كلى الماعز<sup>١٠٠</sup> ودهن شمع وزبد من كل واحد خمسة دراهم ويستعمل

(۳۷۰) حقنة للسحج شعير محمص مرضوض وارز احمر وجاورس وعدس مقشور من كل واحد قبضة ورد وجلنار وآس ولسان الحمل وجفت البلوط من كل واحد اربعة دراهم يطبخ برطلين ماء حتى يتنصف ويصفى ويؤخذ منه وزن خمسين درهما ويستعمل فاترا مع صفرة<sup>٢١٠</sup> بيض مسلوق بخل خمر مع خمسة<sup>٢٠٠</sup> دراهم دهن ورد<sup>٢٠٠</sup> وقرص من اقراص الهوفاقسطيذاس<sup>٢٠٠</sup> وقد ذكر<sup>٢٠٠</sup> في باب الاقراص<sup>٢٠١</sup>

۱۰۱۰ الماعز: المعز B ۱۰۱۲ صفرة: صفوه A ۱۰۱۷ خمسة: اربعين C ۱۰۱۸ ورد: لوز B ۱۰۲۱ لهوفاقسطيذاس: الهيوفاقسطيذاس B ۱۰۲۱ وقد ذكر في باب الاقراص: – A ۱۰۲۲ شيافة: حقنه B ۱۰۲۲ وهي اللطيفة: – C



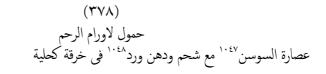
(٣٧٤) حقنة الفها زهرون الحراني <sup>٢٢</sup>، للسحج ارز احمر وحلال<sup>٢٠</sup> السويق الشعيرى من كل واحد خمسة عشر درهما آس يابس وورد وجلنار وجفت بلوط من كل واحد عشرة دراهم لسان الحمل يابس عشرة دراهم يغلى بستة ارطال ماء حتى يبقى الثلث ويصفى منه ثلاث اواق وتذاف<sup>٢٠</sup> فيه صفرة بيضة مسلوقة فى ماء السماق او خل او هما<sup>٢٠</sup> وثلاثة دراهم دهن ورد ودرهمان من ذريرة السحج ويحتقن<sup>٢٠</sup>



والصموغ المذكورة لذلك السدس المقدر بحسب ما سبق تقدير الادوية وينقص<sup>٢٠</sup>٬ ويزاد في جميع ذلك بحسب الدواعي ومقدار الحقنة<sup>٢٠٬</sup> من هذا خمس اواق مع اوقية دهن ناردين واوقيتان مرى واوقيتان عسل واوقية شحم الدجاج المذاب ويحتقن به

## (۳۷٦) حقنة تعين على الباه

يؤخذ راس حولى الضان السمين واكارعه وخصيتاه<sup>٢٠</sup> وكليتاه مع شحمهما وجنبه الايمن وقطعة من اليته يرض فى قدر برام مع حنطة مهروسة عشرون درهما وحمص مثله وحسك وقرطم وبطم وبزر جزر وبزر كراث وبزر هليون وبزر رطبة مرضوضة من كل واحد خمسة دراهم يطبخ ذلك حتى يتهرا ويصفى من المرق والدسم نصف رطل وتضاف اليه عشرة دراهم سكر شامى ويستعمل بعد ان تستعمل اولا حقنة لاستنطاف الاثفال<sup>٢٠</sup> تتخذ من ماء السلق<sup>٢٠</sup> والشيرج والمرى والسكر يكرر مرتين حتى تخلو<sup>٢٠</sup> الامعاء<sup>٤٠</sup> وتوصل تلك وينام عليها متشددا بقماط ثم يقضى<sup>٤٠</sup> بها وان امسكها قدر ثلاث ساعات او اربع اكتفى



(۳۷۹) تزريق لقروح القضيب ماء لسان الحمل ودهن ورد وشياف<sup>63 (</sup> ابيض المتخذ لرمد العين يحل بلبن النساء وزنبق البيض ويخلط ويستعمل

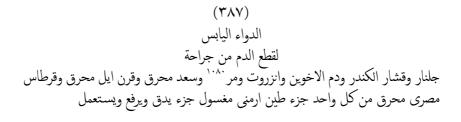
#### $(\Upsilon \Lambda \cdot)$

حقنة لوجع المفاصل حلبة ولوز مر وخروع وبزركتان من كل واحد كف حب الغار وبابونج وشبث من كل واحد ثلاثون درهما حسك ثلاثون درهما سورنجان ومقل اليهود وخربق ابيض من كل واحد عشرة دراهم قنطوريون خمسة وعشرون درهما اشق وسكبينج وجاوشير وحنظل من كل واحد ستة دراهم بزر الكرفس خمسة عشر <sup>٥٠٠</sup> درهما بزر الشبث وبزر السذاب من كل واحد اثنا عشر درهما تين حلواني عشرة عددا عناب جرجاني عشرة<sup>٥٠٠</sup> عددا سبستان اربعون <sup>١٥٠</sup> عددا يجمع ويطبخ بنار لينة في قدر فخار ويترك في التنور الى الغد ويؤخذ ثماني اواق ويلقي عليه سمن البقر ودهن خيري من كل واحد اوقية ويحتقن<sup>١٥٠٠</sup> به فاترا

#### ( ۳۸۱)

حقنة نافعة لقروح الامعاء ماء الارز وسويق الشعير المطبوخ مع شحم كلى الماعز <sup>١٠٠</sup> غير مملح من كل واحد<sup>١٠٠</sup> اثنا عشر درهما وتلقى عليه هذه الادوية مدقوقة منخولة اسبيذاج الرصاص وقرطاس محرق وصمغ عربى واقاقيا ودم الاخوين من كل واحد درهم صفرة البيض ثلاثة مسلوقة بخل خمر ودهن ورد يخلط الجميع جيدا ويحتقن<sup>٢٠٠٠</sup> به

(٣٨٤) السورنتيخان<sup>٢٦٠</sup> لعفونة اللثات<sup>٢٦٠</sup> واسترخائها عروق وشب واقاقيا وجلنار وعفص وسماق وقشور الرمان وملح اجزاء متساوية يدق ويستعمل بالخل ويتمضمض<sup>٢٦٠</sup> بعده بماء السماق ودهن ورد وانما يكون استعماله على طرف ميل تلف عليه خرقة ناعمة وتبل بالخل ويمر عليها<sup>٢٠١</sup> الدواء مسحوقا وتصاب بها من اللثات المواضع التي تحتاج اليها<sup>٢٠١</sup> يفعل ذلك الطبيب في موضع مضيء وربما دلك به لحم الاشداق اذا عفن ايضا



(۳۸۸) لازوق لقطع دم الشرايين'<sup>۲۰۱</sup> دم الاخوين انزروت شب قلقطار اقاقيا جلنار صبر دقاق الكندر من كل واحد جزء صمغ عربي جزآن يدق ويعجن ببياض البيض ويجعل على وبر الارنب ويوضع ويشد ولا يرفع اياما

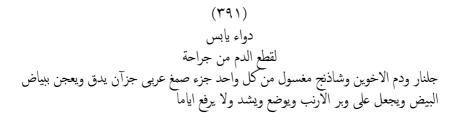
## (۳۸۹) الدیك بر دیك ای قدر علی قدر

يؤخذ زرنيخ اصفر وقلى ونورة وزنجار من كل واحد نصف رطل زئبق <sup>٢٠٠</sup> ونوشاذر من كل واحد ربع رطل يسحق بالماء الاول الذى سنصفه حتى يموت الزئبق ويجفف ويوضع فى الآلة التى<sup>٢٠٠</sup> يسميها اصحاب الكيمياء<sup>٢٠٠</sup> الاثال ويوقد تحته حتى يصعد ويؤخذ<sup>٢٠٠</sup> ما صعد فى قارورة ويذر على ما يراد ان يسقط كالناصور<sup>٢٠٠</sup> وغيره<sup>٢٠٠</sup> ويقوم مقام الكى

# (**m**9.)

تؤخذ نورة لم يصبها الماء وقلى من كل واحد جزء فيصب عليها^^`` بعد سحق القلى ستة امثالهما<sup>٩٨.٠</sup> ماء ويرفع ويساط ثلاثة ايام فى كل يوم ثلاث مرات ثم يصفى ويطبخ حتى يصير كالخلوق فى الثخن ويترك فى الشمس حتى يغلظ ويتخذ اقراصا ويجفف ويرفع فى موضع لا يصيبه الندى وعند الحاجة يسحق ناعما ويستعمل

- ۱۸۸۰ ومر: C ۱۸۸۱ الشرایین: الشریان C ۱۸۸۲ زئبق: زنبق C ۱۸۸۱ التی: الذی A ۱۸۸۹ یؤخذ: یوضع B ۱۸۸۹ غیره: + فانه یستطه B، + فانه یستط C ۱۸۸۸ عیها: علیهما B
  - C امثالهما: امثالها ۲۰۸۹



(397)

برود الفم بزر بقلة ورد طباشير كسبرة جلنار سماق اهليلج اصفر عدس مقشر من كل واحد جزء يدق ويضاف اليه يسير كافور

(T9E)

ذريرة السحج اسفيذاج الرصاص وصمغ عربي ونشاء مقلوين وعصارة لحية<sup>١٠٩٧</sup> التيس وعصارة لسان الحمل وطين ارمني وطين قبرسي من كل واحد درهمان كهرباء وشاذنج مغسول واقاقيا ودم الاخوين من كل واحد درهم<sup>١٠٩٠</sup> يدق ويستعمل

> <sup>۱۰۹</sup> الجلاء: طلا C ۱۰۹۱ للاسنان: الاسنان A ۱۰۹۲ یشد: شد A ۱۰۹۲ یطیب: تطیب A ۱۰۹۰ قال: – BC ۱۰۹۰ محرق: – C ۱۰۹۲ لحیة: لحم C ۱۰۹۷ لحیة: لحم C

(۳۹۵) ولقطع<sup>۹۰۰۱</sup> دم الشرايين<sup>۱۱۱۰</sup> بياض البيض ونورة غير مطفاة ووبر الارنب وخيوط كتان ناعمة يضمد ويشد به

(٣٩٦) سنون''' ينفع من حركة الاسنان جلنار وردكزمازج شب من كل واحد جزء يدق ناعما''' ويلصق على اللثة وقد تضاف اليه نشارة الصندل واهليلج اصفر وكسبرة وعروق الصبغ من كل واحد جزء

(۳۹۸) دواء لنتن الابط شب يماني درهمان مر ثلاثة دراهم ورد ستة دراهم مرداسنج ثمانية دراهم آس ستة دراهم <sup>١٠٠</sup> يدق ناعما ويغسل الابط بالاشنان ويستعمل

۱۰۹۹ لقطع: يقطع C ۱۰۰۰ الشرايين: للشرابين A ۱۰۰۱ سنون: سفوف C ۱۰۰۲ ناعما: – B ۱۰۰۰ سنون: سفوف C ۱۰۰۴ في: + ادوية E ۱۰۰۰ السمنة: السمن C  $(\mathbf{T}\mathbf{9}\mathbf{9})$ 

مسمن مغاث جوز جندم<sup>۲۰۰۷</sup> بهمن زرنباذکثیراء بزر خشخاش کهرباء من کل واحد ثلاثة<sup>۲۰۰۰</sup> دراهم یدق ویقلی<sup>۲۰۱۰</sup> بسمن قلیلا ویخلط بسویق الحنطة منوین ومنا سکر ویؤخذ من الجملة کل یوم عشرون درهما ویطبخ برطل لبن حلیب ویلقی علیه شیء من السمن الطری العذب او من دهن لوز حلو فیمن یکره السمن ویتحسی حارا

(٤٠٠) سمنة للحار المزاج باقلى مقشر وحب القرع مقشر من كل واحد جزء يدق ناعما ويعجن بدهن لوز وتؤخذ منه حفنة فيطبخ في ماء الشعير قدر رطل ويشرب ويستعمل بعده ماء الرمان

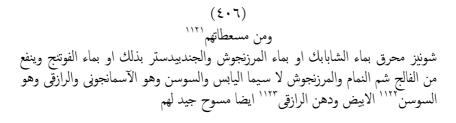
(٤٠١) سمنة للمعتدل المزاج حمص ينقع في لبن حليب غمره ويترك حتى يتشرب اللبن ثم يجفف ويؤخذ منه جزء فيطبخ بلبن حتى ''' ينضج جيدا فاذا نضج يلقى'''' عليه'''' سميد مجفف مدقوق وسكر طبرزذ من كل واحد ثلاثة اجزاء ويزاد لبن ويجعل كالحساء وقد يقع'''' فيه كمون ويستعمل

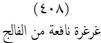
(٤٠٢) سمنة اخرى دقيق سميد كيلجة انزروت ابيض اوقية ونصف يسحق الانزروت نعما ويخلط بالدقيق ويلت بسمن البقر او دهن اللوز لتا رويا ويعجن ويخمر ويجفف<sup>١١٢</sup> ويؤخذ منه كل يوم عشرة دراهم بماء بارد اياما متوالية

(٤٠٣) سمنة جيدة

حمص ابيض منقوع في لبن حليب مجفف مدقوق خمسون درهما باقلى وماش وارز ابيض وحنطة مقشورة وشعير مقشور وعدس مقشر <sup>١١١</sup> ومغاث ابيض وخشخاش ابيض وقلب<sup>١١١</sup> اللوز مقشر وبزر اليقطين مقشر ولب الكعك من كل واحد خمسة و<sup>١١١</sup> عشرون درهما لب بزر القثاء وصمغ اللوز ولب بزر الخيار وبزر بقلة مغسولة مجففة وسمسم مقشر وكثيراء من كل واحد سبعة دراهم يدق الجميع ناعما وينخل وتؤخذ منه حفنة ويطبخ بلبن حليب كالحساء ويلقى عليه ملح وكمون يسير ودهن اللوز ويرفع ويتحسى ويمتص قبله وبعده الرمان المز يستعمل ذلك مدة خمسة عشر يوما

- <sup>۱۱۱۰</sup> وشعیر مقشور وعدس مقشر: C
  - BC قلب: لب BC
    - .... ۱۱۱۷ خمسة و: - C
  - BC اخرى: + مجربه المحربه
  - "" الغرّغرات: الغرّاغر C
- .... السعوطات: المعطسات BC، المسعطات D





واللقوة والسكتة ايارج فيقرا ووج وخردل وميويزج وعاقر قرحا وزنجبيل وشونيز وفوتنج<sup>٢٢١</sup> وصعتر واصل السوسن الآسمانجونى وقشور اصل الكرفس من كل واحد خمسة دراهم يدق الجميع نعما كل واحد على حدته ويخلط وينخل بالحرير ويرفع فى اناء ويتغرغر به مع سكنجبين او ماء العسل فى الحمام

(٤٠٩) سعوط نافع من ارواح السبل وغلظ الاجفان ورطوبتها<sup>١٢٧</sup> كندس درهم مر وزعفران وصبر اسقوطرى من كل واحد دانقان حضض دانق يدق وينخل ويعجن بماء المرزنجوش او بماء الريحان ويحبب كالعدس ويجفف في الظل وعند الحاجة<sup>١٢٨</sup>

تؤخذ منه حبة وتحل بلبن جارية ودهن بنفسج ويسعط بذلك وتدلك ببعضه<sup>١١٢٩</sup> الجبهة والانف

الباب الثامن عشر فی ادویة الرعاف

يغسل اولا المنخران <sup>١١٣٠</sup> بخل خمر جيد ويُؤخذ آفيون مصرى وزعفران من كل واحد قيراط يدقان ناعما وتتخذ فتيلة من خرقة كتان وتبل بخل خمر وتلوث بالدواء وتصير في كل واحد من جانبي المنخرين <sup>١١٣١</sup>

 $( \boldsymbol{\xi} ) \boldsymbol{\cdot} )$ 

# (٤١١) سعوط يقطع الرعاف قرطاس محرق واقاقيا وشب وافيون مصرى ورامك البلح<sup>١٢٢</sup> وكافور من كل واحد خمسة دراهم زاج وجلنار وسياه داوران<sup>١٢٢</sup> ورامك العفص<sup>١٢٢</sup> وودع محرق وعفص محرق<sup>١٢٠</sup> مطفا بخل خمر ولسان الحمل<sup>١٢٢</sup> من كل واحد عشرة دراهم عصارة لحية التيس ودم الاخوين وشيح<sup>١٢٢</sup> محرق من كل واحد سبعة دراهم كزيرة يابسة محرقة ثمانية دراهم يدق الجميع ناعما ويعجن بماء لسان الحمل ويقرص ويستعمل منه وقت الحاجة دانقان بماء لسان الحمل

# (٤١٢) دواء نافع من الرعاف شب يمانى وقلقطار محرق وقلقديس وزاج وقرطاس محرق وقرن ايل محرق مغسول مجفف وودع محرق مغسول مجفف وعفص محرق مطفا في خل خمر وكافور بقدر الحاجة<sup>١١٣</sup> يدق وينفخ في الانف بانبوب من قصب او فضة بعد ان تغسل المنخرين بخل خمر

(٤١٣) وايضا للرعاف يسعط بماء القثاء المر او بماء القاقلي او فتيلة من خرقة كتان تغمس في حبر ويذر عليها زاج وتوضع في الانف

(٤١٤) آخر للرعاف قشار الكندر وقرطاس محرق وزاج مصرى من كل واحد خمسة دراهم يدق الجميع ناعما وينخل وينفخ في الانف بعد غسل المنخرين<sup>٢٦٩ </sup> بخل خمر

(٤١٥) دواء للقىء يخرج صفراء وسوداء ويتقيا به فى الحميات غير الحادة صمغ الكنكر<sup>١١٤٠</sup> وجوز القىء وبزر الجرجير وبزر الفجل وبزر الشبث وبزر السرمق وملح هندى اجزاء سواء تجمع مسحوقة ويؤخذ منها بقدر الحاجة ويشرب منها بماء حار وعسل

 $(\xi V)$ آخر للقىء فجل مقطع عشرون درهما عيدان الشبث عشرة دراهم ملح هندى بزر البطيخ بزر عالا السرمق من كل وأحد خمسة دراهم يطبخ باربعة أرطال ماء عذب الى ان يبقى الثلث ويصفى الماء الباقي "ثاناً ويمرس فيه عسل أو اسكنجبين العسل نحو اوقيتين أو اقل أو أكثر ويشرب وهو فاتر ويستقصى في القيء

 $(\xi \Lambda)$ آخر للقىء جوز القيء وكنكرزد وبزر الفجل منكل واحد درهمان خردل وملح هندي منكل واحد درهم بزر السرمق ثلاثة دراهم<sup>٢١٢</sup> يدق وتؤخذ منه ثلاثة دراهم مع ثلاثين درهما سكنجبين قد انقع فيه فجل مقطع من الليل بماء حار مغلى فيه شبث ويشرب ويستقصى في القيء

# $(\xi | q)$ دواء يقيئ مرارا اصفر

ماء السرمق وماء الخبازي وماء الشبث المطبوخ فيه الصعتر وسكنجبين وفقاع ويلقى عليه جزء من ملح جريش ويشرب وهو فاتر

- <sup>۱۱٤٤</sup> بزر: او C
- B الماء الباقي: B
- ۱۱۲۲ بزر السرمق ثلاثة دراهم: C ۱۱۴۷ ویدق: B
  - <sup>۱۱٤۸</sup> درهمان: درهم C

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الباب العشرون فی ما يدر العرق ويمسكه لادرار العرق البورق الارمنى يحل بدهن البابونج ويطلى به<sup>١١٢</sup> البدن ودهن البابونج وحده يدر العرق

(٤٢٢) آخر عاقر قرحا يطبخ بدهن السمسم ويطلى به البدن فانه ينفض<sup>٠٥٠</sup> العرق وينفع من البرد الحادث في الحميات

(٤٢٣) لحبس'<sup>٥١١</sup> العرق كسفرة يابسة سماق منقى ارز مغسول دفعات من كل واحد عشرة دراهم يطبخ الجميع بثلاثة ارطال ماء حتى يبقى ثلثه ثم يصفى ويشرب منه فى كل يوم ثلاث اواق ويدهن ايضا بدنه بدهن السفرجل وينثر على بدنه طين ارمنى وآس وورق الطرفاء مدقوقة كالغبار وايضا يتدهن<sup>١٥٢</sup> بدهن الآس والخلاف

(٤٢٤) ومما يمنع العرق ان<sup>١٠٥٢</sup> يمسح البدن بدهن الورد ودهن الآس ويصب عليه ماء الورد ويروح بالمراوح وينام العليل في موضع قد صير فيه ورق الخلاف وورق الكرم والآس والكمثري والتفاح

تم

<sup>۱۱٤۹</sup> به: + على B . . . . ۱۱۰۰ ينفض: ينقص B <sup>۱۱۰۱</sup> لحبس: مما يحبس C ۱۱۵۲ یتدهن: یندهن C ۱۱۵۳ ان: – A

# The Dispensatory of Ibn at-Tilmīd

Chapter One on Pastilles Chapter Two on Pills and Hierata Chapter Three on Powders Chapter Four on Electuaries Chapter Five on Stomachics Chapter Six on Lohochs and Robs Chapter Seven on Beverages Chapter Eight on Preserves Chapter Nine on Decoctions Chapter Ten on Collyria, Catapasms, and Ophthalmics Chapter Eleven on Oils Chapter Twelve on Liniments Chapter Thirteen on Cataplasms and Ointments Chapter Fourteen on Enemas and Suppositories Chapter Fifteen on Dry Preparations and Dentifrices Chapter Sixteen on Nutrition Chapter Seventeen on Snuffs and Gargles Chapter Eighteen on Rhinorrhoeal Preparations Chapter Nineteen on Emetical Preparations Chapter Twenty on What Promotes and Prohibits Perspiration

# Chapter One on Pastilles

(1)

The tabasheer pastille with alhagi

for (the treatment of) acute fever, thirst, and cramp Tabasheer four *dirham*; alhagi five *dirham*; serpent melon seeds, cucumber seeds, and gourd (seeds) three *dirham* of each; starch, lightcoloured poppy, tragacanth, and gum-arabic one *dirham* of each. The ingredients are brought together, and each one is pounded and strained separately. (This) is kneaded with the maceration of fleawort seeds, formed into pastilles of one  $mitq\bar{a}l$ , (and) a potion (may be made by using) one pastille in barley-water.

(2)

The *tabasheer* pastille with sorrel seeds for (the treatment of) abdominal disorder, bloody expectoration, cough, and a predominance of biliousness

Take fine sorrel seeds, sealing bole, gum-arabic, and myrtle seeds ten *dirham* of each; barberry seeds and tabasheer eight *dirham* of each; rose petals seven *dirham*; roasted starch five *dirham*; acorn four *dirham*; saffron, amber, and red coral three *dirham* each; Fanṣūr camphor<sup>1</sup> half a *dirham*. (This) is pounded, strained, kneaded with rose-water, formed into pastilles of one *dirham*, dried, and used with the *myrtle* only rob.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Fanșūr is the Arabic name for the modern district of Barus on the northwest coast of Sumatra which was famous for the best varieties of camphor, see Tibbetts *Study* 140f. with map 7[a]; the 'variant' *qaişūrī* (instead of *fanşūrī*), as it often occurs in the literature (e.g. Gassānī Muʿtamad 404 and Dozy *Supplément* 2/440), is in fact a ghostword and should accordingly be amended.

<sup>&</sup>lt;sup>2</sup> Compare recipe 166.

#### (3)

The *small barberry* pastille which is useful against fever, thirst, and anxiety

The flesh of the barberry, liquorice rob, and tabasheer three *dirham* of each; Indian spikenard two *dirham*; cucumber seeds three and a half *dirham*; rose petals six *dirham*; purslane seeds, saffron, starch, and tragacanth two *dirham* of each; Fanṣūr camphor<sup>3</sup> half a *dirham*. (This) is ground, kneaded with alhagi-water, formed into pastilles of one *mitqāl*, and dried.

# (4)

The *large barberry* pastille which is useful against tumours of the liver and stomach, the early stages of dropsy, inveterate fevers, and yellow jaundice

The flesh of the fresh barberry, liquorice rob, red roses, serpent melon seeds, and the peeled seeds of musk melon three *dirham* of each; mastic, Indian spikenard, agrimony sap, dyer's madder, the resin of unripe dates, absinthe sap, asarabacca, citronella blades, fumitory seeds, endive seeds, flax dodder, Chinese rhubarb, saffron, and tabasheer two *dirham* of each; alhagi six *dirham*. The alhagi is dissolved in hot water, and the (other) ingredients are kneaded with it. (This) is formed into pastilles of one  $mitq\bar{q}l$ , dried, and used.

# (5)

The sumach pastille

for (the treatment of) dysentery and haemorrhage The fruit of the tarfa, Syrian sumach, myrtle seeds, gum-arabic, pomegranate flowers, grains of paradise, and Egyptian opium one part of each. (This) is kneaded with apple-water, formed into pastilles of one *dirham*, (and) a potion (may be made by using) just one pastille.

<sup>&</sup>lt;sup>3</sup> On Fanșūr see note 1 above.

#### (6)

# Pastilles which tighten the belly if its laxity is due to weakness and softness of the bowels

Roses and pomegranate flowers four *dirham* of each; gum-senegal three *dirham*; gum-arabic and tragacanth two *dirham* of each; the bark of the frankincense(-tree) and raw Indian lignaloes one *dirham* of each; *sukk*<sup>4</sup> and saffron half a *dirham* of each. (This) is pounded, brought together, strained, kneaded with the water from the spadix of the palm tree or date(-water) or lettuce(-water), formed into pastilles of two *dirham*, put in the shade to dry, and used.

#### (7)

A cooling pastille with camphor which is useful against flaming sensations, remnants of fevers, thirst, and gastric debility

Purslane seeds and the peeled seeds of serpent melon, cucumber, and gourd five *dirham* of each; fresh barberry sap or the flesh of the barberry, and light-coloured and dark-coloured poppy seven *dirham* of each; lettuce seeds, white Maqāṣīr sandalwood,<sup>5</sup> tabasheer, quince seed pulp, starch, and gum-arabic four *dirham* of each; yercum sugar eight *dirham*; Fanṣūr camphor<sup>6</sup> half a *mitqāl*. Each (ingredient) is ground on its own, (then) mixed together, kneaded with the maceration of fleawort seeds, formed into pastilles of one *mitqāl*, and used with the water of purslane seeds and the *pomegranate* beverage.<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> sukk is the name of a 'perfume', that is to say a medicinal preparation of which there are many different compositions; the basic ingredients seem to include musk, dates, gallnuts, oil, and certain other aromatics originally of Indian provenance, see e.g. Levey *Kindī* 294 and the very detailed descriptions in Wiedemann *Schriften* 2/821–826.

<sup>&</sup>lt;sup>5</sup> Maqāṣīr, a variant spelling of Maqāṣar, is the Arabic name for presumably the whole of the island of Celebes, see Tibbetts *Study* 255 with map 7[b] and the discussion in Dozy *Supplément* 2/366f.

<sup>&</sup>lt;sup>6</sup> On Fanșūr see note 1 above.

<sup>&</sup>lt;sup>7</sup> See recipe 194.

#### (8)

# The *agrimony* pastilles for (the treatment of) prolonged fever accompanied by shivering; they are used with plain oxymel<sup>8</sup> and rose-water

Roses, the resin of unripe dates, and agrimony sap one *dirham* of each; purslane seeds two *dirham*; tabasheer half a *dirham*; liquorice rob one fourth of a *dirham*. (This) is kneaded with rose-water, and formed into pastilles of one *dirham*.

# (9)

# The *caper* pastilles for (the treatment of) sclerosis and enlargement of the spleen

The peels of the caper root four *dirham*; the seeds of agnus castus, black pepper, asarabacca, 'long' birthwort, the root of the sky-coloured iris, and Indian spikenard two *dirham* of each; saffron half a *dirham*. (This) is kneaded with wine boiled down to one quarter, formed into pastilles of one *dirham*, and used with seeded oxymel.<sup>9</sup>

# (10)

# The poppy pastilles

# for (the treatment of) hepatic fever

Light-coloured and dark-coloured poppy four *dirham* of each; the peeled seeds of serpent melon, cucumber, gourd, and purslane, and starch and gum-arabic one part of each. (This) is pounded, kneaded with water, formed into pastilles of one mitqal, and drunk with seed-water, and with the *pomegranate* beverage<sup>10</sup> and its oxymel.

# (11)

# The pomegranate flower pastilles for (the treatment of) abrasion, haemorrhage, bloody expectoration, and dysentery

Cassia, Armenian bole, and gum-arabic four *dirham* of each; gumsenegal, rose petals, and pomegranate flowers eight *dirham* of each;

<sup>&</sup>lt;sup>8</sup> See recipe 185.

<sup>&</sup>lt;sup>9</sup> See recipe 189.

<sup>&</sup>lt;sup>10</sup> See recipe 194.

tragacanth one and a half *dirham*. (This) is kneaded with the cooked water of fresh pomegranate flowers or rose-water, dried, (and) a potion (may be made by using) two *dirham* (of it).

#### (12)

The *red coral* pastilles which are useful against haemorrhage, consumption, and purulent matter

Red coral fifteen *dirham*; Oriental frankincense, pomegranate flowers, and gum-senegal four *dirham* of each; gum-arabic and cinnamom half a *dirham* of each. (This) is ground, strained, kneaded with egg white, formed into pastilles of one *dirham*, and drunk with water.

#### (13)

The *gum-senegal* pastilles which are useful against bleeding, urinating blood, and bloody expectoration

Gum-senegal twenty *dirham*; sumach three *dirham*; the seed vessels and flowers of the pomegranate, and plantain sap two and a half *dirham* of each; washed Armenian bole and washed haematite one *dirham* of each; burnt staghorn, the finest amber, red coral, mussel shells, and opium one *dirham* of each. (This) is formed into pastilles of one *mitqāl* by (using) water, and drunk after six months with the *myrtle* rob.<sup>11</sup> And so it is with all pastilles and other drinkable compounds which contain opium—they are only drunk after six months and not used before that.

#### (14)

The *rhubarb* pastilles for (the treatment of) sclerosis of the spleen and liver, and inveterate fevers

Rhubarb, lac, madder, celery seeds, agrimony sap, and anise in equal parts. (This) is kneaded with water, formed into pastilles of one *dirham*, and drunk with oxymel.

<sup>11</sup> See recipe 166.

# (15)

# The *amber* pastilles —(according to) Ḥunain's copy<sup>12</sup> for (the treatment of) hyperaemia in general

Amber, red coral, and purslane seeds four *dirham* of each; burnt staghorn and gum-arabic three *dirham* of each; roasted coriander and light-coloured poppy six *dirham* of each; burnt mussel shells, henbane seeds, haematite, and sealing bole three *dirham* of each. (This) is pounded, strained, kneaded with rose-water, formed into pastilles of one *dirham*, dried, (and) a potion (may be made by using) one *dirham* (of it).

## (16)

# The mountain alkekengi pastille which is useful against urinating blood and purulent matter

Light-coloured poppy ten *dirham*; celery seeds, wormwood, and marijuana six *dirham* of each; saffron, opium, wild sorrel seeds, pine nuts, and peeled almonds three *dirham* of each; fennel seeds two *dirham*; fifty alkekengi berries; olibanum and tragacanth two *dirham* of each. (This) is pounded, strained, kneaded with wine boiled down to one third, formed into pastilles, put in the shade to dry, (and) after six months a potion (may be made) from it.

# (17)

# Pastilles for (the treatment of) urinating blood

Armenian bole ten *dirham*; amber, gum-senegal, pomegranate flowers, and gum-arabic ten *dirham* of each; salsify sap three *dirham*; henbane seeds two *dirham*; absinthe one *dirham*. (This) is pounded, strained, kneaded with water, and formed into pastilles of two *dirham*.

<sup>&</sup>lt;sup>12</sup> Hunain ibn Ishāq al-'Ibādī (d. 260/873 or 264/877) was one of the leading minds of the receptive period in Arabic scientific history, an ingenious translator of mainly Greek texts, and a prolific author of genuine medical and pharmacological works as well; the 'copy' Ibn at-Tilmīd refers to in the present context is most probably Hunain's own dispensatory (aqrābādin) of which we possess unfortunately nothing but a dozen or so scattered quotations, see Ullmann *Medizin* 299 note 1 and *GaS* 3/255 no. 2.

# (18)

# The *absinthe* pastilles

which are useful against obstruction of the liver Anise, celery seeds, asarabacca, peeled bitter almonds, and absinthe in equal parts. (This) is pounded, strained, kneaded with water, formed into pastilles of one *mitqāl*, and drunk pulverized with oxymel.

# (19)

# The *iris* pastille

# for (the treatment of) sclerosis of the spleen

The root of the sky-coloured iris four *dirham*; white pepper, Indian spikenard, and ammoniacum two dirham of each. (This) is pounded and strained, the ammoniacum is soaked in wine vinegar, the (other) ingredients are kneaded with it, (and) a potion (may be made by using) from it a weight of one *dirham* together with seed-oxymel.<sup>13</sup> This pastille is strong in loosening sclerosis of the spleen (and) proven by experience.

# (20)

The seed 'hazelnuts' for (the treatment of) burning urinary sensations,

urinating purulent matter, and ischuria

Gum-arabic, light-coloured poppy, the peeled seeds of serpent melon, starch, and linseed in equal parts; celery seeds one third of a part. (This) is kneaded with water, formed into pills, (and) a potion (may be made by using) one *dirham* (of it) with poppy beverage<sup>14</sup> and seed-water.

# (21)

The triangular pastilles

for (the treatment of) headache and insomnia;

# they are rubbed onto the forehead

Myrrh, opium, henbane seeds, the peels of the mandrake root, and dry mandrake in equal parts; saffron one third of a part. (This) is kneaded with lettuce-water and nightshade-water, and formed into triangular pastilles. These take on a triangular (shape) for no other reason than

<sup>&</sup>lt;sup>13</sup> Compare recipe 189.<sup>14</sup> See recipe 191.

to avoid that someone confuses them and they be drunk, (since) the only way to use them is externally as an unguent—and yet in some hospitals they are occasionally confused, so beware of changing their shape hereafter!

# (22)

# The *hypocistis* pastilles as used in the enemas (against) abrasions<sup>15</sup>

Burnt Egyptian papyrus, washed haematite which is 'bloodstone', burnt staghorn, amber, gum-senegal, washed Armenian bole, ceruse, dragon's blood which is  $q\bar{a}tir$ ,<sup>16</sup> plantain sap, and the sap of salsify which is 'hypocistis'<sup>17</sup> ten *dirham* of each; burnt biscuit eight *dirham*; burnt mussel shells three *dirham*; pomegranate flowers five *dirham*; saffron three *dirham*; opium four *dirham*; frankincense three *dirham*. All (this) is pounded, strained through a cloth of silk, kneaded with pomegranate flower-water or rose-water, and formed into pastilles of three and a half *dirham* each, one of which is used pulverized in an enema—the management of such an enema is mentioned in the chapter on enemas.<sup>18</sup>

#### (23)

# A pastille for him who brings up his food

Roses, tabasheer, and dried cumin soaked in wine vinegar one *dirham* of each; sumach three *dirham*; dried roasted coriander soaked in wine vinegar two *dirham*; the mash of pomegranate seeds two *dirham*; pistachio shells one *dirham*; mastic half a *dirham*. (This) is kneaded with rose-water, and one mitqal to two *dirham* from it is drunk with the *minty pomegranate* beverage.<sup>19</sup>

<sup>&</sup>lt;sup>15</sup> See recipe 370 in particular.

 $<sup>^{16}</sup>$  *qāțir* lit. "the dripping" is used here synonymously to denote the resinous exudation or inspissated juice of the dragon-tree *Dracaena draco* which is otherwise and more commonly known in Arabic as *dam al-aḥawain* "dragon's blood", cf. Levey *Kindī* 268.

<sup>&</sup>lt;sup>17</sup> The equation of salsify *Tragopogon porrifolius* and 'hypocistis' *Cytinus hypocistis* may be explained by the assumption that Ibn at-Tilmīd considered both plants to represent what in modern taxonomic terms is classified as *Tragopogon pratensis*, i.e. "goat's beard", cf. the discussion in Schmucker *Tabarī* 527f.

<sup>&</sup>lt;sup>18</sup> See e.g. recipe 370.

<sup>&</sup>lt;sup>19</sup> See recipe 200.

(24)

The kaukab pastille which is (also) called *lā* mazdahyānā, that is 'invincible'<sup>20</sup>—owing, as they say, to the strength of its effect; it is called *kaukab* pastille simply because it contains talc, and in the Syriac language it (appears as) kaukab  $ar^{i}\bar{a}$ , that is 'star of the earth';<sup>21</sup> it is useful for (the treatment of) the weak stomach which suffers from residues. acid belching, and headache when drunk or rubbed onto the forehead with vinegar; for (the treatment of) bloody expectoration, catarrh, chronic cough, fevers which (come) with paroxysms, and pain in the ears when some of it is shed into them with sweet marjoram-water; and for (the treatment of) bleeding, painful gums, and toothache if you knead it with galbanum and put it on the decayed (area)

Myrrh, castoreum, Indian spikenard, cassia, sealing bole, and the peels of the mandrake root five *dirham* of each; poppy six *dirham*; carrot, anise, moon carrot, the seeds of white henbane, storax, and celery seeds one *dirham* of each; talc four *dirham*. (This) is pounded, brought together, formed into pastilles of half a *dirham*, and dried.

(25)

The *rose* pastilles which are useful against phlegmatic fevers and against pain in the stomach

Roses two parts; Indian spikenard and liquorice rob one part of each. (This) is kneaded with wine boiled down to one third, formed into pastilles of one  $mitq\bar{a}l$ , and used.

 $<sup>^{20}</sup>$ Syriac lā mazdaļyānā (i.q. ἀνίκητος) "invincibilis", see Payne Smith Thesaurus 1/1121.

 $<sup>^{21}</sup>$  Syriac kaukab arʿā (i.q. γῆς ἀστήρ) "stella terrae, lapis amiantus, talcum", see Payne Smith Thesaurus 1/1694 and WkaS 1/446f.

#### (26)

The *rose* pastilles with tabasheer which are useful against the alternation of tertian The petals of red roses five *dirham*; Indian spikenard two *dirham*; tabasheer one *dirham*; agrimony sap eight *dirham*. (This) is brought together, ground, strained, kneaded with water, formed into pastilles, put in the shade to dry, and one *mitqāl* from it is drunk with oxymel.

# (27)

# The *mezereon* pastilles for those who suffer from dropsy and a lack of strength

Endive seeds ten *dirham*; mezereon and agaric one *dirham* and two thirds of a *dirham* each; peeled cucumber seeds two and a half *dirham*; the petals of Persian roses just as much. All (this) is pounded, ten pastilles are made, and every day one pastille is taken with quince oxymel.<sup>22</sup>

# (28)

# The lignaloes pastille

for (the treatment of) coldness of the stomach The petals of red roses and scraped iris root five *dirham* of each; mastic, grains of paradise, Indian spikenard, and Indian laurel two *dirham* of each; wild marjoram and Indian lignaloes one *dirham* of each; saffron half a *dirham*. (This) is pounded, kneaded with rose-water, formed into pastilles of one mitadal, (and) a potion (may be made by using) one pastille with quince wine.

# (29)

# The *lac* pastille

# for (the treatment of) hepatic debility

Clear lac, madder, anise, celery seeds, the sap or herbs of absinthe, peeled bitter almonds, bitter alecost, dry elecampane, cinnamom, 'long' birthwort, and the sap or stems of agrimony one *dirham* of each. All that is brought together, ground, strained, kneaded with fresh water, formed

<sup>&</sup>lt;sup>22</sup> See recipe 195.

into pastilles, put in the shade to dry, (and) a potion (may be made by using) a weight of one  $mitq\bar{a}l$  (of it) with tepid water and oxymel. Sābūr ibn Sahl says: "In another copy there is found Chinese rhubarb instead of cinnamom, and the addition of barberry sap and liquorice rob in similar parts to the remaining ingredients"; he (also) says: "And there is no mention of elecampane". Ibn at-Tilmīd (however confirms that) the first (prescription) is the one which is generally used.<sup>23</sup>

# (30)

The *resin* pastilles which are useful against hepatic debility and membranous dropsy; they rank among (the prescriptions) preferred by the great Hibatallāh ibn Ṣāʿid ibn Ibrāhīm Ibn at-Tilmīd

The resin of unripe dates, Chinese rhubarb, and mastic three *dirham* of each; Indian spikenard, celery seeds, visnaga, citronella, savin, bitter almonds, alecost, madder, agrimony sap, asarabacca, 'rolled' birthwort, and gentian one and a half *dirham* of each. (This) is made into pastilles, and one *mitqāl* of these is drunk with roots-water obtained from endive, celery, fennel, and citronella roots.<sup>24</sup>

(31)

A remedy known as  $Barmak\bar{\iota}^{25}$ which rids the stomach and the intestines from phlegmy residues, and delays the advance of old age

Yellow, black, and chebulic myrobalan, beleric myrobalan, emblic, and embelia one part of each; lupine two parts; and from candy the total weight. The candy is dissolved, measured like strong julep, and the

<sup>&</sup>lt;sup>23</sup> This is a nice example of how meticulously Ibn at-Tilmīd dealt with his sources, and at the same time it reveals his ultimately pragmatic approach; he quite lengthily quotes his famous predecessor Sābūr ibn Sahl (d. 255/869) for a modification of the recipe's ingredients only to conclude with the dry remark that these expositions are obsolete. Which 'copy', however, Sābūr himself refers to in this quotation is a crux— the general drift as much as the specific wording of the quotation seem to rule out any of his own medico-pharmacological works which, insofar as they are preserved, do not testify to this option anyhow; he therefore would have used, at least according to Ibn at-Tilmīd, a very early, and in all likelihood lost pharmacological text, probably designed for clinical settings and clearly considered commonplace; but stuff like that hardly existed in those days.

<sup>&</sup>lt;sup>24</sup> Compare recipe 225.

<sup>&</sup>lt;sup>25</sup> Barmakī denotes a person or a thing belonging to or associated with the

(other) ingredients are kneaded with it. (This) is made into pastilles of ten *dirham* each, dried, and used.

# (32)

# A remedy which is useful against epilepsy

Take the ingredients mentioned in the aforesaid *Barmakī* remedy and admix the following—French lavender, polypody, mastic, cassia, and asarabacca half a part of each; and candy set at about the total (weight). Pick up the candy, pound it first, besprinkle it with hot water, and once it dissolves pour forth enough of that water to cover it; then, when the candy has (properly) melted, strain it through a sieve, and knead the (other) ingredients with it. (This) is made into pastilles of ten *dirham* each, (and) a potion (may be prepared) by dissolving a single pastille in hot water at the break of day.

# (33)

# The hospital pastille (called) *violet*

'Askar violet<sup>26</sup> two *dirham*; white turpeth one *dirham*; liquorice rob four  $d\bar{a}niq$ ; grilled Antioch scammony one  $d\bar{a}niq$ ; anise and tragacanth one third of a *dirham* each. (These ingredients) are brought together, and they (make) one potion.

# (34)

# The purgative pastilles (called) *violet*

Violet two *dirham*; 'hollow' turpeth one *dirham*; liquorice rob four  $d\bar{a}niq$ ; scammony one  $d\bar{a}niq$ —(another) copy has one and a half  $d\bar{a}niq$ , but what is generally used in the hospitals is (just) one  $d\bar{a}niq$ ; (yet another) copy has anise in a weight of two  $d\bar{a}niq$ , but they do not actually add it to this pastille which is made for the ordinary.

Barmakids, an illustrious Iranian family of secretaries and viziers during the time of the early Abbasid caliphs; the term is also linked to this family's semi-legendary eponym Barmak who figures in the Arabic tradition as the high priest of a Zoroastrian fire temple or, more likely, a Buddhist monastery, and who is further said to have been a gifted healer if not a trained physician, see Barthold/Sourdel "Barāmika" 1033 and Abbas "Barmakids" 806. The connotations of *Barmakī*, as it is used in the present context, are therefore 'time-honoured, sacred, mighty, effective' and the like.

<sup>&</sup>lt;sup>26</sup> banafsağ ʿaskarī lit. "soldier's violet" is a somewhat obscure designation; considering that 'askar "camp", when followed by a marker, was a fairly common place name, it may in the present context be short for 'Askar Mukram, a formerly flourishing but now ruined town in the province of Hūzistān in southwestern Iran, see Streck/Lockhart "Askar Mukram" 711 with Le Strange Lands map 2.

# (35)

# A violet pastille according to Zahr $\bar{u}n^{27}$

Sugar ten  $\bar{u}q\bar{i}ya$ ; 'Askar violet<sup>28</sup> six  $\bar{u}q\bar{i}ya$ ; turpeth one  $\bar{u}q\bar{i}ya$ ; agaric and liquorice rob half an  $\bar{u}q\bar{i}ya$  of each; scammony one third of an  $\bar{u}q\bar{i}ya$ . (This) is pounded, (and) a potion (may be made by using) fourteen *dirham* of all the powder.

# (36)

# Another violet pastille by him

Violet one hundred *dirham*; liquorice rob twenty-five *dirham*; anise and Indian salt twelve and a half *dirham* of each; scammony ten *dirham*. A potion (may be made by using) four *dirham* from it.

# (37)

# The brimfull hiccup pastilles

Bitter alecost, aloe, citronella, dry wild thyme, mountain mint, dry mint, dry rue, celery seeds, Oriental frankincense, and asarabacca two *dirham* of each; Egyptian opium and the petals of red roses half a *dirham* of each. (This) is pounded, kneaded with wine or wine boiled down to one half or wine boiled down to one third, formed into pastilles of one *mitqāl*, dried, and used.

# (38)

The *ailāwus*<sup>29</sup> pastilles and they are useful (against) vomiting due to coldness of the stomach and belly

Celery seeds and anise eighteen *dirham* of each; absinthe twelve *dirham*; cassia twenty-four *dirham*; myrrh, black pepper, opium, and castoreum five *dirham* of each. (This) is pounded, kneaded with water, put in the shade to dry, and after six months a potion (may be made) by using one *dirham* (of it).

<sup>&</sup>lt;sup>27</sup> There is an isolated mention in Ibn Abī Uşaibiʿa ʿUyūn 1/240,-6 of a certain physician named Zahrūn who is said to have been a contemporary of Abū l-Farağ ʿAbdallāh ibn aṭ-Ṭaiyib (d. 435/1043); but since Ibn at-Tilmīd refers to Zahrūn again in recipe 374 by adding the genealogical indicator *al-Ḥarrānī*, it is more likely that Zahrūn was the grandfather of the physician Abū l-Ḥasan Tābit ibn Ibrāhīm ibn Zahrūn al-Ḥarrānī (d. 369/980, see e.g. Ibn al-Qiftī Ḥukamā' 111–115), which would place him in the middle of the 3rd/9th century. This is all we can say.

<sup>&</sup>lt;sup>28</sup> On 'Askar see note 26 above.

<sup>&</sup>lt;sup>29</sup> ailāwus < εἰλεός "intestinal obstruction", see Liddell/Scott Lexicon 486.

#### (39)

# (Some) mezereon pastilles for (the treatment of) dropsy when strength is lacking

Endive seeds ten *dirham*; mezereon leaves soaked in vinegar (and) then dried one *dirham*; two thirds of a *dirham* (from) agaric; cucumber seeds two and a half *dirham*; rose petals two and a half *dirham*. This is made into ten pastilles, (and) a potion (may be prepared by using) one pastille with the *quince* oxymel.<sup>30</sup>

#### (40)

# Another mezereon pastille

Mezereon, dodder, and turpeth one *dirham* of each; Kerman cumin, Indian salt, and chebulic and yellow myrobalan half a *dirham* of each. (These ingredients) are brought together by grinding, (and) a potion (may be made by using) one *dirham* (of it) with hot water.

## (41)

# The *spikenard* pastilles for (the treatment of) an inveterate tumour in the stomach

Citronella blades, cassia, roses, rhubarb, lemon grass, and Indian spikenard three *dirham* of each; saffron, anise, alecost, and black pepper one *dirham* of each; bdellium africanum three *dirham*; mastic two *dirham*; ammoniacum one *dirham*. (This) is formed into pastilles, (and) a potion (may be made by using) one  $mi\underline{q}al$  (of it) every day with wine boiled down to one quarter.

#### (42)

# A pastille for (the treatment of) chronic scabies

Burnt vitriol and burnt salt, sulphur, mercury dust, oak galls, turmeric, and litharge one part of each. (This) is pounded, strained, kneaded with water, formed into pastilles of three *dirham* each, dried, and used after scratching the scabious area and rubbing onto it wine vinegar, honey, salt, and green lye.

<sup>&</sup>lt;sup>30</sup> See recipe 195.

# (43)

A pastille for (the treatment of) moist scabies Ceruse, kamala, babul, tabasheer, and pomegranate flowers half a *rațl* of each; potsherds one *rațl*. (This) is pounded, strained, kneaded with rose oil and wine vinegar, and used.

# (44)

A pastille for (the treatment of) dry scabies Pomegranate flowers, turmeric, and litharge one part of each; pine resin, bitter lentils, greater celandine, and 'long' birthwort half a part of each. (This) is pounded, kneaded with wine vinegar, and used.

#### (45)

A pastille for those who suffer from spleen disease—(invented) by Ibn at-Tilmīd

Agrimony sap two  $mitq\bar{a}l$ ; water flag two  $mitq\bar{a}l$ ; the peels of the caper root four ( $mitq\bar{a}l$ ); the pulp of serpent melon seeds and musk melon seeds five ( $mitq\bar{a}l$ ) of each; endive seeds and flax dodder three ( $mitq\bar{a}l$ ) of each; anise, celery seeds, and fennel seeds two *dirham* of each; bitter almonds three (*dirham*); rusty back fern five *dirham*. (This) is pounded, kneaded with bitter endive-water or with vinegar in which had been soaked ammoniacum, and formed into pastilles of one mitqal.

# (46)

And for (the treatment of) the indurated spleen

Rusty back fern is cooked in wine, strained off, and drunk on an empty stomach for a few days; the application of a cataplasm (made) from ammoniacum and vinegar—as if it were clay—(also) relaxes the spleen.

# (47)

# And (again) for that

Agnus castus seeds and the peels of the caper root five *dirham* of each. (This) is soaked in vinegar, dried, pounded, and three *dirham* from the lot are taken every day with oxymel beverage<sup>31</sup> to cure the spleen within a week.

<sup>&</sup>lt;sup>31</sup> Compare recipe 185.

# Chapter Two on Pills and Hierata

#### (48)

# A pill for (the treatment of) the cough in children who, besides heavy coughing, are (also) troubled by vomiting

Opium one *dirham*; starch, gum-arabic, liquorice rob, and lightcoloured poppy one *dirham* of each. (This) is pounded, kneaded with fleawort maceration, formed into pills similar to peppercorns, and one (of these) is put in the mouth at bedtime, not to be swallowed.

#### (49)

# A hospital pill for (the treatment of) coughing Liquorice rob, starch, tragacanth, sweet almonds, and gum-arabic three *dirham* of each; white sugar candy five *dirham*. (This) is pounded, strained, kneaded with quince seed maceration, formed into pills similar to chickpeas, and used.

#### (50)

# A pill for (the treatment of) the cough in a frail disposition

Starch, tragacanth, gum-arabic, almonds, peeled broad beans, and Armenian bole in equal parts are kneaded with fleawort maceration. The sheikh Abū l-ʿAlāʾ Ṣāʿid ibn at-Tilmīd says about the treatment of the soft and slippery stomach: "The *carob* stomachic<sup>32</sup> with fresh boxthorn-water is among the strongest (remedies) to toughen the stomach, followed by the *pomegranate flower* pastille<sup>33</sup> with the *myrtle* rob,<sup>34</sup> and the *astringent quince* stomachic<sup>35</sup> with the *sour apple* rob;<sup>36</sup> one may (also) apply to the stomach a cataplasm (made) from roses, lignaloes, saffron, lemon grass, cyperus, and ramie kneaded together with myrtlewater and mint-water; and the diet (should consist) of baked or grilled

<sup>&</sup>lt;sup>32</sup> See e.g. recipe 247 in Kahl Sābūr<sup>1</sup> 151 and Sābūr<sup>2</sup> 127 respectively.

<sup>&</sup>lt;sup>33</sup> See recipe 11.

<sup>&</sup>lt;sup>34</sup> See recipe 166.

<sup>&</sup>lt;sup>35</sup> See recipe 134.

<sup>&</sup>lt;sup>36</sup> Compare recipe 162.

francolin or partridge—if (the patient) is too weak to digest these, (he is given) spoon-meat,<sup>37</sup> and if he dislikes them (that way), they are boiled in vinegar (and) then roasted".<sup>38</sup>

# (51)

For (the treatment of) moist cough, and choking with a superfluity of moisture released from the stomach and oesophagus

Inspissated turpeth two *dirham*; peeled sweet almonds four *dirham*; sugar eight *dirham*. (This) is pounded, kneaded with (a few) drops of wine boiled down to one quarter, and made into pills which are swallowed before going to sleep.

# (52)

# A diuretic

Celery seeds, dyer's madder, carrot seeds, parsley, savin, asarabacca, visnaga, fennel, Indian spikenard, alecost, and bitter almonds ten *dirham* of each; musk melon seeds five *dirham*; ammoniacum three *dirham*. (This) is dissolved in wine, made into 'hazelnuts', (and) a potion (may be prepared by using) a weight of three *dirham* (of it).

# (53)

'Hazelnuts' for (the treatment of)

burning urinary sensations and vesical ulcers

Musk melon seeds ten *dirham*; cucumber seeds five *dirham*; gourd seeds five *dirham*; purslane seeds two *dirham*; henbane seeds, marshmallow seeds, almonds, tragacanth, liquorice rob, light-coloured poppy, starch, Armenian bole, and celery seeds two *dirham* of each. (This) is kneaded with water, formed into pills, and used.

 <sup>&</sup>lt;sup>37</sup> zīrbāğa "spoon-meat" < Persian zīrah-bā "puls cum carne avis pinguis, cumino et aceto cocta", see Vullers *Lexicon* 2/170; cf. also Dozy *Supplément* 1/618.
 <sup>38</sup> Abū l-ʿAlāʾ Ṣāʿid ibn at-Tilmīd (fl. second half of 5th/11th century), on whose

<sup>&</sup>lt;sup>38</sup> Abū l-ʿAlāʿ Ṣāʿid ibn at-Tilmīd (fl. second half of 5th/11th century), on whose authority the preceding information is given, was Ibn at-Tilmīd's own father and apparently himself a physician of some repute, see Ibn Abī Uṣaibiʿa ʿUyūn 1/259,-4f.; since this is practically all we know about Ṣāʿid, it is impossible to say whether the quotation originates from a (hypothetical) text or rather a personal instruction.

#### (54)

# (A remedy) which crumbles kidney stones

Balm seeds, radish seeds, carrot, parsley, the peels of the caper root, the peels of the opopanax root, bitter almonds, bay laurel seeds, citronella, cyperus, Indian spikenard, rusty back fern, harmala, gentian, birthwort, asarabacca, Jews' stone, wild caraway, myrrh, ammoniacum, sagapenum, bdellium mukul, black pepper, and sweet flag in equal parts. Pound what can be pounded, and mix it with balm oil; (then) soak the remaining (ingredients), namely the resins, in a little water, and knead the (other) ingredients with it. (This) is made into pills, and every day one *dirham* (of it) is drunk together with one *dāniq* (of) scorpions' ashes<sup>39</sup>—for that crumbles the kidney stones within fourteen days, or so they say.

# (55)

# Scorpions' ashes

Take the scorpions, put them in a cooking-pot made of baked clay and hair, close its top, place it on a brick in a moderately preheated oven for six hours, (then) remove and use (that).

# (56)

# The hiera picra

# *—hiera* meaning 'divine' and *picra* 'bitter'<sup>40</sup>

Mastic, saffron, Indian spikenard, balm seeds, balm twigs, asarabacca, cassia, and cinnamom one *dirham* of each; aloe sixteen *dirham*. A potion (may be made by using) two *dirham* (of it).

## (57)

#### The *hiera* pill

*Hiera picra*<sup>41</sup> and white turpeth ten *dirham* of each; yellow and chebulic myrobalan, and anise five *dirham* of each; Indian salt two *dirham*; scammony grilled in quinces two and a half *dirham*. (This) is pounded, kneaded with Nabataean celery-water, (and) a potion (may be made by using) two and a half *dirham* (of it).

<sup>&</sup>lt;sup>39</sup> See recipe 55.

<sup>&</sup>lt;sup>40</sup> *hiera picra* < ἰερὰ πικρά lit. "divine bitter" is the name of an "antidote" (thence 'higry-pigry'), see Liddell/Scott *Lexicon* 1403 with Ullmann *Medizin* 296.

<sup>&</sup>lt;sup>41</sup> On *hiera picra* see note 40 above.

# (58)

# The aloe pill

Aloe ten *dirham*; roses, chebulic myrobalan, and mastic five *dirham* of each; saffron one *dirham*. (This) is formed into pills (by kneading it) with celery-water in which had been soaked bdellium mukul, (and) a potion (may be made by using) two and a half dirham (of it).

# (59)

# The meadow saffron pill

Aloe, meadow saffron, and yellow myrobalan one part of each; Antioch scammony one sixth of a part. A potion (may be made by using) two and a half *dirham* (of it).

# (60)

# The *joints* pill

Meadow saffron, green-winged orchid, cocculus, paeony, small centaury, turpeth, aloe, and black myrobalan one part of each. (This) is pounded, kneaded with hot water, formed into pills, (and) a potion (may be made by using) two and a half *dirham* (of it) and one *dāniq* (of) scammony each time.

# (61)

# The *plum* lohoch

Half an *ūqīya* of plums together with one *dāniq* (of) scammony (make) a potion.42

# (62)

# The *stomachic*<sup>43</sup> pill

Balmseeds, balmtwigs, cassia, Indianspikenard, asarabacca, cinnamom, citronella root, saffron, mastic, the rootstock of sweet flag, absinthe sap, 'rolled' birthwort, and Indian salt one dirham of each; Socotra aloe fifteen *dirham*; scammony, agaric, and the pulp of colocynth

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 <sup>&</sup>lt;sup>42</sup> This recipe should rather be expected to figure in chapter six on lohochs and robs.
 <sup>43</sup> In the present text, "stomachic" occurs either as the name of a pharmacological product (specific), or as the name of a pharmacological category (general). The former is represented by the term  $ustumahiquin < \sigma \tau \circ \mu \alpha \chi \kappa \circ v$  "good for the stomach", see Liddell/Scott Lexicon 1649; the latter is represented by the term ğawārišn < Persian quwārišn "medicamentum compositum, quod cibi digerendi caussa edunt", see Vullers Lexicon 2/1040.

four *dirham* of each. (These ingredients) are brought together by pounding and straining, and (then) by kneading them with celery-water. (This) is formed into pills similar to peppercorns, (and) a potion (may be made by using) two *dirham* (of it) with hot water.

# (63)

# A pill which is useful against melancholia

Dodder twenty *dirham*; polypody ten *dirham*; agaric ten *dirham*; black hellebore two and a half *dirham*; Indian salt two and a half *dirham*; French lavender seven *dirham*; *hiera picra*<sup>44</sup> fifteen *dirham*. (This) is brought together, pounded, strained, formed into pills, (and) a potion (may be made by using) three to four *dirham* (of it).

# (64)

# The *šabyār*<sup>45</sup> pill

Aloe three *dirham*; mastic and roses one *dirham* of each. (This) is pounded, formed into pills, dried, (and) a potion (may be made by using) one  $mitq\bar{q}l$  to two *dirham* (of it) at bedtime.

# (65)

# The qūqāyā<sup>46</sup> pill

# which is attributed to Galen the famous,<sup>47</sup> and which is (also) mentioned by ar-Rāzī in (his book entitled) *al-Muršid* as an example for the composition of purgative drugs<sup>48</sup>

Aloe, mastic, the sap or leaves of absinthe, scammony, and the pulp of colocynth in equal parts. (This) is brought together with celery-

<sup>&</sup>lt;sup>44</sup> On *hiera picra* see note 40 above.

<sup>&</sup>lt;sup>45</sup> *šabyār* < Persian *šab-yār* lit. "friend of the night", i.e. a remedy (here: a pill) to be taken at bedtime; cf. Vullers *Lexicon* 2/409 "(noctis amicus) nom. electuarii vel potionis somniferae" and Ullmann *Medizin* 298.

<sup>&</sup>lt;sup>46</sup> qūqāyā < Syriac < κοκκία (dim.[?] of κόκκος) "pill", cf. Liddell/Scott Lexicon 971, Dozy Supplément 2/428, and Schmucker Ţabarī 367; an isolated reference to the actual use of the term κοκκία "[little] pill" in Greek is a prescription against coughing given by Alexander of Tralleis (d. 605 CE) under the heading Βηχικὰ κοκκία "Hustenpillen", see Puschmann Alexander 2/182f. In any case the expression "qūqāyā pill" (habb qūqāyā) is a curious tautology.

<sup>&</sup>lt;sup>47</sup> Galen (*Ğālīnūs* < Γαληνός) of Pergamon (d. 199 CE), the famous Greek physician on whom see Kudlien/Wilson "Galen" passim; on Galen in Islam cf. Walzer "Djālīnūs" 402f. with Ullmann *Medizin* 35–68 and *GaS* 3/68–140. I have not been able to substantiate the attribution of the *qūqāyā* pill to Galen.

<sup>&</sup>lt;sup>48</sup> For the essentials of this recipe, adopted from Muḥammad ibn Zakarīyā' ar-Rāzī's

water, (and) a potion (may be made by using) one and a half up to two *dirham* (of it). Ibn at-Tilmīd (however says): "(A final dose of) two *dirham* would contain (a relative share of) four *dāniq* scammony and just as much colocynth pulp, making this (prescription) very strong indeed. In my opinion the potion should be (made by using only) half a *dirham* up to one *dirham*—such that (a final dose of) half a *dirham* would contain (a relative share of) one *dāniq* of (each of) these two (ingredients), which makes a weak potion; and that (a final dose of) one *dirham* would contain (a relative share of) two *dāniq* (of each), which makes a perfect potion. Perhaps when using this (prescription) to (counter) colicky powers, one may actually end up with (a final dose of) two *dirham*, as mentioned".

# (66)

A pill which expels worms and flukes

Male fern, kamala, indigo seeds, Kabul embelia, lupine, white turpeth, yellow myrobalan, and Turkish wormwood half a *rațl* of each; add to it the same (amount of) sugar. (This) is pounded, formed into pills, (and) a potion (may be made by using) six *dirham* from it—(but) drink half a *rațl* (of) fresh goatmilk before taking this (remedy), and afterwards gulp down (a few) mouthfuls (of) wine vinegar.

# (67)

### A hospital pill which clears the chest

White agaric three *dirham*; liquorice rob in a weight of one *dirham*; white horehound one *dirham*; turpeth three *dirham*; *hiera picra*<sup>49</sup> eleven *dirham*; the pulp of colocynth and sarcocolla two *dirham* of each. (This) is pounded, formed into pills, (and) a potion (may be made by using) two *dirham* (of it).

<sup>(</sup>d. 313/925 or 323/935) aphoristic medical treatise *al-Muršid*, see Iskandar "Murshid" 62,4ff.

<sup>&</sup>lt;sup>49</sup> On *hiera picra* see note 40 above.

#### (68)

# A pill for (the treatment of) halitosis —from (the book entitled) a<u>d</u>-<u>D</u>ahīra<sup>50</sup>

Lignaloes, clove, and mastic in equal (parts). (These ingredients) are kneaded in pounded form with gum-arabic dissolved in aromatic wine. (This) is formed into pills, and put in the mouth.

# (69)

# An hiera

—mentioned by 'Alī ibn al-'Abbās<sup>51</sup> which rids the stomach, the intestines, the brain, and the nerves from residues, loosens trapped wind, opens obstruction, stimulates the appetite, strengthens the digestion, straightens the mind, delays ageing, and is useful in the preservation of health, especially for those whose nature is dominated by phlegm

Celery seeds and anise four *dirham* of each; fennel seeds, absinthe, and visnaga three *dirham* of each; mastic, Indian spikenard, and cinnamom in a weight of two *dirham* each; scraped (and) then pounded liquorice root three *dirham*; Socotra aloe thirty *dirham*. (This) is finely pounded, strained, and kneaded with the water of citron leaves for those who are affected by phlegm, and with oxymel for those who are affected by yellow bile; for those (however) who are affected by black bile admix to all that five *dirham* (of) dodder, and knead it with the waters of lemon balm and pennyroyal; and for him who is in need of this remedy whilst suffering from rectal pain or haemorrhoids knead it with the water of bdellium africanum, whereby the amount of bdellium going into each potion should be about half a *dirham*. (Such) a potion (may be made by using) two to three *dirham* (of any of these preparations)—and what a marvellous (remedy) it is!

<sup>&</sup>lt;sup>50</sup> For this recipe from Tābit ibn Qurra al-Ḥarrānī's (d. 288/901) pseudepigraphic (?) medical handbook a<u>d</u>-Daḥīra see Tābit Daḥīra 53,5.

<sup>&</sup>lt;sup>51</sup> In its essential parts this recipe is a pretty neat adoption from 'Alī ibn al-'Abbās al-Maǧūsī's (d. late 4th/10th century) celebrated medical encyclopaedia, see Maǧūsī *Kāmil* 2/20,-4ff.

#### (70)

# The musk remedy —that is the musk remedy with absinthe which is useful against palpitations, delusions, and laryngeal tumours, and which desiccates gastric moisture

Absinthe and aloe eight *dirham* of each; Chinese rhubarb six *dirham*; visnaga, saffron, and celery seeds four *dirham* of each; musk, nard, laurel, and myrrh two *dirham* of each; castoreum one and a half *dirham*. (This) is pounded, kneaded with honey, (and) a perfect potion (may be made by using) one  $mitq\bar{q}l$  (of it).

#### (71)

A pill which is suitable for jaundice in most cases

Agaric seven *dirham*; *hiera picra*<sup>52</sup> six *dirham*; flax dodder seeds six *dirham*; yellow myrobalan and garden orache seeds five *dirham* of each; fresh dodder and black myrobalan four *dirham* of each; Indian salt, radish seeds, and scammony three *dirham* of each; anise, celery seeds, and fennel two *dirham* of each. (This) is kneaded with the water of young radish leaves, (and) a potion (may be made by using) two *dirham* to two *mitqāl* (of it).

#### (72)

The *seed* 'hazelnuts'<sup>53</sup> which strongly promote urination

Celery seeds, spignel, valerian, carrot, parsley, savin, asarabacca, visnaga, fennel seeds, Indian spikenard, and bitter almonds twenty *dirham* of each; peeled musk melon seeds ten *dirham*; ammoniacum three *dirham*. The ammoniacum is dissolved in wine, and (the other ingredients) are kneaded with it. This is formed into 'hazelnuts', (and) a potion (may be made by using) three or five of these.

<sup>&</sup>lt;sup>52</sup> On *hiera picra* see note 40 above.

 $<sup>^{\</sup>rm 53}$  For a different prescription bearing the same name and also relating to urology see recipe 20.

For (the treatment of) flukes and large worms Male fern, embelia, kamala, turpeth, lupine, and myrrh (in) equal (parts). A potion (may be made by using) four *dirham* (of it) with hot water.

(74)

The *sweet musk* remedy for (the treatment of) palpitations, black-bilious diseases, difficulty in breathing, epilepsy, hemiplegia, facial paralysis, and quartan

Take zerumbet and great leopard's bane one *dirham* of each; small pearls, amber, red coral, and burnt raw silk one and a half *dirham* of each; red sea lavender, white sea lavender, Indian laurel, Indian spikenard, grains of paradise, clove, castoreum, and usnea half a *dirham* of each; ginger and long pepper four  $d\bar{a}niq$  of each; musk one and a half  $d\bar{a}niq$ . The ingredients are pounded, strained through a cloth of silk, and kneaded with raw honeycombs undisturbed by fire (in a ratio of) three parts of honey to one (part of ingredients). (This) is stored in a vessel, and after two months a potion (may be made) with aromatic wine by using from it (an amount) similar to a chickpea.

### (75)

A pill which is useful against most kinds of colic

The pulp of colocynth and scammony two *dirham* of each; aloe three *dirham*; borax and bdellium mukul one *dirham* of each. (This) is formed into pills, (and) a potion (may be made by using) one *dirham* to one  $mi\underline{t}q\overline{a}l$  (of it).

Among the electuaries which prove useful in resolving colic are the (ones called)  $datish^{54}$  and  $šahriy\bar{a}r\bar{a}n$ , 55 and with regard to easing colical pain the (one called) *Greek Filūniyā* and, it is said, (also) the

<sup>&</sup>lt;sup>54</sup> See recipe 145 ("stomachic").

<sup>&</sup>lt;sup>55</sup> See e.g. recipe 252 in Kahl Sābūr<sup>1</sup> 152f. and Sābūr<sup>2</sup> 129 respectively ("stomachic"). šahriyārān < Persian šahr-yārān lit. "friends of the city", i.e. princes, kings, emperors and the like, cf. Vullers *Lexicon* 2/486; at the same time, Šahryār is an Iranian proper name of ancient fame, see Justi *Namenbuch* 174ff.

<sup>&</sup>lt;sup>56</sup> See recipe 119.

*Persian Filūniyā*<sup>57</sup>—but compared to the other, the *Greek* is particularly renowned for this (effect); and *hiera picra*<sup>58</sup> is of great benefit when checking nausea in those who suffer from colic.

# Chapter Three on Powders

# (76)

# The *bole* powder for (the treatment of) abrasion and yellow-bilious diarrhoea

Sweet basil seeds, plantain seeds, sorrel seeds, starch, gum-arabic, and purslane seeds one part of each; Armenian bole, rose seeds, and pomegranate flowers one and a half parts of each. (This) is roasted except the bole, and three *dirham* from it are swallowed dry with the *quince only* rob.<sup>59</sup>

# (77)

# The *pomegranate seed* powder

which strengthens the stomach and the intestines

Pomegranate seeds, the seeds of unripe grapes, the seeds of (ripe) grapes, myrtle seeds, Syrian carob, Nabataean carob, acorn, dried coriander soaked in sumach-water, and sumach one part of each; babul and Bengal quince one and a half parts of each. All (this) is then roasted, pounded, and a potion (may be made) by using three *dirham* (of it).

# (78)

# The stalks powder

Roast the stalks of the service-tree, the lote-tree, the date-palm, the quince-tree, the Syrian carob-tree, and the mulberry-tree (bearing)

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<sup>&</sup>lt;sup>57</sup> See recipe 120.

<sup>&</sup>lt;sup>58</sup> On *hiera picra* see note 40 above.

<sup>&</sup>lt;sup>59</sup> Compare recipe 161.

immature (fruit), bring them together (in) equal (parts), and use them.

# (79)

# A powder for those who suffer from the cough in conjunction with diarrhoea

Sweet chestnut, the peels of dainty reddish almonds, Syrian carob, Nabataean carob, washed Armenian bole, gum-arabic, starch, purslane seeds, and poppy. (This) is roasted except the bole, and used.

#### (80)

# A powder which retains urine

Cyperus, Indian spikenard, French lavender, frankincense and the bark of its tree, and the grilled inner skins of acorn-cups in equal parts. (This) is pounded, brought together, and one  $mitq\bar{q}l$  from it is taken in the mornings and (again) at the end of the day.

# (81)

# A powder which retains trickling urine

Acorn, the bark of the frankincense(-tree), myrrh, and elecampane in equal (parts). (This) is pounded, and one  $mi\underline{q}al$  from it is swallowed dry, if necessary with wine boiled down to one quarter—(so) it is used, and sumach is eaten upon the powder.

# (82)

# The *crayfish* powder for (the treatment of) coughing up purulent matter

The ashes of freshwater crayfish ten *dirham*; gum-arabic, Cyprian bole, and light-coloured and dark-coloured poppy five *dirham* of each; tragacanth three *dirham*. (This) is finely pounded, (and) a potion (may be made by using) a weight of two *dirham* (of it) with forty *dirham* ass's milk; sometimes it is drunk with two  $\bar{u}q\bar{v}a$  jujube beverage, and one may also take a *mitqāl* from it at the end of the day together with poppy beverage.<sup>60</sup>

#### (83)

# The *maqliyā*tā<sup>61</sup> powder for (the treatment of) long-standing diarrhoea, dysentery, gastric debility, coldness, and haemorrhoids

Fried garden peppercress one and a half ratl; leek seeds and cumin half a ratl of each; linseed one third of a ratl; mastic one  $\bar{u}q\bar{v}a$ ; chebulic and black Indian myrobalan fried in cow's ghee one fourth of a ratl each. All (this) is roasted, brought together, and used.

# (84)

# The hospital powder (called) maqliyātā

Chebulic myrobalan, acorn, pomegranate flowers, and babul one part of each; pomegranate seeds two parts; oak gall half a part. The myrobalans, acorns, and oak galls are crushed and fried in rose oil, the pomegranate seeds are roasted. (This) is pounded, and used.

#### (85)

# A powder which is useful against epilepsy according to Qust $\bar{a}^{\rm 62}$

Chebulic myrobalan, beleric myrobalan, mastic, French lavender, and polypody in equal parts. Three *dirham* from it are drunk every day.

# (86)

# The purgative powder with cheese-water<sup>63</sup>

Yellow myrobalan, Socotra aloe, roses, tragacanth, scammony grilled in quinces, anise, washed Armenian stone, dodder, absinthe, French lavender, fumitory seeds, polypody, borage, turpeth, and agaric. Take from these (ingredients) whichever seem appropriate to be washed down in the (given) situation, and have three *dirham* of this (compound powder); or else confine yourself to three *dirham* of yellow myrobalan,

<sup>&</sup>lt;sup>61</sup> maqliyātā < Syriac maqlyātā (root qlā) "roasted" (scil. ingredients), cf. Payne Smith Thesaurus 2/3620ff. and Schmucker Ţabarī 484f.

 $<sup>^{62}</sup>$  Qusțā ibn Lūqā al-Baʿlabakkī (d. ca. 300/912) was a philosopher-physician, mathematician, and translator of notably Greek scientific texts; as matters stand, I have not been able to trace the above reference in any of Qusțā's hitherto published medical writings for which see Kahl "Qusțā" 312 note 4 (adding L. Ambjörn, *Qusțā ibn Lūqā on Numbness*, Stockholm 2000).

<sup>&</sup>lt;sup>63</sup> For the preparation of cheese-water see recipe 226.

pulverized like kohl and mixed with sweet almond oil and a similar (amount of) sugar—(either way) swallow it dry and wash it down with cheese-water. You may also take black Indian myrobalan together with two *dāniq* (of) Indian salt and grilled scammony or, for a cooling (effect), sugar and tabasheer. And as for substitute drugs (to go) with cheese-water it is possible to take tabasheer, the flesh of the barberry, roses, <sup>64</sup> the peeled seeds of serpent melon, cucumber, and sweet gourd, purslane seeds, light-coloured poppy, white sandalwood, and things like that. This (remedy) is useful for (the treatment of) hot tempers.

#### (87)

A remedy which purges from (any) viscid mucous residue

Ginger, turpeth, and sugar in equal parts. (These ingredients) are brought together by grinding and straining, and two *dirham* are swallowed dry (with) a potion of hot water.

# (88)

# A purgative remedy with cold water

Turpeth one *dirham*; Indian salt one and a half *dirham*. (These) two (ingredients) are brought together by grinding and straining. (This) is swallowed dry, and cold water is drunk upon it; drinking hot water stops regurgitation.

(89)

A remedy which is drunk with hot water, and which expels viscid phlegm and black bile

Scammony seven  $q\bar{r}r\bar{a}t$ ; Socotra aloe ten  $q\bar{r}r\bar{a}t$ ; Cretan dodder twelve  $q\bar{r}r\bar{a}t$ ; polypody five  $q\bar{r}r\bar{a}t$ . (These ingredients) are brought together by straining and are swallowed dry, whereafter hot water is taken. Ibn at-Tilmīd (says): "For those who cannot tolerate that, (prepare) an altogether perfect potion (by using) one  $d\bar{a}niq$  scammony and one *dirham* polypody (instead)".

 $<sup>^{\</sup>rm 64}$  Roses are in fact already mentioned at the beginning of the recipe as constituents of the 'standard' composition.

#### ENGLISH TRANSLATION

#### (90)

## A remedy which prevents geophagism

Kerman cumin and visnaga one part of each. (This) is chewed, and swallowed before food.

## (91)

## Another for that

Grains of paradise, Malabar cardamom, and cubeb one part of each; sugar as much as the total (amount). (This) is ground, and swallowed dry on an empty stomach.

#### (92)

## A remedy which prevents geophagism and other such wicked things, and which chases flatuses away

Kerman cumin and anise two *dirham* of each; cyperus, dry mint, and pennyroyal one  $mi\underline{q}a\overline{l}$  of each; chebulic myrobalan, beleric myrobalan, and emblic three *dirham* of each. The ingredients are pounded, white sugar candy is added to them in a weight matching their (total), (and) a potion (may be made by using) just one *dirham* (of it) with cold water.

## (93)

Another powder which purges from black bile, and which is drunk with cheese-water<sup>65</sup>

Polypody and dodder two *dirham* of each; chebulic and black myrobalan five *dirham* of each; borage and lemon balm leaves three *dirham* of each; washed Armenian stone one *dirham*. A potion (may be made by using) one to two *dirham* (of it) at first, and twice as much towards the end.

<sup>&</sup>lt;sup>65</sup> For the preparation of cheese-water see recipe 226.

#### ENGLISH TRANSLATION

#### (94)

## A powder which balances the (humoral) mixture in the liver of someone who suffers from iaundice following evacuation

Roses and tabasheer two *dirham* of each; lac half a *dirham*; saffron and rhubarb one fourth of a *dirham* each; camphor one  $d\bar{a}niq$ . If the natural disposition (of the patient) is retaining, (this remedy) is taken with the waters of plum, tamarind, and alhagi; if (the natural disposition) is balancing, (it is taken) with oxymel.

#### (95)

## A pastille for that as well

Barberry, tabasheer, and roses three *dirham* of each; endive seeds, gourd (seeds), cucumber (seeds), purslane seeds, lettuce, and white sandalwood one *dirham* of each; camphor one fourth of a *dirham*. (This) is formed into pastilles of two *dirham*.<sup>66</sup>

(96)

A remedy for him who had contaminated food that will not pass through (the digestive tract); it softens the belly without (causing) stings or (any other) damage—from al-Masīḥī<sup>67</sup>

Dry figs and safflower pulp one part of each. (These) two (ingredients) are pounded, and a bit of pulverized fresh dodder is added. (This) is used as necessary. Ibn at-Tilmīd (says): "If (the amount of) figs and safflower is one hundred *dirham* altogether, then (the amount of) dodder should be ten *dirham* to ten *mitqāl*; and between ten and fifteen *dirham* of this (remedy) are taken".

<sup>&</sup>lt;sup>66</sup> This recipe should rather be expected to figure in chapter one on pastilles.

<sup>&</sup>lt;sup>67</sup> Isā ibn Yaḥyā al-Masīhī (d. 401/1010) was a famous physician, one of the teachers of Avicenna, and best known as the author of a medical encyclopaedia entitled *al-Mi* a which Ibn at-Tilmīd himself furnished with notes and glosses, cf. introduction 2.b.2.c; however, I have not been able to trace the above reference in this most likely source of information for which see Sanagustin *Livre* passim.

#### (97)

## A powder for (the treatment of) palpitations of the heart due to heat

The pulp of serpent melon seeds, cucumber seeds, and gourd (seeds), barberry, Armenian bole, roses, and tabasheer two *dirham* of each; amber and pure lignaloes one *dirham* of each; Fanṣūr camphor<sup>68</sup> one fourth of a *dirham*; mastic one third of a *dirham*. All (this) is pounded, and as required swallowed dry with apple-water or pomegranate-water.

#### (98)

## A powder which suppresses haemorrhage

Haematite, amber, dragon's blood, red coral, Yemenite alum, pomegranate flowers, and Armenian bole five *dirham* of each. (This) is pounded, swallowed dry together with sumach infusion, and administered for seven days.

#### (99)

## A powder which crumbles kidney stones

The seeds of cucumber, gourd, serpent melon, musk melon, marshmallow, and fennel one *dirham* of each; saxifrage seeds and plum mucilage two *dirham* of each; Jews' stone half a *dirham*. (This) is pounded, strained, and drunk with a decoction which is prepared as follows boil two *dirham* caltrop seeds in twelve *dirham* water until half (of it) is left, (then) throw into it one  $\bar{u}q\bar{v}a$  fleawort maceration and five *dirham* sugar, and make that last for seven days.

#### (100)

## A powder which crumbles kidney stones $^{\rm 69}$ for the cold-tempered

Balm seeds, radish seeds, the peels of the caper root, the peels of the opopanax root, bitter almonds, bay laurel seeds, citronella, cyperus, Indian spikenard, rusty back fern, harmala, Greek gentian, birthwort,

<sup>&</sup>lt;sup>68</sup> On Fanşūr see note 1 above.

<sup>&</sup>lt;sup>69</sup> For a parallel transmission (with minor variants) see recipe 54 which more appropriately figures in chapter two on pills and hierata.

asarabacca, Jews' stone, wild caraway, ammoniacum, myrrh, sagapenum, bdellium mukul, black pepper, and sweet flag in equal parts. (These ingredients) are pounded, thoroughly mixed with balm oil, kneaded with all the aforesaid (and) thence dissolved resins, made into pills, (and) a potion (may be prepared by using) from them a weight of one *dirham* together with one *dāniq* from scorpions' ashes.<sup>70</sup>

## (101)

## Another powder for (the treatment of) kidney stones in the hot-tempered

The pulp of serpent melon seeds, cucumber (seeds), gourd (seeds), musk melon (seeds), dark-coloured chickpeas, marshmallow seeds, fennel seeds, and scorpions' ashes three *dirham* of each; plum mucilage five *dirham*; Jews' stone five *dirham*; maidenhair three *dirham*; the calcified shells of hatched eggs in a weight of two *dirham*. (This) is pounded, brought together, and a potion (may be made) by using from it a weight of two *dirham* with water in which had been cooked caltrop seeds.

#### (102)

## A powder which crumbles the kidney stones of children

Musk melon seeds ten (*dirham*); plum mucilage and saxifrage seeds five *dirham* of each. (This) is brought together, pounded, and used.

#### (103)

#### A powder for (the treatment of) diabetes

Dry coriander and red roses five *dirham* of each; the seeds of the sour pomegranate ten *dirham*; myrtle seeds four *dirham*. (This) is roasted except the roses, pounded, strained, (and) a potion (may be made by using) three *dirham* (of it).

<sup>&</sup>lt;sup>70</sup> See recipe 55.

## Chapter Four on Electuaries

#### (104)

### An electuary which increases sexual potency

Carrot seeds, onion seeds, radish seeds, rocket seeds, lucerne seeds, the pulp of cotton seeds, green-winged orchid, sweet alecost, ginger, wallflower, common ash, parsnip, the two sea lavenders,<sup>71</sup> long pepper, and asafoetida resin one part of each. All (this) is pounded, and three *dirham* from it are taken in the morning as well as before going to sleep; and the diet (should consist of) a thick bouillon<sup>72</sup> with fat meat, broad beans, chickpeas, egg white, cinnamom, and galingale, or with chopped and grilled fish.

## (105)

#### Sulaim's yellow<sup>73</sup>

## for (the treatment of) black-bilious palpitations

White pepper, ginger, and Indian salt six *dirham* of each; opium, castoreum, clove, mastic, pellitory, and alecost five *dirham* of each; red bryony which is *fāšrā*,<sup>74</sup> white bryony which is *šašbandān*,<sup>75</sup> cyperus, zerumbet, great leopard's bane, and 'long' birthwort two *dirham* of each; balm oil and camphor-water four *dirham* of each. (These

 $<sup>^{71}\,</sup>$  That is red sea lavender Limonium vulgare and white sea lavender Centaurea behen, cf. Schmucker Țabarī 122f.

<sup>&</sup>lt;sup>72</sup> *isbīdbāğa*"thickbouillon" < Persian *ispīd-bā* "cibi genus ex carne, cepis, butyro, oleo, apio et coriandro paratum", see Vullers *Lexicon* 1/92; cf. also Dozy *Supplément* 1/20.

<sup>&</sup>lt;sup>73</sup> The identity of *Sulaim*, clearly a proper name, is uncertain. Tabarī *Firdaus* 453, when introducing a variant transmission of this recipe, mentions that one *Slym an-Nkrāw*ī (sic) used it (*istaʿmalahu*)—a passage which Schmucker *Tabar*ī 75 leaves in limbo; Qalānisī *Aqrābād*īn 43 and 49, when mentioning a recipe of the same name, says that its inventor *Slym* was a mandatary (*wakī*l) of 'Abdallāh ibn Abī Bakr (d. ca. 12/633), a son of the first caliph—a statement which according to Fellmann *Qalānisī* 116 is based on the physician Abū l-Farağ Ibn Hindū (d. 410/1019 or 420/1029). Why this compound should also be called *yellow* is even more obscure; the only reason I can possibly think of is a designation *contraria contrariis*, i.e. a *yellow* remedy to counter a *black*-bilious condition, implying of course that the drug did actually have a yellow colour once made and administered.

<sup>&</sup>lt;sup>74</sup> fāšrā is the (somewhat mistakenly) arabicized form of Syriac *alpašrā* "red bryony" *Bryonia dioica*, see Schmucker *Țabarī* 520f.

<sup>&</sup>lt;sup>75</sup> šašbandān is Persian for "white bryony" Bryonia alba, see Schmucker Tabarī 265f.

ingredients) are brought together by pounding and straining, and (then) by kneading them with clarified honey. (This) is filled into a glass vessel well below the brim, and left.

#### (106)

The *smaller ițrīfal*<sup>76</sup> which is useful against laxity and moistness of the stomach, haemorrhoidal cramps, it straightens the mind, and embellishes the complexion

Stoneless chebulic, yellow, and black myrobalan, beleric myrobalan, and emblic in equal parts. (This) is pounded, strained, mixed with sweet almond oil, kneaded with clarified honey, stored in a vessel, and a potion (may be made) by using three *dirham* (of it).

#### (107)

The *larger ițrīfal*<sup>77</sup> which increases the sexual potency of those who have a moist-cold temper

Stoneless chebulic and black myrobalan, beleric myrobalan, the 'milk' of emblic, black pepper, and long pepper three *dirham* of each; ginger, green-winged orchid, mace, Indian garden cress, parsnip, red and white wallflower, common ash, wild pomegranate seeds which are the seeds of *qilqil*,<sup>78</sup> peeled sesame, white sugar candy, light-coloured poppy, and the two sea lavenders<sup>79</sup> one *dirham* of each. (These ingredients) are brought together by pounding and straining, and (then) by kneading them with clarified honey which had been mixed before with cow's ghee. (This) is stored in a vessel, and used.

<sup>&</sup>lt;sup>76</sup> *iţrīfal* < Sanskrit *triphalā* (not to be confused with τρίφυλλον), a name sometimes given to such compounds which are based on the following 'group of myrobalans': *Terminalia chebula var. citrina* (Sanskrit *harītakī* / Arabic *halīlağ* or *ihlīlağ*), *Terminalia bellerica* (Sanskrit *vibhītakī* / Arabic *balīlağ*), and *Phyllanthus emblica* (Sanskrit *āmalakī* / Arabic *amlağ*), see Schmucker *Ṭabarī* 75f.

<sup>&</sup>lt;sup>77</sup> On *ițrīfal* see note 76 above.

<sup>&</sup>lt;sup>78</sup> *qilqil* is, strictly speaking, a name for the East Indian cassia variety *Cassia tora*, but its identification with the pomegranate *Punica granatum* sspp. goes back a long way, see e.g. Schmucker *Tabarī* 357.

<sup>&</sup>lt;sup>79</sup> See note 71 above.

#### ENGLISH TRANSLATION

### (108)

## The *raisin* electuary for those who suffer from epilepsy

Chebulic and yellow myrobalan, beleric myrobalan, emblic, and French lavender ten *dirham* of each; paeony which is  $f\bar{a}w\bar{a}niy\bar{a}^{s0}$  five *dirham*; pellitory seven *dirham*. Pound (this), bring it together, take one *rațl* (of) seedless raisins, pound (that), and knead the (other) ingredients with it. A potion (may be made by using) five *dirham* (of it).

#### (109)

## The *minty* electuary

for (the treatment of) cold pains in the bowels Watermint, mountain mint, parsley, and moon carrot twelve *dirham* of each; celery seeds, chamomile, and calamint four *dirham* of each; lovage fifteen *dirham*; black pepper forty-four *dirham*. (These ingredients) are brought together by pounding and straining, (and then by kneading them) with thrice as much clarified honey. A potion (may be made by using) just one *mitqāl* (of it) with hot water.

#### (110)

## The *happy end* electuary which is useful against melancholia

Black myrobalan, beleric myrobalan, and emblic ten *dirham* of each; polypody, dodder, French lavender, and turpeth five *dirham* of each. (This) is pounded, kneaded, (and) a potion (may be made by using) five *dirham* (of it). Sometimes, on a day when it seems necessary to stimulate nature, (this remedy) is enforced by an appropriate amount of Armenian stone and agaric—(such that) five *dirham* of these two and twice as much or a little bit more of the (other) ingredients are added to and kneaded with one *dirham* or one  $mitq\bar{q}l$  (of) honey; the latter may be replaced by sugar, dissolved (and) thickened like honey.

 $<sup>^{80}</sup>$  fāwāniyā is the arabicized form of παιωνία "paeony" Paeonia officinalis, see Schmucker Țabarī 308.

#### ENGLISH TRANSLATION

#### (111)

The *Greek sealing bole* electuary which is useful against lethal poisons that were drunk or emptied into human bodies by reptiles and (other) vermin

Greek bole and bay laurel seeds two *dirham* of each; gazelle's rennet eight *dirham*; hare's rennet four *dirham*; Greek gentian, 'rolled' birthwort, rue seeds, myrrh, and bay laurel leaves one *dirham* of each. (These ingredients) are brought together by straining, and (then) by kneading them with clarified honey. (This) is stored, and as required a potion (may be made) by using (from it an amount) similar to a broad bean.

#### (112)

A delightful hot electuary for (the treatment of) palpitations occurring from coldness; it heats and strengthens the heart, and it does the same to the stomach Canella, clove, cinnamom, and Indian spikenard one part of each; usnea, opercula of snail shells, pomegranate, and sweet basil two parts of each; saffron and mastic half a part of each. (This) is ground, and kneaded with clarified honey.

#### (113)

A delightful cold (remedy) which, among other things, is good for the hot liver, and whose benefits are opposite to those of the former

Light-coloured poppy, dry coriander, and sweet musk melon seeds three parts of each; white tabasheer, red roses, and borage one and a half parts of each; barberry sap and sealing bole one part of each. (This) is ground, and kneaded with honey in which are preserved myrobalans.

#### (114)

#### A delightful balancing (remedy)

The two sea lavenders<sup>81</sup> five parts of each; stoneless chebulic myrobalan twenty *dirham*; fumitory, borage, and lemon balm ten *dirham* 

<sup>&</sup>lt;sup>81</sup> See note 71 above.

of each; coriander, tabasheer, and sealing bole three *dirham* of each; raw silk cocoons which had been scorched—not burnt to ashes—so that they char and can be ground, Maqāṣīr sandalwood,<sup>82</sup> and pistachio skins two *dirham* of each; red coral, pearls, and the finest amber one *dirham* of each; raw Indian lignaloes half a *mitqāl*. Pound these ingredients, and mix them together. (Then) take from apple-water, fragrant quince(-water), sour citron-water, barberry-water, sourish pomegranate-water, rose-water, and (from) the finest aromatic wine or wine boiled down to one half (an amount of) one fourth of a *rațl* each. Bring the waters together, melt into them three *rațl* (of) pure sugar, skim off the scum, and let them gain the consistency of honey. (Finally) knead the (previous) ingredients with it. (This) is stored, and every day a spoonful or five *dirham* from it are taken; and the diet to go along with it (should consist) in most cases of barberry relish or sweetened spoon-meat.<sup>83</sup>

#### (115)

An electuary which helps particularly those who have a moist temper to improve (their) memory—from al-Kindī<sup>84</sup>

Lucerne seeds two *dirham*; sweet flag one *dirham*. (This) is pounded, mixed with cow's ghee, and kneaded with honey.

#### (116)

## A delightful wholesome (remedy containing) a precious stone

Mountain borage, lemon balm, sweet basil seeds, and red and white sea lavender seven *dirham* of each; cinnamom, dry coriander, tabasheer, amber, red coral, raw Indian lignaloes, and burnt raw silk cocoons—as described before<sup>85</sup>—in a weight of two *dirham* each; sealing bole and unpierced pearls one *mitqāl* of each; saffron one *dirham*; clove two *dirham*; zerumbet and great leopard's bane three *dirham* of each; gold,

<sup>&</sup>lt;sup>82</sup> On Maqāṣīr see note 5 above.

<sup>&</sup>lt;sup>83</sup> On zīrbāğ (a sidekick of zīrbāğa) "spoon-meat" see note 37 above.

<sup>&</sup>lt;sup>84</sup> For a full-blown version of this recipe, adopted from Ya qub ibn Ishāq al-Kindī's (d. shortly after 256/870) dispensatory originally entitled *al-Ihtiyārāt*, see Levey Kindī 32f. no. 2.

<sup>&</sup>lt;sup>85</sup> See the instruction given in recipe 114 regarding the 'burning' of silk.

silver, and ruby filings two *dāniq* of each; orache two *dirham*; cubeb and grains of paradise three *dirham* of each; emblic soaked in aromatic wine and then roasted twenty *dirham*; the petals of Persian roses five *dirham*; the bark of Maqāṣīr sandalwood<sup>86</sup> three *dirham*. Pound the ingredients finely, and bring them together. (Then) take from chebulic myrobalans preserved in honey half a *rațl*, from julep having gained the consistency of honey one and a half *mann* at most, and from seedless Rāziqī raisins<sup>87</sup> just one *rațl*. Pound the raisins by sprinkling on them rose-water and a bit of aromatic wine so as to mix them properly. (Finally) blend all the (other) ingredients with it, and with the myrobalan honey and the consolidated julep, and whip that well until its parts are even. (This) is stored in a vessel of glass or porcelain, and every day two to three *mitqāl* (of it) are used.

#### (117)

Again a delightful balancing (remedy)

The two sea lavenders,<sup>88</sup> chebulic myrobalan, senna, fumitory, roses, and borage in equal parts. (These ingredients) are kneaded with thrice as much honey.

#### (118)

## The *asafoetida resin* electuary

Asafoetida resin, black pepper, myrrh, and rue leaves in equal parts. (This) is kneaded with honey, (and) a potion (may be made by using) one *dirham* (of it).

#### (119)

#### The Greek Filūniyā<sup>89</sup>

#### which eases colical pains and the like

White pepper and henbane seeds twenty *mitqāl* of each; opium ten *mitqāl*; saffron five *mitqāl*; spurge, Indian spikenard, and pellitory one

<sup>&</sup>lt;sup>86</sup> On Maqāsīr see note 5 above.

<sup>&</sup>lt;sup>87</sup> Rāziqī—"les raisins qui portent ce nom sont petits, blancs et à très-petits pépins", see Dozy *Supplément* 1/524.

<sup>&</sup>lt;sup>88</sup> See note 71 above.

<sup>&</sup>lt;sup>89</sup> Filūniyā < Φιλώνια or, correctly, Φιλώνειος "(remedy) invented by Philo", see Liddell/Scott Lexicon 1942 with Dozy Supplément 2/282; this recipe is also known as Philonium romanum, see e.g. Schmucker Ṭabarī 324. On Philo of Tarsos, a 'poetphysician' and pharmacologist of the late Hellenistic period, see DkP 4/776 no. 13.

 $mi\underline{t}q\bar{a}l$  of each. (This) is kneaded with clarified honey, (and) a potion (may be made by using from it an amount similar to) a chickpea with tepid water.

#### (120)

# The Persian Filūniy $\bar{a}^{90}$ for (the treatment of) bleeding and a lax constitution; it (also) protects the unborn

White pepper and henbane seeds twenty *dirham* of each; opium and sealing bole ten *dirham* of each; saffron five *dirham*; spurge, Indian spikenard, and pellitory two *dirham* of each; castoreum one *dirham*; zerumbet, great leopard's bane, unpierced pearls, and musk half a *dirham* of each; camphor one and a half *dāniq*; and (enough) clarified honey to knead (the ingredients) with. A potion (may be made by using) one *dirham* (of it) with any suitable beverage.

#### (121)

## A delightful cold (remedy)

Tabasheer ten *dirham*; rose petals five *dirham*; borage ten *dirham*; barberry sap five *dirham*; Greek bole seven *dirham*; the 'milk' of emblic fifteen *dirham*; Maqāṣīr sandalwood<sup>91</sup> two *dirham*; dry coriander two *dirham*; the 'outer' shells of the pistachio two *dirham*; great leopard's bane from Greece two *dirham*; the two sea lavenders,<sup>92</sup> amber, red coral, and unpierced pearls two *dirham* of each; saffron two *dāniq*; pure gold and unalloyed silver one *mitqāl* of each; ruby half a *mitqāl*; raw silk cocoons which had been burnt in an earthen bowl with its top closed one *dirham*. Pound the ingredients, and turn the gold and silver into filings—either by scraping it over a new whetstone and (then) wash it or by rasping it with a small-toothed file. Bring everything together in ground form. Then take from sour apple-water and from sour citronwater fifteen *dirham* each, and from Hūzistān sugar<sup>93</sup> two *mann*; melt

<sup>&</sup>lt;sup>90</sup> On *Filūniyā* see note 89 above; this recipe is also known as *Philonium persicum*, see e.g. Schmucker *Ṭabarī* 324.

<sup>&</sup>lt;sup>91</sup> On Maqāṣīr see note 5 above.

<sup>&</sup>lt;sup>92</sup> See note 71 above.

 $<sup>^{93}</sup>$  Hūzistān is a province in southwestern Iran which in the Middle Ages was famous for its sugar plantations and in the 4th/10th century even had a monopoly on the sale of cane-sugar throughout Iran, Iraq, and Arabia, see Wiedemann *Aufsätze* 2/306 and Savory "<u>Kh</u>ūzistān" 80.

the sugar with the waters, skim off the scum, and let them gain the consistency of honey. (This) is put into a broad jug (made of) china (clay) so that it can breathe, and as required five *dirham* to five  $mi\underline{t}q\bar{a}l$  (of it) are used.

## (122)

An iṭrīfal94

which rids the stomach and the adjacent (organs) as well as the head from phlegm and black bile; it is safe (to be used even) by a pregnant woman who is breast-feeding

Stoneless chebulic, yellow, and black Indian myrobalan, beleric myrobalan, and emblic twelve *dirham* of each; scraped (and) inspissated white turpeth ten *dirham*; anise two *dirham*; fresh dodder five *dirham*. Pound (that), mix it with forty *dirham* sweet almond oil, and knead it with three *rațl* of Hūzistān sugar<sup>95</sup>—(the latter you prepare by) evaporating one *mann* of rose-water and borage-water to half (of that amount), (then) by cooking (the sugar) in it, skimming off the scum, and letting it gain the consistency of honey. (This) is stored in a jug, (and) a potion (may be made by using) five *mitqāl* (of it).

#### (123)

The happy end electuary<sup>96</sup>

for those who suffer from melancholia

Black myrobalan, beleric myrobalan, and emblic ten *dirham* of each; polypody, dodder, French lavender, and turpeth five *dirham* of each. (This) is pounded, kneaded with honey, (and) a potion (may be made by using) five *dirham* (of it). If it appears necessary to enforce the purgative (effect) of this (remedy), one  $mitq\bar{a}l$  of agaric and Armenian stone is put into a single potion.

#### (124)

An electuary which is useful against epilepsy Bay laurel seeds four *dirham*; moon carrot three *dirham*; 'rolled' birthwort two *dirham*; paeony root three *dirham*; castoreum two *dirham*; the

<sup>&</sup>lt;sup>94</sup> On *ițrīfal* see note 76 above.

<sup>&</sup>lt;sup>95</sup> On Hūzistān see note 93 above.

<sup>&</sup>lt;sup>96</sup> For a parallel transmission (with minor variants) see recipe 110.

*squill* pastilles<sup>97</sup> one *dirham*. (This) is kneaded, and one spoonful from it is drunk with honey-water or squillitic oxymel.<sup>98</sup> Pellitory on its own, kneaded with honey, is (also) useful against epilepsy.

#### (125)

An electuary which protects from poisons Take sealing bole and bay laurel seeds ten *dirham* of each. (This) is pounded, strained, kneaded with cow's ghee and clarified honey, and used before and after food.

#### (126)

An electuary which is useful against vitiligo—it is proven by experience

Reddish Cretan dodder thirteen *dirham*; yellow myrobalan thirty-two *dirham*; black and chebulic myrobalan seven *dirham* of each; very sweet seedless raisins twelve *dirham*. All (this) is pounded until it resembles marrow, ground with violet oil or almond oil, and every morning a quantity of one walnut is taken from it, and likewise in the evening.

#### (127)

## An electuary which is useful against fear and black bile

Black myrobalan twelve (*dirham*); dodder fifteen (*dirham*); harmala, sweet basil seeds, white wild marjoram, agaric, black hellebore, and borage fifteen (*dirham*) of each; French lavender ten (*dirham*); clove two *dirham*; lemon balm, citron rinds, and sweet basil three *dirham* of each; nutmeg and *sukk*<sup>99</sup> one *dirham* of each. (This) is finely pounded, kneaded with currants and honey, and used.

#### (128)

An electuary which is useful against facial paralysis

Kerman cumin five *dirham*; frankincense one *mitqāl*; globe thistle which is *ḥazā*<sup>'100</sup> two *dirham*; white pepper one *dirham*; clove, nutmeg,

<sup>&</sup>lt;sup>97</sup> See e.g. Ibn Sīnā Qānūn 3/314,12-17.

<sup>&</sup>lt;sup>98</sup> Compare recipe 186.

<sup>&</sup>lt;sup>99</sup> On *sukk* see note 4 above.

<sup>&</sup>lt;sup>100</sup> *ḥazā*' is, strictly speaking, a name for the wild variety of dill Anethum silvestre,

and saffron half a mitqal of each. All (this) is finely pounded, kneaded with clarified honey, (and) a potion (may be made by using) one to two *dirham* (of it).

#### (129)

The *large marking-nutty* (remedy) which is a treacle against hemiplegia, tremor, and apoplexy in particular, and all (kinds of) cold disorders

Ginger, pellitory, black cumin, alecost, black pepper, long pepper, and sweet flag ten *dirham* of each; rue leaves, asafoetida resin, gentian, birthwort, bay laurel seeds, castoreum, garden cress, and mustard five *dirham* of each; the 'honey' of marking nuts five *dirham* and one third (of a *dirham*). (This) is finely pounded, mixed with walnut oil, kneaded with clarified honey, (and) a potion (may be made by using) from it (an amount) similar to one hazelnut.

(130)

The *small marking-nutty* (remedy) for (the treatment of) lichen, weakness of sight, (the symptoms of) ageing, and forgetfulness

Black myrobalan, beleric myrobalan, and emblic ten *dirham* of each; frankincense, globe thistle, black pepper, ginger, and the 'honey' of marking nuts five *dirham* of each; and (enough) bee honey to bring (the ingredients) together. A potion (may be made) as (with) the previous (remedy), but sometimes sweet flag, cyperus, and Indian spikenard are added to it (in a weight of) five *dirham* each.

#### (131)

## An electuary which is very useful against epilepsy

Pellitory, moon carrot, and French lavender ten *dirham* of each; agaric, wild caraway, good asafoetida resin, 'rolled' birthwort, asphodel which is the root of *ašrās*,<sup>101</sup> balm seeds, and paeony two and a half *dirham* of

but not uncommonly identified with the globe thistle *Echinops ruthenicus* var. *sphaero-cephalus*, see e.g. Schmucker *Ṭabarī* 176f. and 223f.

<sup>&</sup>lt;sup>101</sup> ašrās is another name for asphodel *Asphodelus* spp., see Löw *Pflanzennamen* 290ff.

each; chebulic, yellow, and black Indian myrobalan fifteen *dirham* of each. Express the juice of the squill, pour on it the same (amount of) honey, cook (that), and (then) knead the (previous) ingredients with it—this is an excellent (and) effective (preparation) from which you may draw the utmost benefit by regularly employing it with (the remedies called) *hiera Hermes*<sup>102</sup> and *small marking-nutty*.<sup>103</sup>

### (132)

## An electuary which is useful against chill, and which intensifies (the desire for) sexual intercourse

Galingale twelve *dirham*; carrot seeds and rocket seeds fifteen *dirham* of each. All (this) is finely pounded, kneaded with clarified honey, (and) at bedtime a potion (may be made by using from it an amount) similar to one walnut.

## Chapter Five on Stomachics

#### (133)

## The *hammer-scale* stomachic which is useful against gastric debility

The petals of Persian roses, Maqāṣīr sandalwood,<sup>104</sup> Indian spikenard, the flesh of the barberry, chebulic, yellow, and black myrobalan, beleric myrobalan, emblic, washed Armenian bole, coriander, tabasheer, borage, cinnamom, cubeb, grains of paradise, mastic, areca, cyperus, pistachio shells, Ṣanf lignaloes,<sup>105</sup> dry mint, myrtle, and the

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<sup>&</sup>lt;sup>102</sup> See e.g. recipe 38 in Kahl Sābūr<sup>1</sup> 61 and Sābūr<sup>2</sup> 51 respectively ("electuary"). On Hermes (*Hirmis* < Ἐρμῆς) Trismegistos and Hermetism in Islam see Ullmann NGw 368–378 and passim; *hiera* < ἰερά "(remedy filled with or manifesting) divine (power)", see Liddell/Scott Lexicon 820 and 822.

<sup>&</sup>lt;sup>103</sup> See recipe 130.

<sup>&</sup>lt;sup>104</sup> On Maq $\bar{a}$ ș $\bar{s}$ r see note 5 above.

<sup>&</sup>lt;sup>105</sup> Sanf is the Arabic name for the historical state of Champa which covered roughly the middle part of modern Vietnam and was famous for its excellent aloes, see Tibbetts *Study* 159f. with map 5 and Lamant "Sanf" 17.

dried fleshless rinds of the yellow citron one part of each; Basra iron oxide prepared with sour vinegar and potash three parts. Pound these ingredients finely, and mix them together. (Then) take from Hūzistān sugar<sup>106</sup> as much as their total, melt it in rose-water, skim off the scum, and wait until it sticks to the hand a little. (Now) strew the ingredients on it, and whip (that) until (all) parts are absorbed. (Finally) besmear a plate of silver or marble with superb rose oil, spread the stomachic over it, cut it in span-long pieces, leave these to dry, store them in a glass (vessel), and use from them (a quantity of) one or two *mitqāl*.

### (134)

## The astringent quince stomachic

Take coreless peeled guinces and clarified honey two ratl of each; black pepper, long pepper, and ginger five *dirham* of each; cardamom one dirham; grains of paradise, clove, Indian spikenard, cinnamom, and saffron two *dirham* of each. These ingredients are brought together by pounding and straining. The quinces (however) are cooked in wine, which is the original, or wine boiled down to (either) one half or one third or raisin wine and honey-some physicians cook them in fragrant vinegar but aromatic wine is more appropriate, then taken off the fire, drained so as to loose all moisture, and finely pounded; the purified honey (in turn), which should be (flavoured with) savory and (in quality) superb, is cooked on a low flame. (Now) sprinkle the ingredients on it, and mix (that) until it is even. (Finally) spread it over a marble (plate) covered with superb rose oil, cut it in span-long pieces (weighing) about four *mitqāl* each, wrap them into citron leaves, and store these in a glass (vessel). Some physicians add to this (remedy) a bit of Tibetan musk.

#### (135)

#### The *purgative quince* stomachic

Take peeled quinces two *rațl*; clarified honey two *rațl*; ginger and long pepper four *dirham* of each; cinnamom two *dirham*; cardamom, grains of paradise, and saffron three *dirham* of each; mastic five *dirham*; scammony ten *dirham*; white turpeth thirteen *dirham*. (These ingredients)

<sup>&</sup>lt;sup>106</sup> On Hūzistān see note 93 above.

are brought together by pounding and straining. The quinces (however) are cooked in wine or wine boiled down to one half or raisin wine and honey, and (the remedy) is prepared in exactly the same (way) as the previous. (Then) it is stored, (and) a potion (may be made by using) four *dirham* from it with hot water.

#### (136)

## A delightful stomachic from al-Kind $\overline{i}^{107}$

Roses six *dirham*; cyperus five (*dirham*); clove, mastic, Indian spikenard, and asarabacca three *dirham* of each; canella, orache, and saffron two *dirham* of each; cardamom, mace, grains of paradise, and nutmeg one *dirham* of each. Grind (this), and strain it through a cloth of silk. Then take one *rațl* (of) emblic, cook it in nine *rațl* water until one third of it is left, throw half a *rațl* (of) bee honey on it, and cook (this) until it thickens. (Now) strew the ingredients on it, stir (that) with a broad willow-wood stick, store it, (and make) a potion (by using) two and a half *mitqāl* (of it). Sometimes sweet basil, lemon balm, pearls, and laurel (in a quantity of) two *dirham* each are cast into the ingredients, and one *dāniq* (of) musk may be added (as well); and (then there are) some people who set the mace, the grains of paradise, and the nutmeg at two *dirham* each.

### (137)

## A hospital stomachic which is useful against incontinence of urine by retaining it

Cyperus, Indian spikenard, French lavender, frankincense and the bark of its tree, acorns and the inner skins of their cups, and cumin in equal parts. A potion (may be made by using) one mitqal (of it) in the morning, and just as much in the evening.

 $<sup>^{107}</sup>$  For the archetype of this recipe, adopted from Yaʻqūb ibn Ishāq al-Kindī's (d. shortly after 256/870) dispensatory originally entitled *al-Ihtiyārāt*, see Levey *Kindī* 32–35 no. 3.

#### (138)

The hammer-scale remedy (also) called fanğnūš<sup>108</sup> —according to Rağā' al-Işfahānī<sup>109</sup> which is useful against gastric and hepatic debility, and which embellishes the complexion

Yellow, black Indian, and chebulic myrobalan, beleric myrobalan, and the clear 'milk' of emblic seven dirham of each; barberry, sumach, roses, and fumitory five *dirham* of each: fennel seeds, endive (seeds), dried Baghdad flax dodder, dry coriander, and Kerman cumin three *qīrāt* of each; Bengal quince and Maqāsīr sandalwood<sup>110</sup> two dirham of each. Pound all (this) coarsely, and put it in a double cloth of linen: take half a *ratl* from light brittle fragmented Basra iron oxide which had been soaked in vinegar for fourteen days then dried (and) roasted, grind it, and put it in another double cloth. Hang the two cloths into (one of the) porcelain vessels, pour over them one and a half ratl of recent curd, and throw onto it a small bunch of each of these herbsrue, celery, mint, sweet basil, and fresh fennel; leave (that) for a day and a night; then strain from it half a *ratl* (of liquid) every day after having repeatedly squeezed the two cloths, and sprinkle on it every day half a *mitqāl* of the following ingredients, ground and combined white tabasheer, fresh barberry sap, and Chinese rhubarb one dirham of each, and clear lac and Persian pomegranate flowers half a mitgal of each. (This is the medicine) you take. Renew the herbs every third day and the curd every day (in order) to replace what has been drunk; rinse the receptacle containing the curd every second or third day so as to prevent (the growth of) mould; clean the brim of this vessel several times a day from the stuff that has gathered upon it; and keep the vessel in a draughty place during the day, and at night cover it with a cloth and expose it to the air.

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 $<sup>^{108}</sup>$  fanğnūš < Persian panğ-nūš, a name originally given to an "electuarium e quinque rebus compositum", see Vullers *Lexicon* 1/376; later the term apparently became independent and was used, for reasons I cannot explain, as the name of an "electuarium e scoria ferri [!], vino et oleo amygdalarum paratum", see Vullers *Lexicon* 2/693 with Schmucker *Țabar*ī 326f.

 $<sup>^{109}</sup>$  I have not been able to identify this man. There is a mention *en passant* in Ibn Abī Uşaibi'a 'Uyūn 1/240,-6 of a physician (*tabīb*) from Hurāsān bearing the (not exactly widespread) name of Raǧā' (probably short for Raǧā'addīn) and who figures among the contemporaries of Abū l-Faraǧ 'Abdallāh ibn at-Taiyib (d. 435/1043)—but this is little to go by.

<sup>&</sup>lt;sup>110</sup> On Maqāşīr see note 5 above.

#### ENGLISH TRANSLATION

#### (139)

A lignaloes stomachic which strengthens the cold stomach but not in those who are heated (by a fever), it digests the food, and absorbs phlegm

Indian spikenard which is *sunbul aț-țīb*,<sup>111</sup> Greek spikenard which is *nārdīn iqlīțī* and (also) called *maibahūša*,<sup>112</sup> celery seeds, anise, and mastic one *dirham* of each; lignaloes three *dirham*; clove two *dirham*; mace two and a half *dirham*; canella and *sukk*<sup>113</sup> two *dirham* of each; chebulic myrobalan soaked in wine two and a half *dirham*; nutmeg one and a half *dirham*; wild marjoram three *dirham*; roses and lemon grass two *dirham* of each. (This) is kneaded with quince wine, (and) a potion (may be made by using) two *mitqāl* (of it).

#### (140)

A lignaloes stomachic from Ibn  $S\bar{\imath}n\bar{a}^{_{114}}$ 

Cardamom, ginger, cinnamom, cassia, saffron, black pepper, sweet basil, and zerumbet five *dirham* of each; cyperus, orache, Indian laurel, and clove three *dirham* of each; raw lignaloes seven *dirham*; ambergris one *mitqāl*; lapis lazuli the same; camphor two *dāniq*; turpeth four *dirham*; Indian salt one *dirham*. All (this) is ground, and made into a stomachic with honey or sugar.

#### (141)

The bishop's stomachic which loosens the belly and chases flatuses away; it is useful against foul smells, haemorrhoidal cramps, pain in the hip and pelvic bones, and colic; and it increases sexual potency

Take from white turpeth and scammony five *mitqāl* each; white pepper and grains of paradise three *mitqāl* of each; ginger, cinnamom, emblic,

 $<sup>^{\</sup>rm 111}$  sunbul at-țīb is another name for Indian spikenard Valeriana jatamansi, see Schmucker Țabarī 248f.

<sup>&</sup>lt;sup>112</sup> nārdīn iqlīțī lit. "Celtic nard" is another name for Greek spikenard Valeriana celtica, see Schmucker Ṭabarī 248f. and 497f.; maibahūša (originally corresponding to ὑ διὰ νάρδου οἶνος) is its Persian equivalent, see Dozy Supplément 2/634f.

<sup>&</sup>lt;sup>113</sup> On *sukk* see note 4 above.

 $<sup>^{114}</sup>$  For this recipe from al-Husain ibn ʿAbdallāh Ibn Sīnā's (d. 428/1037) famous medical encyclopaedia see Ibn Sīnā Qānūn 3/359,3–7.

mace, clove, and nutmeg one  $m\underline{i}\underline{t}q\overline{a}l$  of each; white sugar half a  $ra\underline{t}l$ . All (this) is pounded, strained through a fine-meshed sieve, kneaded with clarified honey, and as required a potion (may be made) by using four  $m\underline{i}\underline{t}q\overline{a}l$  (of it).

#### (142)

## A lignaloes stomachic

Indian lignaloes three *dirham*; the rinds of the yellow citron with its flesh two *dirham*; cinnamom and anise one *dirham* of each; saffron half a *dirham*; sugar one *mann*.

#### (143)

## Another lignaloes stomachic

Ginger two *dirham*; cinnamom three *dirham*; clove three *dirham*; wild marjoram three *dirham*; anise three *dirham*; mastic two *dirham*; saffron one *dirham*; lignaloes five *dirham*; mace two *dirham*; zerumbet two *dirham*; sugar one *mann*; aromatic wine one *rațl*. (The wine) is cooked, the (other) ingredients are brought together in ground form, and (all this) is made (into a stomachic which) is wrapped into citron leaves.

#### (144)

## The cuminy stomachic

for (the treatment of) chill and acid belching Kerman cumin soaked in wine vinegar for a day and a night (then) dried (and) roasted, rue leaves dried in the shade, black pepper, and ginger thirty *dirham* of each; Armenian borax ten (*dirham*). (This) is strained, kneaded with thrice as much clarified honey, (and) a potion (may be made by using) one to two *dirham* (of it).

## (145)

## The *datish* stomachic for (the treatment of) retention and detention when caused by coldness

Armenian borax, Kerman cumin, parsley, ginger, and white pepper twelve *dirham* of each; scammony five *dirham*; seedless Hairūn dates<sup>115</sup>

<sup>&</sup>lt;sup>115</sup> Hairūn is a crux-Freytag Lexicon 4/423 simply has al-hairūn "dactylorum

or heavy red dates, almond nuts, and rue leaves ten *dirham* of each. The dates are soaked in wine vinegar for a day and a night, (then) pounded, and kneaded with the remaining ingredients (and) twice the total of honey.

#### (146)

## A stomachic for (the treatment of) gastric debility in conjunction with coldness

Visnaga, frankincense, cinnamom, mastic, raw lignaloes, and pistachio shells. (This) is kneaded with honey and cooked emblic-water.

#### (147)

## The seed stomachic

which is useful against gastric flatulence Caraway, anise, Kerman cumin, grains of paradise, canella, visnaga, and celery seeds two *dirham* of each; clove and Malabar cardamom half a *dirham* of each; ginger and long pepper two *dāniq* of each; sugar twenty *mitqāl*. (This) is brought together, and as required two *dirham* (of it) are swallowed dry.

### (148)

## The *kings* stomachic which is a remedy of traditional choice (and) great reliability for those who have a cold-moist temper

(Stone)less black myrobalan, beleric myrobalan, and emblic thirty-six *mitqāl* of each; black cumin twenty-four *mitqāl*; black pepper, ammoniacum, long pepper, ginger, and long pepper root two *mitqāl* of each;

species", Dozy *Supplément* 2/774 gives *hairūn*ī "espèce de dattes inconnue au Maghrib", and Schmucker *Ṭabar*ī 132 s.v. *tamr Hairūn* proceeds to a brief discussion of this well-attested yet obscure epithet. Phonetically it seems obvious that Hairūn should refer to Heron ("Hρων) of Alexandria (fl. ca. 100 CE), a Greek mathematician and mechanic who as such was also known to the Arabs, see *DkP* 2/1106–1109 and *GaS* 5/151–154; logically though it is of course much more tempting to associate Hairūn with Heras ('Hρα<sub>C</sub>) of Cappadocia (fl. early 1st century CE), a Greek physician and author of a pharmacological work entitled Νάρθηξ, but we cannot say for sure whether he was known to the Arabs at all and, if so, whether it is his name that is hidden behind the mysterious *Hwdās*, *Hrāws*, and *Hrāds* as quoted three times in Muḥammad ibn Zakarīyā' ar-Rāzī's (d. 313/925 or 323/935) huge medical encyclopaedia *al-Ḥāwī*, see *DkP* 2/1053 and *GaS* 3/58.

cubeb and marking nut six *mitqāl* of each. (This) is ground, dissolved in six hundred *dirham* of Siğistān candy<sup>116</sup> or pomegranate-candy conserve, kneaded, and used—when shaping this (remedy) into 'hazel-nuts', turn your hand in cow's ghee; and take from it one 'hazelnut'.

### (149)

## The *musk* stomachic for (the treatment of) coldness of the bowels and palpitations of the heart

Musk half a mitqal; cinnamom, nutmeg, canella, Malabar cardamom, clove, galingale, long pepper, and Indian lignaloes half an uqiya of each; saffron two dirham; white sugar candy half a ratl. Bring all (this) together, and pound and strain it. Take an appropriate quantity (of) honey, boil it, and remove the scum. Sprinkle the ingredients on it, throw (that) on a marble (plate), spread it, and cut it in span-long pieces.

#### (150)

## A good purgative stomachic

Turpeth two *dirham*; clove, nutmeg, saffron, and lignaloes two *dāniq* of each; scammony one  $q\bar{r}r\bar{a}t$ . (This) is pounded, strained, and formed into a stomachic with candied honey which (gives) a single potion.

### (151)

## The *visnaga* stomachic which is useful against gripes, gastric debility, and flatulence

Visnaga, celery seeds, and black cumin ten *dirham* of each; ginger two and a half *dirham*. Grind (this), boil honey, remove the scum, sprinkle the ingredients on it, and do what you do with stomachics.

<sup>&</sup>lt;sup>116</sup> Siğistān or Sīstān is a region of eastern Iran which must have been quite famous for its candy, judging from the fact that "Siğistān candy" is mentioned in Arabic pharmaceutical literature with great nonchalance and just like a trade name.

#### (152)

## The cardamom stomachic which is useful against colical pain and cold disorders

White turpeth two *dirham*; Chinese ginger ten *dirham*; cardamom and Antioch scammony five *dirham* of each; saffron one *dirham*. Bring (this) together, and pound and strain it. Boil honey so as to condense it. Sprinkle the ingredients on it, stir (that), throw it on a marble (plate), spread it, cut it in span-long pieces, store these in a new clay vessel, (and make) a potion (by using) three to five *mitqāl* (of them).

#### (153)

## A stomachic which purges from phlegm

Cardamom and anise one *dirham* of each; cinnamom, Indian salt, and scammony half a *dirham* of each; long pepper five  $q\bar{r}r\bar{a}$ ; sugar four *dirham*. (This) is pounded, formed into a stomachic, (and) a potion (may be made by using) four *dirham* (of it) with tepid water.

#### Chapter Six

#### on Lohochs and Robs

#### (154)

## The almond linctus<sup>117</sup>

## for (the treatment of) cough and sore throat

Gum-arabic, starch, tragacanth, liquorice rob, and Siğistān candy<sup>118</sup> one part of each; quince seed pulp, the pulp of sweet gourd seeds, and peeled sweet almonds half a part of each. (This) is finely pounded, kneaded with julep, and used as required together with sweet almond oil.

<sup>117</sup> The rather unusual term used here for "linctus" is a straight borrowing from Syriac *metahtā* (i.q. ἕκλειγμα) "res quae lingitur", see Payne Smith *Thesaurus* 2/2076.

#### (155)

## A diyāqūd from Sābūr ibn Sahl<sup>119</sup>

Light-coloured poppy ten *dirham*; dark-coloured poppy ten *dirham*; marshmallow seeds, tragacanth, gum-arabic, hollyhock seeds, fleawort, and quince seeds five *dirham* of each; scraped (and) crushed liquorice root two *dirham*. All (this) is soaked in five *ratl* rainwater for a day and a night, (then) cooked until half of the water is gone, strained over two *ratl* (of) the finest wine and one *ratl* (of) pomegranate-candy conserve, condensed on a low flame until it gains the consistency of a lohoch, stored, and used.

#### (156)

### The *grape* lohoch

Light-coloured poppy, gently pounded, fifty *dirham*; maidenhair twenty *dirham*; fennel one fourth (of that); hollyhock seeds and marshmallow seeds of each one eighth; sebesten one fourth; liquorice root ten *dirham*; quince seeds ten *dirham*. All (this) is soaked in ten *ratl* rainwater for a day and a night, then cooked until half (of it) is gone, strained over an equal measure of the finest matured grape wine and about half as much pomegranate-candy conserve, and condensed until it gains the consistency of a lohoch; once cooking is completed, five *dirham* each of strained tragacanth and 'Persian gum' which is almond mucilage are thrown into it, and (so it is) stored.

#### (157)

## The *dark-coloured* poppy lohoch for those who suffer from consumption

Light-coloured poppy, crushed, ten *dirham*; fleawort three *dirham*; hollyhock seeds and marshmallow (seeds) seven *dirham* of each. All (this) is cooked in one *rațl* water until half (of it) is left, (then) strained, cooked (again) with one *rațl* (of) candy, mixed together with the powders of one and a half  $\bar{u}q\bar{y}a$  (of) gum-arabic and ten *dirham* (of) dark-coloured Egyptian poppy, condensed, and stored.

<sup>&</sup>lt;sup>119</sup> *diyāqūd* < (ἡ) διὰ κωδίων lit. "(remedy made) with poppy capsules", cf. Liddell/ Scott *Lexicon* 1016 and then Dozy *Supplément* 1/480. This prescription appears to be a considerably modified version of a rob against irritations of the respiratory tract in Sābūr ibn Sahl's (d. 255/869) *small* dispensatory, cf. recipe 338 in Kahl *Sābūr*<sup>1</sup> 186f. and *Sābūr*<sup>2</sup> 156f. respectively.

#### ENGLISH TRANSLATION

#### (158)

#### A lohoch which is useful against asthma

Peeled almonds five *dirham*; maidenhair two *dirham*; liquorice rob one *dirham*; large pine nuts and pistachios three *dirham* of each; fennel seeds and hyssop one *mitqāl* of each; vetch 'beans' and fenugreek (seeds) two *dirham* of each. (The ingredients) are brought together by pulping them with honey or (with) the *fig* decoction,<sup>120</sup> and this paste is used (in a quantity of) one to two *mitqāl* with raisin-water or honeywater, both of which should be (made) hot.

#### (159)

## The *hyssop* lohoch for those who suffer from asthma

Hyssop, white horehound, and fennel seeds three *dirham* of each; maidenhair and liquorice rob seven *dirham* of each; turpentine and fenugreek two *dirham* of each; seedless raisins twenty *dirham*. The ingredients are ground, the raisins and the resin<sup>121</sup> (however) are soaked in wine boiled down to one quarter before they (too) are ground in a mortar. (This) is kneaded with one *rațl* (of) clarified honey, (and) as required a potion (may be made) by using (from it) a weight of one *mitqāl* together with the *fig* decoction<sup>122</sup> and bitter almond oil. Ibn at-Tilmīd (says): "For those whose humours are tenacious, the (dose to go with this) potion is by far higher than what we just mentioned".

#### (160)

## A lohoch which dispels tough phlegm from the chest

Pure myrrh, liquid storax, and the root of the sky-coloured iris three *dirham* of each. Liquefy altogether half a *rațl* of clear raisin honey, fig (honey), and sugar, mix (everything) up, and take from it one spoonful at night.

<sup>&</sup>lt;sup>120</sup> Compare recipes 173 and 203.

<sup>&</sup>lt;sup>121</sup> That is the turpentine.

<sup>&</sup>lt;sup>122</sup> Compare recipes 173 and 203.

#### (161)

## The *quince* rob

Cook the juice of quinces until it is reduced by one fourth, strain it, and leave it to clear completely; (then) cook it again until one half is left—that is from the original (amount of) juice.

#### (162)

#### The *apple* rob

Boil the juice (of apples) until one fourth (of it) is left, then store it. If it is (too) thin, you may have to expose it to the sun.

#### (163)

#### The pomegranate only rob

Press ripe sourish pomegranates, boil their juice until one fourth (of it) is left, and expose it to the sun. In the same way (you prepare) the *unripe grape* rob. And if you want to take these robs sweetened, cook the juice until one half (of it) is left, throw into what remains a similar (amount) of sugar, and let that gain consistency.

#### (164)

#### The *mulberry* rob

Express the juice of ripe Syrian mulberries and, if desired plain, boil it until one fourth (of it) is left; or else you may add to one *rați* of rob one *dirham* each of myrrh, alum, and saffron.

#### (165)

#### The walnut rob

(Prepare walnuts) in the same way (after having) removed their green husks, and consolidate (them), just as before, with myrrh, alum, and saffron.

## (166)

## The *myrtle* rob

Press ripe (myrtle) berries, and boil their juice until one fourth (of it) is left.

## (167)

The *Ğaisuwān* date<sup>123</sup> rob

Extract the juice (of these dates), and boil it until one third (of it) is left.

## (168)

The *sour citron* rob Boil the juice (of citrons) gently until one fourth (of it) is left.

#### (169)

## The *light-coloured* poppy rob

Crush the capsules of light-coloured poppies, press them, strain them, melt into this juice about half as much sugar, and let (that) gain consistency.

#### (170)

The liquorice rob lohoch

for (the treatment of) viscid residues in the chest Liquorice rob and tragacanth one  $\bar{u}q\bar{i}ya$ ; peeled almonds and fennel in equal parts. Pound what can be pounded, soak what can be soaked, knead (all that) with clarified honey, and use (from it an amount) simi-

lar to an hazelnut with the hyssop decoction.<sup>124</sup>

## (171)

## A grape lohoch

## for (the treatment of) asthma

Fennel seeds five *dirham*; moon carrot two *dirham*; 'king figs'<sup>125</sup> fifteen fruits in number. Cook this in one *mann* (of) the finest matured grape

<sup>&</sup>lt;sup>123</sup> Ğaisuwān "ne signifie pas, comme on lit chez Freytag, une excellente espèce de palmier, mais c'est le nom que porte dans l'Irâc une espèce de datte très-mûre et très-molle", see Dozy *Supplément* 1/238.

<sup>&</sup>lt;sup>124</sup> See recipe 224; cf. also recipe 233.

<sup>&</sup>lt;sup>125</sup> šāhanğir < Persian šāh-anğir lit. "the king of figs" denotes "la meilleure espèce de figues" and perhaps also "petite figue qui n'est pas mûre", see Dozy Supplément 1/717; according to Vullers, šāh-anğir is a kind of fig also called anğir wazīrī "species fici albae et suavis", see Lexicon 1/127; and Ibn at-Tilmīd himself describes these figs once as "fleshy" and "yellowish" (recipe 224) and another time as "black" (recipe 375). In any case the expression "šāhanğīr figs" (tīn šāhanğīr) is in part a tautology.</p>

wine together with half a *rațl* of Hūzistān sugar<sup>126</sup> until one half (of it) is left, strain it, add to it ten *dirham* (of coagulated and then) ground liquorice rob, and let (that) gain consistency.

#### (172)

For (the treatment of) cold tough-mattered chronic coughing Eat figs with walnut kernels, and prepare a lohoch from savory(-flavoured) honey, liquid storax, pennyroyal, and turpentine.

#### (173)

## The *fig* lohoch for those who suffer from asthma

Figs, maidenhair, and pennyroyal. Cook the figs, take their syrup, let it gain consistency, and add from those (other two ingredients) as (much as is) necessary; or cook them (at once) with the figs, and strain (that).

#### (174)

## The *mūrdānağ* or 'myrtle seed'<sup>127</sup> rob for (the treatment of) abdominal disorder and torrential vomiting

Take from thick black aged  $til\bar{a}$  wine<sup>128</sup> four jugfuls and from ripe black myrtle seeds six and a half *ratl*, pour this wine over the seeds into a green trough,<sup>129</sup> and leave (that) for six days; (then) press it and extract the juice (of the seeds) by straining the wine. (This) is put into one of the wine vessels, and used after six months.

<sup>&</sup>lt;sup>126</sup> On Hūzistān see note 93 above.

 $<sup>^{\</sup>rm 127}$  mūrdāna<br/>á <br/>  ${\rm Persian}$  mūrd-dānah "semen myrti", see Vullers Lexicon 2/822 s.v. k<br/>rm with 2/1226.

<sup>&</sup>lt;sup>128</sup> According to Ibn at-Tilmīd's own expositions concluding recipe 217, *tilā*' is "pure wine of good quality" or "superior wine" and also a synonym of *maifuhtağ* "wine boiled (down to one quarter)".

<sup>&</sup>lt;sup>129</sup> According to Ibn at-Tilmīd's own explanatory remark in recipe 247, a green trough (*iǧǧāna hadrā*') is one that is made of porcelain (*muġaddara*); it was probably a vessel glazed in a green or blue-green colour by using copper silicates, cf. Levey *Kindī* 32 note \*.

## (175)

## The *mūrdānağ* only (rob) for (the treatment of) an (increased) afflux of blood, ulcerations, and the cough

Express the juice of myrtle seeds, cook it until more than one half (of it) is gone, (and make) a potion (by using) just one spoonful (of it).

## (176)

#### The pomegranate rob<sup>130</sup>

(This) is made by boiling the juice (of pomegranates) until it gains consistency.

#### (177)

## The *fenugreek* lohoch which is useful against the cough

Linseed fifteen *dirham*; Syrian fenugreek and peeled sweet almonds four *dirham* of each; tragacanth, scraped liquorice root, peeled pine nuts, peeled bitter almonds, wheat starch, and gum-arabic two *dirham* of each. Bring the ingredients together, grind what needs grinding and soak what needs soaking, then take wine boiled down to one third, boil it (again) to the point of coagulation, scatter the ingredients on it, mix (that) well, and store it in a glass vessel.

#### (178)

## The winner lohoch

Roses, service-berry mush, the 'outer' shells of the pistachio, pomegranate seeds, and barberry seeds fifteen *dirham* of each; sumach seven *dirham*; mint and myrtle two bunches. Cook (this) in three *rațl* water until one *rațl* is left, strain it, add to it tamarind-water, lemonwater, the water from unripe grapes, quince-water, and wine vinegar (in a quantity of) fifteen *dirham* each, bring (all that) together (by stirring it), add to it two *mann* (of) white sugar candy, boil (that) towards a (certain) consistency, then lift it into the sun until it gains the consistency (required) of lohochs, and (finally) store it.

<sup>&</sup>lt;sup>130</sup> Compare recipe 163.

#### (179)

## A lohoch for children —drunk together with mothers' milk for (the treatment of) heat and raucity in the chest

Liquorice rob, tragacanth, gum-arabic, and candy eight *dirham* of each; quince seed mucus two *dirham*; white sugar candy fifty *dirham*. Dissolve the candy and the sugar in fresh water, and cook (that) until it coagulates; (then) pound what must be pounded from the (other) ingredients, give also a bit of sweet almond oil to it, beat (all that) into an (even) mixture, and store it.

#### (180)

## The *soft-rinded* pomegranate<sup>131</sup> lohoch

Take the juice of pomegranates, boil it, and remove the scum; once it is clear, throw into it white sugar candy at half of its weight, light a gentle fire below it, (and cook that) until it gains the consistency of a lohoch. Sometimes gum-arabic, starch, and tragacanth are added to it, each (in a weight equalling) one twentieth of the pomegranate juice.

#### (181)

## A lohoch for (the treatment of)

## long-standing cough and hoarseness

Cassia and olibanum ten *dirham* of each; liquorice root two *dirham*; myrrh, Indian spikenard, and tragacanth four *dirham* of each; honey as necessary. (This) is finely pounded, and processed like the (other) lohochs.

#### (182)

#### A lohoch for (the treatment of) dry cough

Peeled sweet and bitter almonds, liquid storax, linseed, anise, tragacanth, and gum-arabic four *dirham* of each; sugar and candy five *dirham* of each. (This) is pounded, kneaded with fresh fennel-water, and stored.

 $<sup>^{131}</sup>$  *im*līsī "soft-rinded" denotes "une variété de certains fruits, de grenades [...] et semble signifier qui a la peau lisse", see Dozy *Supplément* 2/620.

## Chapter Seven on

#### Beverages

#### (183)

The pandanus<sup>132</sup> beverage for (the treatment of) smallpox and measles —(according to) the copy of the hospital<sup>133</sup> (and first) made by Zahrūn<sup>134</sup>

Coarsely pounded pandanus wood, the stalks, seeds, and root peels of fennel, and seedless Meccan tamarind one *rațl* of each; red roses half a *rațl*; Indian spikenard and clear lac four *dirham* of each; unscraped red and white Maqāṣīr sandalwood<sup>135</sup> four *dirham* of each. Bring (this) together, crush what can be crushed, soak it in four times as much fresh water for a day and a night, then cook it on a low flame until one fourth (of it) is left, squash (that), strain it through a thick cloth of linen, return it to the cooking-pot, cast upon it a quantity of two *rațl* wine vinegar and one *rațl* each of sour and sweet pomegranate-water, cook (that) on a calm fire until it gains a certain consistency, throw into it one *mann* (of) white sugar candy, leave it on the smouldering embers until the scum rises (only) to be removed, take it off the fire, mix into it three *dirham* (of) Fanṣūr camphor<sup>136</sup> and three *dirham* (of) 'hairy' saffron, both finely ground, store (this) in a glass vessel, (and make) a potion (by using) one to three *dirham* (of it).

<sup>&</sup>lt;sup>132</sup> The term used here for "pandanus" *Pandanus odoratissimus* is *kadar*, which seems to be of ultimately Hindi origin; in the recipe itself, "pandanus" reappears under its Persian name  $k\bar{a}d\bar{d}$ , cf. Vullers *Lexicon* 2/805 and *WkaS* 1/10.

<sup>&</sup>lt;sup>133</sup> This is almost certainly the famous 'Adudī hospital in Baghdad, an institution which Ibn at-Tilmīd knew very well since he worked there for many years as head physician, cf. introduction 2.a. with note 24. More difficult to answer is the question which 'copy' Ibn at-Tilmīd refers to in the present context—we know that in the first half of the 5th/11th century the physicians of the 'Adudī hospital had prepared a revised and abridged edition of the *large* version of Sābūr ibn Sahl's (d. 255/869) dispensatory to serve their highly specialized purposes, and that precisely this text was eventually replaced by Ibn at-Tilmīd's own dispensatory, see Kahl Sābūr<sup>1</sup> 21f. with note 69; however, no reliable manuscript of the *large* version of Sābūr's dispensatory has survived, whilst in the *small* version the recipe on hand is missing altogether, see Kahl Sābūr<sup>1</sup> and Sābūr<sup>2</sup> passim.

<sup>&</sup>lt;sup>134</sup> On Zahrūn see note 27 above.

<sup>&</sup>lt;sup>135</sup> On Maqāṣīr see note 5 above.

<sup>&</sup>lt;sup>136</sup> On Fanșūr see note 1 above.

#### (184)

## The *rose* beverage

Take one part of red roses, cook them in ten parts (of) water until one part of that water is gone, press the roses, and keep immersing them like this a number of times, depending on how strong a purgative (effect) you wish (to achieve)—stronger if one tenth of the water is (eventually) left, weaker if one half of it remains; then take this water wherein the roses have repeatedly been (immersed), melt into it a similar (amount of) pure sugar, let (that) gain the consistency of an oxymel, (and make) a potion (by using) four  $\bar{u}q\bar{i}ya$  (of it) together with thirty *dirham* of ice—(this remedy) purges from yellow bile by forcing it out (of the body), and its force is backed up by the ice; it (also) purges from delicate humours other than the yellow bile.

## (185)

#### Plain oxymel

Take for each *mann* of sugar eight  $\bar{u}q\bar{v}a$  (of) wine vinegar and one fourth of a *rațl* (of) fresh water, beat into that water the white of two eggs, mix it (all) together, skim off the scum repeatedly until (the mixture) is clear, and store it. Some people make (this remedy) without (the use of) fire (and wait) until the sugar dissolves (naturally)—they claim it is better.

(186)

The *squill* oxymel for (the treatment of) tenacious humours, a bad complexion, and the calamities of juvenility

The bulbs of squills one part; vinegar ten parts. Cook (this) until (the squills) disintegrate after having cut them into pieces with a wooden knife, strain it, throw into each *rațl* of vinegar one and a half *rațl* of white sugar candy, consolidate (that), and store it.

## (187)

## The lemon beverage

Boil the juice of lemons until half of it is gone, throw into what remains a similar (amount of) sugar, consolidate (that), and store it in a glass vessel.

#### (188)

## The winner beverage

Barberry seeds ten dirham; fruitless sumach (leaves) six dirham; seedless tamarind two ūgīva; myrtle two dirham; dry mint, cubeb, and grains of paradise two dirham of each; clove three dirham; roses three dirham; sandalwood three dirham; the 'outer' shells of the pistachio four dirham; hard dry dates one fourth of a ratl. Cook (this) in four ratl water until one *ratl* (of it) is left and, having strained it, return it to the cooking-pot; (now) add to it twenty *dirham* each of wine vinegar, the water from unripe grapes, quince-water, and sour apple-water, melt into it three *ratl* of white sugar candy, take it off (the fire), cast upon it fifteen dirham (of) fresh lemon-water, ten dirham (of) sour citron-water, one ūqīya (of) rose-water, and one ūqīya (of) sour pomegranate-water, and boil (that) again; then flavour it with one *daniq* (of) camphor, and put it in a glass vessel—(prior to this last step) you may add to it (further shots of) the aforesaid lemon-water and so on, (however) without boiling it (yet again) but rather putting it away (as before); (finally) close the top of the vessel, place it into the sun until (the mixture) consolidates, and use (this).

## (189)

#### Seeded oxymel

Celery seeds, fennel (seeds), and aniseed one part of each. Crush (this), boil it in ten parts (of) sour vinegar until one half (of it) is gone, strain it, and melt into every each eight  $\bar{u}q\bar{v}ya$  of vinegar one mann (of) sugar.

#### (190)

#### The (remedy which is as good as a) coin of gold

Prepare endive seeds in the following manner—crush them (and) boil one part of them, or even the washed (and) afterwards crushed roots of this plant, in thrice as much or more of vinegar so as to reduce it by half, (then) strain it, and melt sugar into it; if the juice of the bitter endive has been extracted without (prior) washing (of the roots), you should clear it and then melt (into) eight  $\bar{u}q\bar{i}ya$  of it and an additional two  $\bar{u}q\bar{i}ya$  of sour vinegar one mann (of) sugar.

#### (191)

### A poppy beverage

Take fifty *dirham* (from) the seeds of the light-coloured poppy, boil them in one *mann* (of) water until one *rațl* (of it) is left, strain (that), and melt into it one *mann* (of) sugar.

#### (192)

## The sandalwood beverage

Crush five *dirham* (of) Maq $\bar{a}$ s $\bar{s}$ r sandalwood,<sup>137</sup> boil (that) in one *mann* (of) water until one *rațl* (of it) is left, and melt into it one *mann* (of) sugar.

#### (193)

## The ribes beverage

Express the juice of fresh ribes, and melt into it one *mann* (of) sugar; due to (these berries) being so watery, a plain rob may (only be made) by clearing one part of their juice from twenty parts of water, and (even then) it hardly ever gains the consistency of a rob without (the addition of) a little sugar. When making (this beverage) some people do not (use) fire (straightaway but wait) until the sugar dissolves (naturally and only) then cook it—they claim it is better.

### (194)

#### The *pomegranate* beverage

Take for each *mann* of sugar one *rațl* or ten  $\bar{u}q\bar{l}ya$  of sour pomegranate juice, and proceed as before. By adding some mint to the juice of the sweet and sour pomegranates you get the *minty pomegranate* beverage,<sup>138</sup> which is suitable for (the treatment of) nausea and free from vinegar.

#### (195)

#### The *quince* oxymel

Four  $\bar{u}q\bar{i}ya$  vinegar, half a *rațl* quince juice, and one *mann* sugar are cooked as before.

<sup>&</sup>lt;sup>137</sup> On Maqāṣīr see note 5 above.

<sup>&</sup>lt;sup>138</sup> See recipe 200.

#### (196)

#### The *apple* beverage

Take one part from the juice of peeled coreless apples, one part from white sugar candy or pure honey, and two parts from rainwater, and cook (this).

#### (197)

## The *citron* beverage made with its leaves which is useful against coldness of the bowels

Take citron leaves, wipe off the dust, soak them for seven days in wine of good quality, (then) strain the wine, throw into every each six parts of it one part of pure honey, cook (that), remove the scum, and store it.

#### (198)

## The *citron* beverage made with its sour juice which is useful against heat of the bowels

Express the juice of ripe sour citrons having rid them from their seeds, throw into each *rațl* of it one *mann* of superb sugar, leave (that) until (the sugar) melts without (the help of) fire, then bring it to the boil on a low flame, take away the scum, and let it gain consistency.

#### (199)

The *myrtle* beverage made with its seeds Crush the myrtle seeds, soak them for seven days in wine of good quality, cook (this) gently, strain it, and let it gain a degree of consistency.

#### (200)

#### The *minty pomegranate* beverage

Peel (both) sweet and sourish pomegranates, pound them with their pulp, express their juice, and leave it to clear; (then) take from it four *rațl*, cook it together with a bunch (of) mint until half of the juice is left, strain it, cook it (again) together with one *rațl* (of) sugar until half (of it) is left, and store (this).

#### ENGLISH TRANSLATION

#### (201)

Plain quince 'wine'<sup>139</sup> from Galen<sup>140</sup> for (the treatment of) loss of appetite combined with a bad hot (humoral) mixture in the liver and stomach, and a downflow of biliousness towards these (organs)

Take large sweet-smelling quinces, peel them from the outside and clear them from the inside, then pound them, express three *rațl* of their juice, and mix it together with a similar (amount) of first-rate honey—(but) whoever wishes to employ sugar instead of honey may do so; (now) mix (that) together with two *rațl* of sour vinegar, lift it on a fire of smouldering embers, take away the scum as it rises, (wait) until it gains the consistency of honey, and (thus) use it—if (however) the (humoral) mixture in the liver and stomach (inclines) to coldness, admix three *dirham* (of) ginger and two *dirham* (of) white pepper, and flavour (this) with a bit of mastic, lignaloes, musk, and the like; (finally make) a potion (by using) three to six mitqal (of it) before food, and at bedtime you may take the same amounts (again).

#### (202)

## The *squill* beverage (which is used) to open obstruction and to cut the humours

It hardly ever gains the consistency of a rob without (the addition of) a little sugar.  $^{\rm 141}$ 

<sup>&</sup>lt;sup>139</sup> *maibah* "quince 'wine'" < Persian *mai* "potus, vinum" and *bih* "malum cydonium", see Vullers *Lexicon* 2/1245 and 1/283 respectively; cf. also Ibn at-Tilmīd's own expositions concluding recipe 217.

<sup>&</sup>lt;sup>140</sup> On Galen see note 47 above. I have not been able to trace this recipe in Galen's extant writings; however, there is a 'prototype' in Dioscorides' (fl. 1st century CE) Περὶ ὕλης ἰατρικῆς (translated into Arabic mid 3rd/9th century) s.t. Περὶ κυδωνίτου οἶνου: ὁ μὲν οὖν κυδωνίτης ὃν ἔνιοι μηλίτην καλοῦσι σκευάζεται οὕτω μήλων κυδωνίων ἐξελὼν τὸ σπέρμα καὶ τεμὼν ὡς γογγυλίδα εἰς μετρητὴν γλεύκους χάλασον μνᾶς ιβ' πρὸς ἡμέρας λ' εἶτα διϋλίσας ἀπόθου σκευάζεται δὲ καὶ οὕτω δεῖ μετὰ τὸ κόψαι καὶ ἐκθλίψαι τὰ κυδώνια τοῦ χυλοῦ τούτων μίξαι τοῖς ιβ' ξέσταις ἕνα ξέστην μέλιτος καὶ οὕτω χρὴ ἀποθέσθαι ἔστι δὲ στυπτικὸς εὐστόμαχος δυσεντερίαις ἁρμόζων ἡπατικοῖς νεφριτικοῖς τε καὶ δυσουροῦσι, see MGO 25/714.

 $<sup>^{\</sup>scriptscriptstyle 141}$  This recipe should rather be expected to figure in chapter six on lohochs and robs.

#### (203)

# The *fig* beverage for those who suffer from colic

As regards the plain (kind), throw onto the syrup obtained by cooking the figs about one fourth of its (amount) in Siğistān candy,<sup>142</sup> and let (that) gain consistency; as regards the consolidated (kind), add to one *rațl* of the said beverage one *dirham* each of cinnamom, galingale, and long pepper, all ground. This (remedy) is suitable for (the treatment of) colic caused by tough phlegm and cold flux.

## (204)

A condite<sup>143</sup> which is useful against coldness of the stomach, indigestion, quartan fever, pain in the belly, and it strengthens old men —from Sābūr ibn Sahl<sup>144</sup>

Take three *mann* (of) clarified bee honey and cast upon it ten and a half *mann* pure aged wine of good quality, which is the original, or wine boiled down to one half; (now) get five *dirham* (of) ginger, half a *dirham* each of grains of paradise and Malabar cardamom, one  $d\bar{a}niq$  (of) clove, half a *dirham* (of) cinnamom, half a *dirham* (of) unground saffron, and one and a half  $d\bar{a}niq$  (of) long pepper, and grind these ingredients coarsely except the saffron which is not to be ground; (next tie them all up) in a piece of cloth, (throw this) into the wine, leave (the jug) in a warm place for three days, stirring (the mixture) three times daily, and then strain it well; (finally) add to it one  $d\bar{a}niq$  (of) ground musk, and store it in a glass vessel.

(205)

Iron oxide with wine for (the treatment of) gastric debility in conjunction with coldness

Celery seeds, fennel, anise, cumin, asafoetida, visnaga, savory, lovage, caraway, coriander, long pepper, black pepper, cinnamom, frank-

<sup>&</sup>lt;sup>142</sup> On Siğistān see note 116 above.

<sup>&</sup>lt;sup>143</sup> hundīqūn "condite" < κονδῖτον "spiced wine" < Latin *conditum* "aromatic, spiced (wine)", see Liddell/Scott *Lexicon Suppl.* 182 and Lewis/Short *Dictionary* 408; cf. also Ibn at-Tilmīd's own expositions concluding recipe 217.

<sup>&</sup>lt;sup>144</sup> For this recipe from Sābūr ibn Sahl's (d. 255/869) *small* dispensatory see Kahl  $S\bar{a}b\bar{u}r^1$  189 and  $S\bar{a}b\bar{u}r^2$  158f. no. 342 ("rob").

incense, Indian spikenard, clove, nutmeg, cyperus, and ginger one  $m\underline{i}\underline{t}q\overline{a}l$  of each; Basra iron oxide ten  $m\underline{i}\underline{t}q\overline{a}l$ . All (that) is cooked in six times as much wine until half of the wine is left, and every day thirty *dirham* of this beverage are drunk; the food should be light during the three weeks of application, and that which is sour as well as fresh fruits are forbidden.

## (206)

## Flavoured quince wine

Gently cook one part (of) sour quince juice which had been filtered for two days and one part (of) aged wine, take away the scum, add to each *rail* of it one *dirham* (of) ginger, one *dirham* (of) canella, and two *dirham* (of) mastic—crushed, stuffed in a pouch, and thrown (into the liquid) towards the end of cooking—, bring (all that) to the boil two or three (times), strain it, and store it.

### (207)

Iris wine

which is useful against fatigue, feebleness, frailty, vomiting, and gastric and hepatic debility caused by coldness (if) piece(s) of cloth are steeped into it and laid on the hands, the feet, and the neck, and (also) on the stomach, between the shoulders, on the joints, and on the venous and nervous clusters

Take alecost, lemon grass, cassia, and clove four  $\bar{u}q\bar{i}ya$  of each; Indian spikenard two  $\bar{u}q\bar{i}ya$ ; naphthalene six  $\bar{u}q\bar{i}ya$ ; saffron one  $\bar{u}q\bar{i}ya$ ; grape ivy, mace, and Greek mastic two  $\bar{u}q\bar{i}ya$  of each; liquid storax six  $\bar{u}q\bar{i}ya$ . Pound (these ingredients) dry, and strain them; the saffron, the mastic, and the storax (however) grind in aged  $til\bar{a}$  wine.<sup>145</sup> Then bring it all together, take eight hundred (flower) heads from the white wild iris, wipe off the yellow with a cloth of linen, and arrange (alternating) layers of the irises and the spices in an alabaster jug until (everything) is used up. Then pour ten jugfuls of  $til\bar{a}$  wine over it, close the top of the vessel, daub it with clay, and put it in a (storage) room for six months. Sometimes a bit of musk is added to it (as well).

<sup>&</sup>lt;sup>145</sup> On *țilā*' see note 128 above.

#### (208)

## Quince wine for (the treatment of) abdominal disorder and dryness of the uvula, or so it is said

Take quinces at the beginning of winter, rid them from their peels and seeds, soak them in aged  $til\bar{a}$  wine<sup>146</sup> for a day and a night, then pound them finely, take four jugfuls from their pressed juice, cook (that) until it comes to one half, strain it, return it to the cooking-pot, and cast one jugful of clarified honey upon it; (now get) four  $mitq\bar{a}l$  each of grains of paradise and cardamom, one  $mitq\bar{a}l$  (of) cinnamom, two  $mitq\bar{a}l$  each of Greek mastic and clove, and three  $mitq\bar{a}l$  (of) canella, pound these ingredients, put them in a thin cloth of linen, tie it up, and throw it into the pot (as well); then cook (all that) until it thickens a little, strain it into a glass vessel, grind one fourth of a  $mitq\bar{a}l$  from musk and half a  $mitq\bar{a}l$  from camphor, sprinkle it onto and whip it into (the mixture) so as to be absorbed, (and make) a potion (by using) one spoonful (of this remedy) with cold water.

#### (209)

# A mixed juice<sup>147</sup> whose benefit is similar to (that of) quince wine

Take two jugfuls (from) the pressed juice of sourish apples and half a jugful (from) clarified honey, cook that until one third (of it) vanishes, then put (what remains) into a glass vessel, grind four mitqal each of clove and cinnamom, sprinkle it onto the mixture, close the top of the vessel, daub it with clay, and use (this remedy) after six months.

## (210)

#### A condite<sup>148</sup>

Blend four jugfuls (of) aged  $til\bar{a}$  wine<sup>149</sup> with one jugful (of) clarified honey, grind one  $\bar{u}q\bar{i}ya$  (of) black pepper, half an  $\bar{u}q\bar{i}ya$  (of) *sukk*,<sup>150</sup> and just as much (of) canella and Indian spikenard, mix (that)—and sometimes saffron (too)—(into the liquid), put it (all) in a tarred vessel, daub its top with clay, leave (the mixture) to ripen, and (then) use

<sup>&</sup>lt;sup>146</sup> On *țilā*' see note 128 above.

 $<sup>^{\</sup>rm 147}$  maišāb "mixed juice" seems to be a neologistic hybrid derived from the Arabic verbal noun maiš "mixing" and the Persian noun  $\bar{a}b$  "water".

<sup>&</sup>lt;sup>148</sup> On the etymology of *hundīqūn* "condite" see note 143 above.

<sup>&</sup>lt;sup>149</sup> On *țilā*' see note 128 above.

<sup>&</sup>lt;sup>150</sup> On *sukk* see note 4 above.

it—and he who wants to add to it about one *mitqāl* of musk and (again) saffron may do so.

## (211)

## The squill beverage

Take four *rați* from iris roots, two *rați* from dodder, just one *rați* from agaric, one *rați* from squills, and seventeen *istār* from garden pennyroyal, put it (all) into a new cooking-pot of clay, pour over it two jugfuls (of) water, cook (that) until it comes to one half after having soaked (the above ingredients) prior to cooking, and use it one month later.

Wines. The standard measure when using wine from dates, raisins, and currants is (to mix) one (part of this) with thrice as much water, cook the mixture until two thirds (of it) vanish and one third remains, (then) strain it, spice it, and press it quite through so that it ripens; the spices may vary depending on what is required (but) are picked and chosen (from among) cyperus, clove, cinnamom, galingale, flax dodder, iris leaves, ginger, absinthe, mastic, Indian spikenard, roses, nutmeg, alecost, parsnip, saffron, and Indian lignaloes, and sometimes sweetened with sugar or honey.

#### (212)

#### A pennyroyal beverage for (the treatment of) diarrhoea, and moistful and bitterish torrential vomiting arts each of sweet and sour pomegrapate jui

Cook two parts each of sweet and sour pomegranate juice until half (of it) is left, add to it two parts of clarified honey and one part of the pressed juice of fresh pennyroyal, cook (that again) with olive oil, let it cool off, and (then) store it in an alabaster (vessel).

#### (213)

#### Abū Mīlī <sup>151</sup>

Add to five *rațl* (of) honey and four *rațl* (of) fresh water three *dirham* each of cyperus, mastic, and cinnamom, and one *dirham* (of) saffron, cook (that) on a low flame until it is reduced to one half and, having removed the scum, let it cool off in an alabaster (vessel).

 $<sup>^{151}</sup>$  Abū Mīlī (the latter term <  $\mu\epsilon\lambda\iota)$  lit. "the father of honey", that is "the original one with honey".

#### (214)

## (A remedy called) anğūr afšurağ<sup>152</sup>

Take ten jugfuls from the pressed juice of sweet and 'half-and-half' grapes—(the latter) being those which have a rest of acidity—and two jugfuls from clarified honey, cook (that) gently until it thickens, and use it. One spoonful of this (remedy) with cold water clears the stomach and strengthens it, too.

## (215)

## The *fruit* beverage which strengthens the stomach, settles vomiting, and astricts the belly

Take sour quince juice, sourish pomegranates, apples, sumach, myrtle seeds, service, sour citrons, and lote, cook (the quince juice) in water (so as) to lessen its juiciness, strain it, add to it the saps of the remaining (ingredients), let (that) gain the consistency of a rob, and use it.

#### (216)

### The *myrtle* beverage

Take fresh myrtles with their seeds, chop them in small pieces, besprinkle them with water, pound them, press them, take two parts from their sap and two and a half parts from clarified honey, put (that) into a pot, and cook it until it coagulates; then flavour it with Indian spikenard, clove, cinnamom, and nutmeg in the manner of the spices (mentioned) before,<sup>153</sup> strain it once it has cooled down, and put it in an alabaster (vessel).

#### (217)

# An oxymel for those who suffer from spleen disease—(invented) by Ibn at-Tilmīd

The peels of the caper root five *dirham*; rusty back fern five *dirham*; dodder five *dirham*; the fruit of the tarfa three *dirham*; madder three *dirham*; asarabacca one third of a *dirham*; sweet flag three *dirham*; the bast of the willow-tree six *dirham*. Provided that the weights are

<sup>&</sup>lt;sup>152</sup> *anğūr afšurağ* < Persian *angūr* "uva" and *afšurah* "res quaevis expressa, succus expressus", see Vullers *Lexicon* 1/137 and 1/113 respectively.

 $<sup>^{153}</sup>$  Compare the concluding section of recipe 211.

(quantified in) *dirham*, (all this) is boiled in just one *rațl* of wine vinegar until one third of it is gone, (then) strained, and (finally) one *mann* (of) sugar is melted into what remains.

Beverages. Pure wine of good quality, that is superior wine, is called  $til\bar{a}$ ;  $\check{g}amh\bar{u}r\bar{i}$  in turn is a variety of *maifuhtağ* which has not (yet) gone over the state of being drinkable to that of being (too) syrupy,<sup>154</sup> whilst *maifuhtağ* itself means 'cooked wine'<sup>155</sup> and is (also) called  $til\bar{a}$ ' in the Arabic language; *mutallat* is (another) variety of *maifuhtağ* which is cooked until two thirds of it are gone,<sup>156</sup> and honeyed raisin wine may be made from both of them; *hundīqūn* is a wine (prepared with) honey and spices;<sup>157</sup> *maibah* is Persian meaning 'quince beverage', that is to say 'quince wine', and on account of this designation it ought to contain wine rather than vinegar.<sup>158</sup>

Chapter Eight on Preserves

#### (218)

## Roses preserved with honey or with sugar For one part of Persian rose-leaves (take) twice as much of either (honey or sugar).

#### (219)

Preserved violets For one part of violet flowers (take) two parts of sugar.

<sup>&</sup>lt;sup>154</sup> *ğamhūrī* is (grape) wine boiled down to one half, see e.g. Siggel Wörterbuch 26.

<sup>&</sup>lt;sup>155</sup> *maifuhtağ* < Persian *mai-puhtah* is (grape) wine boiled down to one quarter, see e.g. Siggel Wörterbuch 70.

<sup>&</sup>lt;sup>156</sup> *mutallat* is (grape) wine boiled down to one third, see e.g. Siggel Wörterbuch 67.

<sup>&</sup>lt;sup>157</sup> On the etymology of  $hund\bar{l}q\bar{u}n$  see note 143 above.

<sup>&</sup>lt;sup>158</sup> On the etymology of *maibah* see note 139 above; Ibn at-Tilmīd's observation that, strictly speaking, *maibah* "ought to contain wine rather than vinegar" is aimed at the old recipe 201, which bears this name yet involves vinegar instead of wine.

#### (220)

## Preserved citron rinds

For one part of yellow citron rinds—including the pulp that (has been squeezed so as) to remove its natural acidity—washed with salt and water and thereafter left to dry (take) one part of pure honey, cook (that) together, and lift it into a jug; whenever (this concoction) grows fluid, take out (the citrons), stir the honey with your fingers, boil it thoroughly to get rid of (all) wateriness, (then) put (the citrons) back in, and keep doing that until (the mixture) finally thickens, no more wateriness is found, and the honey sticks firmly to the rinds; now is the time to store it away and, lastly, to flavour it with a bit of saffron. In the same way you preserve gourds, apples, and quinces.

#### (221)

Preserved unripe dates which are useful for those who have cold-moist stomachs

Take recent unripe dates which contain little moisture and boil them first thing; then remove their seeds and stems; then stuff (the berries) with honey, clove, cinnamom, ginger, and ground saffron instead; then restore the stems, put (all that) into a glass jug, and pour forth an amount of clarified honey sufficient to cover it.

#### (222)

#### Preserved carrots

Take one part (of) red carrots, grill them, peel them, and pull out their insides, and one part of pure honey, (mix that together), and check the honey (for consistency) every five days by boiling and (then) reuniting it (with the carrots).<sup>159</sup>

#### (223)

#### Preserved ginger

Cut Chinese ginger into large pieces, soak these in water for twenty days, dry them up, pour out enough water and honey to cover them, put (all that) in a cooking-pot of stone, give it a good boiling, then remove (the worn ginger) from the water and the honey, form it into

<sup>&</sup>lt;sup>159</sup> Compare the more detailed instructions given in recipe 220.

small pastilles, pour out enough clarified honey to cover these, throw onto (the mixture) the same spices as when preserving myrobalans,<sup>160</sup> and use (this).

## Chapter Nine on Decoctions

#### (224)

The *hyssop* decoction for (the treatment of) asthma in hot tempers

Rāziqī raisins<sup>161</sup> fifteen *dirham*; jujubes and sebesten twenty fruits of each; husked barley ten *dirham*; light-coloured poppy four *dirham*; violet, nenuphar, cucumber seeds, purslane seeds, maidenhair, scraped (and) crushed liquorice root, and hyssop three *dirham* of each; fleshy yellowish figs which are 'king figs'<sup>162</sup> seven (fruits) in number; gumarabic two *dirham*. All (this) is cooked in five *rațl* water until one third (of it) is left, (then) strained, (and) a potion (may be made by using) four  $\bar{u}q\bar{v}a$  (of it) together with five *dirham* (of) white sugar candy and one *dirham* (of) sweet almond oil. Sometimes, when the sputum is clotted and hard to cough up, (this remedy) is made without gum(-arabic).

(225)

Roots-water which opens obstruction and mollifies tenacious humours

The peels of the fennel root, the peels of the celery root, citronella root, fennel seeds, celery seeds, anise, Indian spikenard, mastic, and dyer's madder one part of each; seedless raisins two parts. (These ingredients) are cooked, the water—having acquired their faculties—is strained, four  $\bar{u}q\bar{v}a$  from it are measured up, drunk moderately hot, and sometimes augmented by two *dirham* (of) castor oil and one *dirham* 

<sup>&</sup>lt;sup>160</sup> There are no specific instructions in the text on hand as to the preservation of myrobalans, but we may guess from recipe 221 that the 'spices' referred to in the present context would run along the lines of clove, cinnamom, and saffron.

<sup>&</sup>lt;sup>161</sup> On Rāziqī see note 87 above.

<sup>&</sup>lt;sup>162</sup> On 'king figs' cf. note 125 above.

(of) sweet almond oil or, alternatively, by bitter almond oil on its own at the combined weight of the aforesaid two oils. When using roots-water to crumble kidney stones, rusty back fern should be added to the decoction which is (then) drunk with Jews' stone; in order to relax tremor and (to treat) phlegmatic diseases it may be used together with certain electuaries, like the *curcuma* remedy<sup>163</sup> or the (one called) *amrūsiyā*,<sup>164</sup> as indicated by the condition of the patient.

## (226)

#### Cheese-water and (this) is used in spring

Choose a young goat that has given birth about a month earlier and a red(-woolled) blue(-eyed) young sheep of the kind that has a sound temper, but before obtaining their milk feed them for a few days coarsely ground wet barley and (its) bran, dog's grass, endive, and fumitory; then milk off (a total of) two ratl every day, cook (that) in a stone cauldron on a calm fire, and stir it with a piece of fresh barked fig-wood which had been crushed (flat) in order to convey to the cheese-water through the lacteous sap inside the fresh fig-wood a specifically mild purgative faculty—if (however) what we just mentioned is not intended and the cheese-water is (meant to be) drunk (merely) to moisten but not to purge, you may replace the fig-wood by a piece of fresh willow-wood; wipe around the cooking-pot, that is to say (around) its edges, with a piece of cloth which had been drenched in fresh water; when the milk boils, take the cauldron off the fire, and sprinkle on the milk inside thirty *dirham* of plain sugared oxymel<sup>165</sup> and, as is often done, about three *dirham* of pure sour wine vinegar, too-but make sure the oxymel and the vinegar are very cold, and be quick to add them so that the cheesiness may separate from the wateriness; stir (the mixture) with the aforesaid wood, and leave it for a short while until it curdles and the wateriness has separated; then strain it through a thick cloth of linen or a densely woven basket made of palm-leaves, and hang up the remaining cheesy stuff until the water stops dripping from it; (finally) return (all) the watery stuff

<sup>&</sup>lt;sup>163</sup> See e.g. Ibn Sīnā Qānūn 3/330,-5ff. and 331,1-11.

<sup>&</sup>lt;sup>164</sup> amrūsiyā < ἀμβροσία "immortality, elixir of life; an antidote", see Liddell/Scott Lexicon 79; for the recipe itself see e.g. Kahl Sābūr<sup>1</sup> 47f. and Sābūr<sup>2</sup> 39 no. 14.

<sup>&</sup>lt;sup>165</sup> Compare recipe 185.

to the washed cauldron, boil it gently, throw into it half a *dirham* of ground white salt, and strain it once more. Take from said cheese-water between one half and two thirds of a *rațl* with white sugar candy, gradually increasing (the dose), and augment it with a purgative powder or else a substitute for that.<sup>166</sup>

## (227)

## Endive-water

Take fresh unwashed endives, cut away their underground parts, extract their water, and drink (from it) thirty *dirham* to half a *rațl* together with plain oxymel<sup>167</sup> in order to open obstruction. Sometimes (this remedy) is administered in combination with certain pastilles which are useful for that (purpose), like the *absinthe* pastille.<sup>168</sup>

#### (228)

## The water of the Indian musk melon which is (also known as) Raqqa<sup>169</sup> or Palestinian (melon)

Take a ripe musk melon, one whose seeds have gone black, cut it in two halves, incise its flesh but do not remove it until (all) wateriness has leaked out, (then) strain it off, and take (from it) fifty *dirham* to half a *rațl* together with any beverage that appears to be appropriate in the (given) situation, like the *pomegranate* or another cooling beverage.<sup>170</sup>

#### (229)

#### Grilled pumpkin-water

Pick a juicy pumpkin and pierce with a knife through a number of spots (on its surface); then take red clay, knead it together with barley meal and fresh water, and cover the whole pumpkin in it as if with a

<sup>&</sup>lt;sup>166</sup> See recipe 86; cf. also recipe 93.

<sup>&</sup>lt;sup>167</sup> See recipe 185.

<sup>&</sup>lt;sup>168</sup> See recipe 18.

<sup>&</sup>lt;sup>169</sup> Raqqa, situated at the great bend of the river Euphrates, was once one of the chief cities of Upper Mesopotamia but not particularly known for its melons, cf. Meinecke "Rakka" passim and Le Strange *Lands* 124 with map 1; from the context it would appear that Ibn at-Tilmīd is referring here to the kind of melon which is otherwise called 'Syrian' or indeed 'Palestinian', see e.g. Dozy *Supplément* 1/457 s.v. *dullā*'.

<sup>&</sup>lt;sup>170</sup> See recipe 194; cf. also recipes 198 and 200.

dress—but do not apply it too thickly or else you prevent the interior of the pumpkin from maturing; (now) carry it to a moderately preheated oven, place two rows of bricks—one above the other—at the bottom of the oven, and put the daubed pumpkin on top of these; when the clay has become dry and hard, lift out the pumpkin and leave it to cool down; (finally) crack off the coating, release the water (from inside the pumpkin), and take from it fifty to sixty *dirham* together with certain cooling beverages, like the *pomegranate* or the *poppy* beverage.<sup>171</sup>

#### (230)

## The hospital decoction

Hulwān plums<sup>172</sup> five mann; Ğurğān jujubes<sup>173</sup> two and a half mann; Hurāsān apricots<sup>174</sup> five mann; Meccan tamarinds five mann; sebesten one mann; Rāzigī raisins<sup>175</sup> five mann; sweet-smelling violets and nenuphars three ratl of each; roses one mann; stoneless chebulic, yellow, and black Indian myrobalan five mann altogether; beleric myrobalan, emblic, and the 'milk' of emblic one mann of each; Meccan senna three ratl; pistachio(-coloured) polypody and scraped (and) crushed liquorice root one and a half ratl of each; French lavender, ground pine, wall germander, bull thistle, giant thistle, and the leaves and seeds of lemon balm two and a half ratl of each; absinthe leaves one *mann*; small centaury three *ratl*; light-coloured poppy five *ratl*; serpent melon seeds, cucumber seeds, and purslane (seeds), all crushed, one kailağa of each; fennel seeds, celery (seeds), and flax dodder (seeds) one kailağa of each; pomegranate seeds and barberry seeds one mann of each; coriander one *makkūk*; borage five *ratl*; Cretan dodder, tied up in a cloth of linen and thrown (into the mixture) towards the end of

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<sup>&</sup>lt;sup>171</sup> See recipes 194 and 191 respectively.

<sup>&</sup>lt;sup>172</sup> Hulwān is the Arabic name of an ancient town situated on the great Hurāsān highway as it crosses the natural frontier between Iraq and Iran; the place was known for an abundance of fruit (dates, pomegranates, figs) though not explicitly plums, see Lockhart "Hulwān" 571 and Le Strange Lands 191 with map 2.

 $<sup>^{173}</sup>$  Ğurğān is a province in northern Iran bordering on the Caspian Sea and crossed by the old caravan route to Russia, see Hartmann/Boyle "Gurgān" 1141; the place was known for its excellent jujubes, see Gassānī *Muʿtamad* 340 and Wiedemann *Aufsätze* 1/867.

<sup>&</sup>lt;sup>174</sup> Hurāsān is a province in northeastern Iran which in the Middle Ages was generally regarded as covering a much wider geographical area than today, see Bosworth "<u>Kh</u>urāsān" 55f.; for a (rather isolated) apricot connection see Dozy *Supplément* 2/603.

<sup>&</sup>lt;sup>175</sup> On Rāziqī see note 87 above.

cooking, one *rațl*; endive and mint a bunch of each; sweet basil seeds one *mann*; agrimony leaves one and a half *rațl*; turpeth and agaric one *mann* of each. All (this) is cooked in one thousand *rațl* fresh water until one third (of it) is left, and (then) strained.

### (231)

## The hospital backup for this decoction

Turpeth, aloe, liquorice rob, and scammony in equal parts; a potion of the *backup* (may be made by using) one *dirham* (of it) at nightfall. The decoction (itself is measured out) at daybreak (in a quantity of) one *rațl* together with two  $\bar{u}q\bar{i}ya$  (of) alhagi and two  $\bar{u}q\bar{i}ya$  (of) purging cassia pods which are dissolved in it; (then) it is strained (again), augmented by two  $\bar{u}q\bar{i}ya$  (of) julep, half a *dirham* (of) washed Armenian stone, and half a *dirham* (of) lapis lazuli, and (thus) drunk.

## (232)

## The hyssop decoction

(which is associated) with heat

Rāziqī raisins<sup>176</sup> fifteen *dirham*; jujubes and sebesten twenty fruits of each—but (this remedy) has already been mentioned.<sup>177</sup>

#### (233)

#### Now the *hyssop* decoction for (the treatment of) tenacious humours from coarsely ground bran 'king figs' <sup>178</sup> t

Take the water from coarsely ground bran, 'king figs',<sup>178</sup> the flesh of raisins and jujubes, liquorice root, fennel and its seeds, maidenhair, hyssop, moon carrot, and violets (mixed) with candy and bitter almond oil all at quantities that vary depending on what is required—but tragacanth, gum(-arabic), sebesten, and the like are not used here.

<sup>&</sup>lt;sup>176</sup> On Rāziqī see note 87 above.

<sup>&</sup>lt;sup>177</sup> See recipe 224.

<sup>&</sup>lt;sup>178</sup> On 'king figs' see note 125 above.

## (234)

# The *aloe* infusion for (the treatment of) hot headache

Express the water from unwashed endives, throw into it a bit of good aloe and a bit of tragacanth, leave these two (ingredients) to dissolve, and then drink (this) as necessary.

#### (235)

# The aloe infusion

for (the treatment of) cold phlegmatic headache; it thoroughly clears the head and (also) the stomach Black myrobalan, beleric myrobalan, and emblic ten *dirham* of each; fennel root, celery (root), citronella root, and liquorice root eight *dirham* of each; Indian spikenard and lemon grass four *dirham* of each; bull thistle and giant thistle five *dirham* of each; the pulp of colocynth two *dirham*. Cook all (this) in five *rațl* water until one and a half *rațl* (of it) are left, (then) throw into it one *ūqīya* of Socotra aloe, put it in a glass vessel into the sun for three days, and as required drink (from it) one to two *ūqīya*—the amount of aloe in the previous *aloe* infusion, which is for (the treatment of) hot headache, should be roughly the same as here.

## (236)

# A decoction for (the treatment of) asthma if there is no fever

Figs, raisins, celery seeds, fennel seeds, maidenhair, hyssop, white horehound, liquorice root, wild caraway, bitter almonds, and 'rolled' birthwort as necessary. (This) may be used as a decoction as well as an electuary.

#### (237)

## Some purgatives for (asthma) sufferers

Agaric, the pulp of colocynth, liquorice rob, white horehound, turpeth, and *hiera picra*<sup>179</sup> are measured up and formed into pills with wine boiled down to one quarter; lohochs (too) are made for these

<sup>&</sup>lt;sup>179</sup> On *hiera picra* see note 40 above.

(patients) from grilled squills, white horehound, water flag, 'long' birthwort, wormwood, rhubarb, myrrh, and saffron (all of which) are measured up to appropriate amounts, inspissated with honey or a decoction of figs or a condensation of grapes, and used.

#### (238)

## And (again) for that

Dried fox lung, pennyroyal, celery seeds, laurel, and grape ivy are brought together with fig honey, formed into pills, and used at bedtime.

#### (239)

## And (again) for that

Fenugreek, large pine nuts, and white horehound are cooked, strained over honey, and inspissated.

#### (240)

## The *roots* decoction for (the treatment of) long black-bilious and phlegmatic fevers, pains in the liver and spleen, and humoral putridity

The peels of the fennel root, celery roots, citronella (roots), fennel seeds, celery seeds, anise, mastic, Indian spikenard, the petals of red roses, bull thistle, giant thistle, agrimony leaves, absinthe leaves, madder, clear lac, Chinese rhubarb, and seedless raisins as necessary. (These ingredients) are cooked in fresh water, their juice is extracted, and drunk together with sweet or bitter almond oil.

#### (241)

Some purgatives which are healthy for those who suffer from facial paralysis and hemiplegia The *chebulic myrobalan* decoction on its own (at a weight of) fifty *dirham*—originally ten *dirham*; (or) one *dirham* (of cooked and then) strained myrobalans together with one *dāniq* (of) ground colocynth pulp.

#### (242)

## The *dodder* decoction which is useful against black-bilious diseases, mange, tetter, and 'black' lichen

Black myrobalan ten *dirham*; polypody five *dirham*; Meccan senna and seedless Rāziqī raisins<sup>180</sup> seven *dirham* of each; turpeth four *dirham*; French lavender and dodder ten *dirham* of each. Bring (this) together, crush what needs to be crushed, cook it (all) in four *rațl* fresh water—the dodder being tied up in a cloth of linen and thrown (into the mixture) towards the end of cooking—, leave it on the fire until it is reduced to one *rațl*, (then) strain it, and drink it together with a pill that expels the black bile, and with agaric, aloe, Indian salt, and black hellebore.

#### (243)

A decoction which makes the menstrual blood flow

Take endive seeds, flax dodder seeds, anise, celery seeds, and fennel two *dirham* of each; Ğurğān jujubes<sup>181</sup> thirty fruits; seedless Rāziqī raisins<sup>182</sup> fifty (in number); red kidney beans, priced like chickpeas, ten *dirham*; 'king figs'<sup>183</sup> ten in number; dry coriander five *dirham*; rue two bunches. Bring (this) together, cook it in two *rațl* water, (then) strain it, and take from it sixty *dirham* together with one  $\bar{u}q\bar{i}ya$  (of) the seed-oxymel.<sup>184</sup>

### (244)

## A sunny infusion from ${\tt S}\bar{a}^{{\tt `id}^{185}}$

Jujubes and plums thirty *dirham* of each; (seed)less tamarinds twenty (*dirham*); fumitory twenty *dirham*; nenuphars five *dirham*; roses ten *dirham*; Meccan senna three *dirham*; endive seeds, flax dodder, and borage three *dirham* of each; liquorice root, polypody, beleric myrobalan, and emblic, all crushed, three *dirham* of each; the crushed seeds

 $<sup>^{\</sup>rm 180}\,$  On Rāziqī see note 87 above.

<sup>&</sup>lt;sup>181</sup> On Ğurğān see note 173 above.

<sup>&</sup>lt;sup>182</sup> On Rāziqī see note 87 above.

<sup>&</sup>lt;sup>183</sup> On 'king figs' see note 125 above.

<sup>&</sup>lt;sup>184</sup> Compare recipe 189.

 $<sup>^{185}</sup>$  On Sāʿid, the 'inventor' of this recipe which in all probability was handed down to Ibn at-Tilmīd by way of oral transmission, see note 38 above.

of serpent melon, cucumber, gourd, and purslane ten *dirham* of each; barberry seeds ten dirham; pomegranate seeds five dirham; coriander five dirham; (stone)less yellow and chebulic myrobalan five dirham of each; plantain five dirham. Bring this together, soak it in ten ratl water, boil it briefly, take it off the fire, leave it in a broad-brimmed vessel of glass, close its top firmly, place it into the sun, stir it (every) morning and evening for a duration of one week or ten days (at most), then dispense from (that) water on the morn of each day thirty to forty *dirham*—depending on how much the drinker can tolerate—, but augment it at the time of drinking with one *mitgāl* (of) pumpkin seed pulp, two *dāniq* (of) washed Armenian stone, half a *dirham* (of) barberry sap, one fourth of a dirham (of) tabasheer, one  $\bar{u}q\bar{v}a$  (of) the pomegranate oxymel without vinegar, one  $\bar{u}q\bar{i}ya$  (of) julep, and one dirham (of) almond oil; and the diet (consisting) of vegetable stuff<sup>186</sup> with the juice of unripe grapes or (else) pullet (is taken) in the afternoon. (This regimen) must be followed for five days up to one week.

## Chapter Ten on Collyria, Catapasms, and Ophthalmics

#### (245)

The *dust-coloured* (remedy) Kerman tutty and burnt caltrop one part of each; sugar one fourth of a part. (This) is ground, then strained, and used.

## (246)

# The polisher from Sābūr<sup>187</sup>

Starch four parts; gum-arabic two parts; ceruse, argentic slag, and stibium one part of each. (This) is ground, and used.

<sup>&</sup>lt;sup>186</sup> *muzauwara* "vegetable stuff" denotes "[un] plat maigre, aux légumes, sans viande, et aussi: boisson douce et enivrante [...] aliment préparé sans viande; on y met de la coriandre ou quelque autre ingrédient de ce genre, et on le donne au malade [...] *muzauwara* signifie ordinairement chez les médecins: chaque plat sans viande qu'on donne à un malade", see Dozy Supplément 1/612.

<sup>&</sup>lt;sup>187</sup> For this recipe from Sābūr ibn Sahl's (d. 255/869) small dispensatory see Kahl Sābūr<sup>1</sup> 197 and Sābūr<sup>2</sup> 166 no. 365.

#### (247)

## The unripe grape coolant

Tutty and yellow myrobalan fifteen *dirham* of each; ginger seven and a half *dirham*; long pepper three and a half *dirham*; turmeric fifteen *dirham*; emblic and greater celandine two *dirham* of each. All (this) is pounded, strained, steeped in the water of fresh unripe grapes in a green—that is a porcelain—trough for seven days, (then) dried, ground again, and used.

### (248)

The *ash-coloured* (remedy) which strengthens the sight and dries up lachrymation

Kohl, Indian tutty, copper scoriae, and burnt wormwood one part of each; greater celandine one fourth of a part. (This) is pounded, strained through a cloth of silk, and stored.

#### (249)

The *mighty* (remedy) which is useful (against) loss of vision, dries up lachrymation, and strengthens the eye Auric slag, copper scoriae, Indian tutty, lobster, stibium, laurel, black and white pepper, long pepper, and sal ammoniac one *dirham* of each; saffron two *dirham*; sweet basil half a *dirham*; musk one *qīrāț*. (This) is properly ground and strained, and (then) stored.

(250)

The (remedy called) *bāsilīqūn* —meaning 'royal' or 'kingly'<sup>188</sup> for (the treatment of) itchiness of the eye and loss of sight

Argentic slag and scaled sepiolite ten *dirham* of each; oxidized copper five *dirham*; ceruse, white salt, sal ammoniac, germander, black pepper, and long pepper two and a half *dirham* of each; clove and usnea one *dirham* of each. All (this) is pounded, strained, and used.

<sup>&</sup>lt;sup>188</sup> *bāsilīqūn* < βασιλικόν (scil. φάρμακον) "royal, kingly" is a name given to various collyria, liniments, and other compound drugs, both in the Greek and Arabic pharmacy, see Liddell/Scott *Lexicon* 309f. and Fellmann *Qalānisī* 242f.

#### (251)

## The (remedy called) *rūšanā'ī* —meaning 'light'<sup>189</sup> which is useful against weakness of sight and floaters

Haematite, oxidized copper, argentic slag, Indian salt, Armenian borax, verdigris, black and white pepper, long pepper, and sepiolite four parts of each; Socotra aloe, Indian spikenard, and clove one and a half parts of each; ginger and lilac two parts of each. (This) is brought together, and used.

#### (252)

The painters coolant which is (also called) the *pomegranate* coolant, and which sharpens the sight Tutty is steeped in the strained water of red pomegranates for seven days, (then) ground, and used.

#### (253)

#### A coolant which makes the eyelashes grow, and which is useful (against) lachrymation the ground seeds of Medina dates<sup>190</sup> or (anoth

Lapis lazuli, the ground seeds of Medina dates<sup>190</sup> or (another kind of) exquisite dates, and frankincense soot are pulverized, strained, and used.

#### (254)

## An Indian coolant for (the treatment of) moist scaly eruptions (around the eyes)

Oxidized copper and iron scoriae eight *dirham* of each; aloe four *dirham*; salt, Armenian borax, black pepper, ginger, and Basra vitriol two *dirham* of each; glass-slag which is the *mashaqūniyā* of glass,<sup>191</sup>

 $<sup>^{\</sup>rm 189}$  Persian  $r\bar{u}\dot{s}an\bar{a}\,\bar{\imath}$  "lux, claritas; lucem, splendorem dans", see Vullers Lexicon 2/75f.

 $<sup>^{190}</sup>$  *șaiḥānī*, reduced in my translation to "Medina", is traditionally described as a sort of date which is black and hard to chew, and allegedly so called after a certain ram named Ṣaiḥān that was once tied to a palm-tree in Medina, see e.g. Lane *Lexicon* 4/1752.

 $<sup>^{\</sup>rm 191}$  mashaqūniyā is a hybrid ultimately derived from Syriac mešhā "oleum" and

white mustard, and burnt Oriental frankincense one *dirham* of each. (This) is pounded, kneaded with wine vinegar, left in a brass vessel in the sun until (the mixture) is dry, and (then) used.

#### (255)

## An unripe grape coolant for (the treatment of) hot mixtures (in the eyes), blepharitis, and ophthalmic fever Tutty is steeped in the filtered water of fresh unripe grapes for seven days, and (then) used.

#### (256)

A collyrium for (the treatment of) albugo Sarcocolla steeped in ass's milk seven *dirham*; saffron two *dāniq*; horn poppy powder two *dāniq*. (This) is ground, and used.

#### (257)

Another collyrium for (the treatment of) albugo The shells of ostrich eggs, pieces of broken Chinese porcelain, tutty, verdigris, and Šalwad kohl<sup>192</sup>—a kind of stibium which is compact, shading into redness, and (in structure) similar to an agate—five (*dirham*) of each; lobster, Indian tutty, and tabasheer two *dirham* of each; lizard droppings and *taġīrā*—a compact white stone which is similar to white marble except that the *taġīrā* is lighter, whiter, and firmer, and that it lacks the translucency of some (varieties of) marble—one *dirham* of each; black pepper half a *dirham*; yercum sugar three *dirham*; washed haematite three *dirham*; new whetstone and marcasite two *dirham* of each. (These ingredients) are brought together rinsed, and they are used as a collyrium which is applied precisely to the albugineous spot by passing a surgical stick over it. This (remedy) is useful, (as) Ibn at-Tilmīd (himself says): "I can confirm that it is proven by experience".

κυάνεος "dark-blue", see Payne Smith *Thesaurus* 2/2238 (with 2240 for the intermediate *mšah qūnyā*) and Liddell/Scott *Lexicon* 1003; cf. also Vullers *Lexicon* 2/852 s.v. *kaf-i ābgīnah* "aqua spumae instar in superficie vitri, quod funditur, apparens" (but never mind his etymology).

<sup>&</sup>lt;sup>192</sup> Šalwad was the Arabic name of a town (*balda*) in Andalusia which produced and exported kohl, see Yāqūt *Buldān* 3/316.

#### (258)

## The (remedy called) *malkāyā* —that is 'kingly'<sup>193</sup> for (the treatment of) acute conjunctivitis

Sarcocolla steeped in ass's milk, starch, and white sugar candy are pounded, strained, and used.

## (259)

## The *yellow* catapasm for (the treatment of) pains in the eye caused by moisture, and inveterate conjunctivitis Sarcocolla steeped (in ass's milk) five *dirham*; horn poppy two *dirham*; aloe, rose seeds, and saffron half a *dirham* of each; opium four *dāniq*. (This) is pounded, strained, and used.

## (260)

## The deliverer

A combination of the *white* and the *yellow* catapasms  $^{\rm 194}$  by equal shares.

## (261)

# The *rosy* (remedy) which is useful against (ophthalmic) ulcers, conjunctivitis, and pimples (around the eyes)

Ceruse eight parts; argentic slag, gum-arabic, and haematite four parts of each; opium, mace, oxidized copper, and saffron one part of each; camphor one  $q\bar{r}a\bar{t}$ . (These ingredients) are brought together in ground form, and (so) they are used.

## (262)

Another rosy (remedy)

for (the treatment of ophthalmic) ulcers

Beans and washed haematite one part of each. Grind the two (ingredients), and use (this).

<sup>&</sup>lt;sup>193</sup> Syriac malkāyā (i.q. βασίλειος) "regius, regalis", see Payne Smith Thesaurus 2/2144.

 $<sup>^{\</sup>scriptscriptstyle 194}\,$  See recipes 263 and 259 respectively.

#### (263)

## A white ophthalmic for (the treatment of) the early stages of hot conjunctivitis, and burning sensations in the eye Gum-arabic, tragacanth, and starch two *dirham* of each; ceruse five *dirham*; opium two thirds of a *dirham*. (This) is ground, strained, kneaded with egg white or rainwater, set up as an ophthalmic, scraped over a whetstone, and used.

#### (264)

The *daizağ*<sup>195</sup> ophthalmic for (the treatment of) pterygium, inveterate pannus, inveterate scaly eruptions (around the eyes), and felty albugo if there is no heat

Gum-arabic, auric slag, and ceruse four *dirham* of each; verdigris two *dirham*; myrrh, opium, castoreum, lycium, and galbanum one fourth of a *dirham* each. (This) is ground, strained through a cloth of silk, kneaded with leek-water or rue-water or wine, and set up as an ophthalmic.

(265)

A mild red ophthalmic for (the treatment of) the remnants of conjunctivitis, and swollen eyelids Gum-arabic, tragacanth, starch, ceruse, oxidized copper, haematite, and Indian laurel in equal parts. (This) is pounded, strained through a cloth of silk, kneaded with water, and set up as an ophthalmic.

(266)

A sharp red ophthalmic for (the treatment of) blepharitis, scaly eruptions (around the eyes), ptosis and relaxation of the eyelids, and pannus

Haematite twelve *dirham*; gum-arabic ten *dirham*; opium and aloe six *dirham* of each; verdigris six *dirham*; myrrh and saffron half a *dirham* of

 $<sup>^{\</sup>rm 195}$  daizağ < Persian dēzah "color cinereus ad nigredinem vergens", see Vullers Lexicon 1/952.

each; dragon's blood two *dirham*. (This) is ground, strained through a cloth of silk, set up as an ophthalmic with water, and used.

## (267)

A green ophthalmic for (the treatment of) inveterate scaly eruptions (around the eyes), swollen eyelids, inveterate pannus with no evidence of redness or harshness, floaters, and albugo Ceruse, ammoniacum, and gum-arabic two *dirham* of each; starch one *dirham*; verdigris two *dirham*. (This) is ground, kneaded with ruewater, and set up as an ophthalmic.

(268)

A black ophthalmic which is (called) the *lead* ophthalmic, and which fills ulcers (of the eyes)

Oxidized black lead, kohl, oxidized copper, tutty, gum-arabic, and tragacanth one part of each; opium half a part. (This) is pounded, strained through a cloth of silk, kneaded, set up as an ophthalmic, and used.

(269)

An ophthalmic for (the treatment of lachrymal) fistula—ar-Rāzī mentions this (remedy) and attributes (its invention) to himself when he says 'by me'<sup>196</sup>

Aloe, Oriental frankincense, sarcocolla, dragon's blood, pomegranate flowers, kohl—that is to say stibium—, and alum in equal parts; verdigris one fourth of a part. All (this) is pounded, strained through a cloth of silk, set up as an ophthalmic, and used as follows—put the patient to sleep on the healthy side, squeeze out the fistula (located) in the larger, inner corner of the eye very thoroughly, shed three drops of the ophthalmic into the eye, (waiting) a short while between each drop,

<sup>&</sup>lt;sup>196</sup> There are a few 'self-invented' prescriptions and applications which are *similar* to the one on hand in the relevant sections of Muhammad ibn Zakarīyā' ar-Rāzī's (d. 313/925 or 323/935) huge medical encyclopaedia *al-Hāwī* but none of them is close enough to be clearly recognized as Ibn at-Tilmīd's source, cf. Rāzī Hāwī 2/246–258.

and let (the patient) sleep for (a further) two hours; proceed with this application for (about) one week until nothing (more) emerges from the fistula when squeezed, then stop treatment.

#### (270)

## The galls ophthalmic for (the treatment of) the early stages of (eye)water

Take for one part of the dried gall-bladders of an ox, a carp, a crane, a falcon, an eagle, and a quail about one tenth of this (amount) in spurge, just as much again (of) colocynth pulp, and from sagapenum the same, bring (all this) together with fennel-water, and set it up as an ophthalmic.

#### (271)

The *Indian tutty* collyrium for (the treatment of) albugo

Sepiolite, auric slag, lizard droppings, glass-slag, new whetstone, lobster, and 'golden' marcasite four *dāniq* of each; Šalwad kohl,<sup>197</sup> washed haematite, and unpierced pearls half a *dirham* of each; yercum sugar one *dirham*; verdigris, sal ammoniac, black pepper, long pepper, clove, and Indian spikenard one and a half *dāniq* of each; Chinese greater celandine two *dāniq*; pieces of broken Chinese porcelain and the shells of ostrich eggs one *dirham* of each; Indian salt two *dāniq*; Syrian glass half a *dirham*; Indian tutty one *dirham*. All (this) is finely pounded and ground, strained through a cloth of silk, and applied as a collyrium in the morning and in the evening.

#### (272)

## A red 'elixir'198

## for (the treatment of) ophthalmic ulcers

Opium, washed haematite, oxidized copper, and starch eight *dirham* of each; gum-arabic forty-eight *dirham*; ceruse four *dirham*; argentic slag twenty-eight *dirham*. Grind the haematite and the copper prop-

<sup>&</sup>lt;sup>197</sup> On Šalwad see note 192 above.

 $<sup>^{198}</sup>$  iksīrīn, translated 'elixir' to maintain the term's alchemical and thence miraculous connotations, is Syriac ksīrīn < ξηρίον "desiccative powder", see Liddell/Scott Lexicon 1190 with Ullmann NGw 257–260.

erly in water, then, when they are dry, bring them together with the remaining (ingredients), and apply (all) this as a collyrium resembling (calcined and powdered) stibium (in density).

### (273)

An ophthalmic called *perfumer* which is useful against pimples (around the eyes), deep (ophthalmic) ulcers, and chorioid melanoma<sup>199</sup> Burnt argentic slag slaked with mothers' milk sixteen *mitqāl*; washed ceruse eight *mitqāl*; saffron four *mitqāl*; tragacanth two *mitqāl*. (This) is kneaded with rainwater, set up as an ophthalmic, and used by rubbing it into egg white.

#### (274)

A catapasm which is useful (against) itchiness and scaly eruptions (around the eyes) Aloe, lycium, yellow myrobalan, and horn poppy powder in equal parts. (This) is ground, and applied as a collyrium.

#### (275)

#### The *myrtle* coolant

Tutty ten *dirham*; kohl three *dirham*; auric slag, gum-senegal, and greater celandine two *dirham* of each; Yemenite alum eight *dirham*; yellow myrobalan six *dirham*; washed haematite five *dirham*. All (this) is finely pounded, and steeped in myrtle-water and sumach-water (exposed) to the sun for seven days.

#### (276)

# The *twelver* collyrium which is useful against loss of sight

Washed haematite ten *dirham*; Indian tutty and (the kind of tutty that) resembles (the white colour of) tabasheer, opium, copper scoriae, unpierced pearls, horn poppy, Socotra aloe, lycium, saffron, oxidized copper, and Chinese greater celandine two *dirham* of each. The ingre-

<sup>&</sup>lt;sup>199</sup> The term used here for "chorioid melanoma", i.e. *mūsarağ*, is the arabicized form of Persian *mūrsarak* "(small) like an ant's head" which, in turn, is a calque of μυιοκέφαλον "(a complaint in the eyes, in which the uvea protrudes) like a fly's head", see Dehkhodā *Luġat-Nāmah* s.v. *mwrsrk* and Liddell/Scott *Lexicon* 1151.

dients are brought together, pounded, strained through (a cloth of) silk, pestled in a mortar until they are (fine) like dust, and applied as a collyrium.

#### (277)

# A hospital coolant which lifts (drooped) eyelids

## and makes the lashes grow

Nard and the burnt seeds of dates in equal parts. (This) is pounded, and used.

#### (278)

#### The *haematite* catapasm

which is useful against pannus and swollen eyelids Haematite ten *dirham*; Socotra aloe, lycium, and black and chebulic myrobalan five *dirham* of each; 'hairy' saffron one  $mitq\bar{a}l$ . The ingredients are brought together, ground, strained through (a cloth of) silk, and used.

#### (279)

## A catapasm which is useful against albugo Sepiolite and eggshells five *dirham* of each; sugar, sarcocolla, and ceruse four *dirham* of each; starch one *dirham*. (This) is finely pounded, strained through (a cloth of) silk, and used.

## Chapter Eleven on

#### Oils

#### (280)

The *myrtle* oil

which darkens and strengthens the hair

Take three  $\bar{u}q\bar{i}ya$  (of) stoneless emblic and cook it in three rațl water until one half (of it) is left—some people use wine instead of water; (now) strain it, cast upon it one rațl (of) fresh myrtle-water, cook it (again) until it is reduced to one half, (then) cast upon it one rațl (of) violet oil, and cook it a third time until (all) the water vanishes and (only) the oil remains—this you can tell by dipping into it a piece of burning wood, which makes a hissing sound if some of the water is (still) left; if there is no (more) hissing, take (the oil) off the fire, but not before throwing five *dirham* (of) pure ladanum into it. According to some copies a relevant quantity (of) myrtle-water is cooked together with a similar (amount of) sesame oil.

#### (281)

# The *egg* oil which makes the hair grow

Take a number of eggs and boil them until they are well-cooked; then take the white and cast it aside; (now) rub the yolk thoroughly between your fingers, throw it in a new frying-pan, light a fire below it, tilt the pan so that the oil flows to one side, strain it by and by, and keep it safe.

### (282)

## The mastic oil

#### which is useful against gastric debility

Take three ra! (of) sesame oil and six  $\bar{u}q\bar{v}a$  (of) mastic, cook (that) on a low flame in a double pot until the mastic melts into the oil and is absorbed by it, (then) take it off the fire, let it cool down, and store it.

#### (283)

#### The *gourd* oil

Go for a juicy gourd, express its water, strain it, cast upon each two *mann* of gourd-water one *rațl* of sesame oil, cook (that) on a low flame until the water is gone and the oil is left, and store (this).

## (284)

## The *basil*<sup>200</sup> oil

The water from fresh sweet basil one part; sesame oil one part. All (this) is cooked until the water is gone and the oil is left, and (then) stored.

<sup>&</sup>lt;sup>200</sup> The term used here for "basil", i.e.  $š\bar{a}hasfaram$ , is the arabicized form of Persian  $s\bar{a}h$ -isparġam which strictly speaking is "bush basil" *Ocimum minimum*, see Schmucker *Țabarī* 259; in the present context, however, it is clearly used as a synonym of *raiḥān* "sweet basil" *Ocimum basilicum*, one of the two ingredients of this recipe.

#### (285)

#### An oil with which to anoint the penis that goes flaccid during sexual intercourse

The seeds of Roman nettle, castoreum, and asafoetida resin two *dirham* of each; Oriental frankincense three *dirham*. Bring (this) together, crush what needs to be crushed, put it (all) in a flask, cast upon it ten *dirham* each of gillyflower oil, jasmine oil, and narcissus oil, boil (that) until the frankincense dissolves and the (other) ingredients (too) blend into it, (then) lift it off just as it is—including the sediment—, fasten the top of the flask with wax, and store it.

## (286)

## Another oil to stimulate sexual desire

Add to four  $\bar{u}q\bar{i}ya$  each of narcissus oil and gillyflower oil one *dirham* (of) spurge, half a *dirham* (of) natron, and one *dāniq* (of) musk, and oil with it penis and pubes when required.

## (287)

#### The absinthe oil

Pour one *mann* (of) sesame oil into a vessel of glass or porcelain, throw on it two  $\bar{u}q\bar{v}ya$  of absinthe blades, leave (that exposed) to the sun for forty days, (then) strain off the oil, and use it. In the same way (you prepare) the oil which is obtained from dill 'seeds'.

## (288)

### The caltrop oil

Crushed caltrop ten *dirham*; ginger four *dirham*; sesame oil one cupful; fresh water fifteen cupfuls. Cook (this) in a pot on a low flame until the water is gone and the oil is left, (then) take it off the fire, strain it, and use it as an enema from the back or from the front by injecting it into (the rectum or) the urethra; and when rubbed into the pubic region, it resolves urinary detention.

#### (289)

An oil which lengthens the hair of the head and the beard, and which accelerates its growth

Take fresh white husked barley and soak it in hot water until it grows and swells up; when it can be pressed, press it; (now) take one part from this 'starch', one part from Cyprian ladanum, one part from milky emblic-water (obtained) by macerating (the fruits) for three days, and the total weight from oil of ben, and boil (all that) on a low flame until the waters vanish and the oil remains (in a consistency) similar to glue; then strain off the oil to one side, wrap the sediment (around the hair) at night, wash it out in the morning, and (finally) apply the oil after washing and drying of the hair.

#### (290)

#### The violet oil

Take properly peeled unroasted dried sesame, put a layer of it into a new bag of cotton, and (another) laver of clean stalkless unrinsed violet flowers which do not (contain too) much (natural) moisture-then they become mouldy-and not (too) little but rather in between; close the top of the bag, cover it with a cloth of cotton, and leave it for three or four days; (now) take out (the content), spread it on a veil of cotton in a room which is absolutely smokefree, (wait for it) to become dry, and (then) throw away the violets; repeat this three or four or more times, depending on how many violets you wish to use; then spread it out (a last time), let it dry off completely, mill (the seeds), and extract their oil; pour (that) in a glass vessel and whenever a deposit settles at the bottom of the vessel, filter (the liquid) through into another vessel; repeat this a number of times until (the oil) is clear. In exactly the same way you prepare violet oil with almond kernels; and rose oil, nenuphar (oil), narcissus (oil), and (many) other oils are made just like that.

## Chapter Twelve on Liniments

#### (291)

#### A white liniment

Ceruse half a *rațl*; clear wax half a *rațl* in the season of summer and five  $\bar{u}q\bar{i}ya$  in winter; *bzğy* oil<sup>201</sup> one *mann*. Melt the wax in the oil on a

 $<sup>^{\</sup>rm 201}$  I have little doubt about the reading *bzğy*, which reoccurs twice in the text on hand and is backed reasonably well by the manuscript tradition; what the term represents, however, I have no idea.

low flame, beat one part (of it) together with the ceruse in a mortar, ceaselessly stirring (the mixture) until it cools off and stiffens under the movement lest the ceruse subside, (then) store it, and use it.

## (292)

## The *vinegar* liniment

Grind and strain one part of litharge of gold, throw it into a green trough,<sup>202</sup> knead it with two parts (of) olive oil, beat (that) gently with your hand, add to it four parts of vinegar little by little, beating (the mixture) until it consolidates, and (then) store it.

## (293)

## The verdigris liniment

Wax one fourth of a *rațl*; mastic one  $\bar{u}q\bar{v}a$ ; ammoniacum two  $\bar{u}q\bar{v}a$ . Dissolve the ammoniacum in two *rațl* wine vinegar and olive oil, melt the wax into it on a fire, mix it together with the remaining (ingredient), add to it two and a half  $\bar{u}q\bar{v}a$  (of) ground verdigris little by little, beating (the mixture) thoroughly, leave it to cool down, and (then) use it.

## (294)

#### The *black* liniment which is (also called) the *pitch* liniment

Wax one and a half parts; pitch and pine resin one part of each. Melt (this) in thrice as much olive oil, strain it through a sieve, leave it to stiffen, and (then) store it.

## (295)

# The *quicklime* liniment for (the treatment of) burns

Take burnt lime, slake it seven times with fresh water, knead it with olive oil little by little so as to retract the water from the body of the lime, leaving (inside only) the oil, and use (this).

<sup>&</sup>lt;sup>202</sup> Compare note 129 above.

#### (296)

## The liniment (called) *diyāhilūn* —that is 'mucilages'<sup>203</sup>

The mucilages of linseed, the seeds of wild marjoram, the seeds of the pale-coloured marshmallow, and fenugreek (seeds) half a *rațl* of each; wax one fourth of a *rațl*. (This) is inspissated with one and a half *rațl* of olive oil, and stored.

#### (297)

A liniment which is useful for (the treatment of) ulcers of the head and the early stages of scabies

Crush five parts each of myrobalan stones and oak galls, and scorch all (this) in sesame oil in a cauldron; then grind it in a mortar, and throw onto it two parts of ground myrtle and half a part of white salt; then cast upon it a sufficient quantity (of) wax and *bzğy* oil<sup>204</sup>—which is to say five times as much as of the (other) ingredients, whereby the wax should have one share and the oil four shares in that total of five. Put (this preparation) on the ulcers, and put on top of it beet and endive.

#### (298)

The haematite liniment which is useful against tenesmus and (anal) fissures in children, and ulcers of the vulva and the penis when injected together with maid's milk, the oil of white jasmines, and rose oil Violet oil and rose (oil) one ūqīya of each; clear washed wax five dirham.

Melt the wax, and pour it in a mortar onto the following ingredients, all ground—ceruse three *dirham*; washed haematite, Armenian bole, and Cyprian bole two *dirham* of each; salsify sap three *dirham*; opium five *dāniq*; saffron one *dirham*. (Then) mix it well.

<sup>&</sup>lt;sup>203</sup> diyāḥilūn < (ἡ) διὰ χυλῶν lit. "(remedy made) with plant juices", cf. Liddell/Scott Lexicon 2013; further Dozy Supplément 1/480 "emplâtre considéré comme résolutif, et dans lequel il entre des substances mucilagineuses".

<sup>&</sup>lt;sup>204</sup> Compare note 201 above.

#### (299)

## How to wash wax-and-oil

Melt (the wax in the oil), pour (the mixture) into water, and keep melting it and pouring it into water until the latter does not taste of wax (any more).

## (300)

## How to wash pitch

In order to reduce its sharpness and its (natural) heat, beat (the pitch)—as indicated—in clear (boiling) water very thoroughly for a long time, (then) let (the water) calm down; when (the pitch) rises to the surface take it, empty out that water, and throw the pitch into another water; repeat this a few times until you find the colour (of the water) pure and its taste agreeable; if it is right, wash it (one) more time, and (thereafter) use it.

## (301)

## How to wash olive oil

Take as much as you like from the purest olive oil, cast it in a cauldron, pour on it a bit of limpid water, throw into it two dates and a handful of flour tied up in a cloth of linen, and boil (all this) gently on a low flame until the water vanishes and the oil remains in a clear state; then take out the flour and the dates, let the oil cool off, and use it as required.

#### (302)

## How to wash lac

Take woodfree lac, grind it, and in order to reduce its sharpness and its (natural) heat pour over it boiling water in which had been cooked rhubarb and citronella roots; (now) stir it gently with a pestle, strain it into a sieve, and throw away the sediment (that has gathered upon it); then clear it again, take what has been purified, let it dry, and use it in the *lac* remedy.<sup>205</sup>

<sup>&</sup>lt;sup>205</sup> See recipe 29 ("pastille").

#### (303)

# A liniment for (the treatment of) acute white vitiligo

Oxidized copper which is  $r\bar{u}sahta\check{g}$ ,<sup>206</sup> orpiment, garden cress, (burnt but) not slaked lime, and potash in equal parts. Steep (these ingredients), once pounded, in children's urine or in wine vinegar (exposed) to the sun, stir (the mixture) every day, do this for four days, (then) store it, and apply it after having washed the (affected) area beforehand with children's urine or with wine vinegar.

## (304)

#### The cooling wax-liniment<sup>207</sup>

Wax one part; rose oil three parts. Melt (the wax in the oil), and mix it thoroughly with endive-water in a mortar.

#### (305)

## The prophets liniment which is (also called) the *apostles* liniment for (the treatment of) fistulae and severe scrofula; it cleans and heals

White wax and pine resin twenty-eight *dirham* of each; 'long' birthwort and Oriental frankincense six *dirham* of each; myrrh and galbanum four *dirham* of each; bdellium mukul six *dirham*; litharge nine *dirham*; opopanax and verdigris four *dirham* of each; ammoniacum fourteen *dirham*. The bdellium is soaked in wine vinegar, and (everything) is cooked with two *rațl* olive oil in summer and three *rațl* in winter.

#### (306)

The *bdellium-and-hump* liniment for (the treatment of) haemorrhoids

Yellow wax, sesame oil, duck's grease, the bone marrow from a cow's shank, the fat from a camel's hump, and bdellium mukul. The bdellium is dissolved in linseed mucus, everything is brought together, and stored.

 $<sup>^{206}</sup>$ rūsa<br/>htağ is the arabicized form of Persian rūy-suhtah "oxidized copper" <br/>  $Cu_2O$ , see Schmucker Țabarī 505f.

 $<sup>^{207}</sup>$  The term used here for "wax-liniment", i.e.  $q\bar{\imath}r\bar{u}t\bar{\imath},$  is a transliteration of  $\kappa\eta\rho\omega\tau\eta$  "cerate", see Liddell/Scott Lexicon 949.

#### (307)

A liniment which brings out arrowheads from the limbs—not on the authority of Hunain<sup>208</sup>

Take Greek pitch, Nabataean gum, pine gum, ammoniacum, bdellium mukul, opopanax, and sagapenum in a weight of one *mitqāl* each; verdigris and chickpeas in a weight of three *dirham*; old cow's ghee in a weight of five *dirham*; 'rolled' birthwort three *dirham*; fresh wax in a weight of four (*dirham*). Melt what can be melted, pound what can be pounded, mix it all together, and store it in a vessel. Smear some of this (preparation) over a piece of cloth, and put that on the (affected) spot so as to open (the wound); then smear some of it over gauze tampons, and insert them into (the wound on) the limb wherein the arrowhead is (stuck)—this will draw and drag it out.

(308)

An 'elixir'<sup>209</sup> which is useful in (treating) ulcers that are about to scar over and fade away

Myrrh, alum, and olibanum one part of each; ceruse about the total (amount). (This) is mixed with oil, kneaded with wine, and used.

(309)

The liniment which is made with iron sulphate, and which Galen called 'the palmy';<sup>210</sup> this liniment heals and skins over ulcers, it puts away tumours, gout, rheumatism, and swellings of the soft tissue, it dissolves abscesses, and it is suitable for (the

 $<sup>^{\</sup>rm 208}$  I have no idea why Ibn at-Tilmīd would have felt obliged to emphasize that the remedy on hand was not taken from Hunain, on whom see note 12 above.

<sup>&</sup>lt;sup>209</sup> Compare note 198 above.

<sup>&</sup>lt;sup>210</sup> On Galen see note 47 above. I have not been able to trace this recipe in Galen's extant writings; however, it is interesting to see what he says about the date-palm in his Περὶ κράσεως καὶ δυνάμεως τῶν ἁπλῶν φαρμάκων (translated into Arabic mid 3rd/9th century) s.t. Περὶ φοίνικος: φοῖνιξ τὸ δένδρον στυπτικῆς μετέχει δυνάμεως ἐν ἅπασι τοῖς ἑαυτοῦ μέρεσιν ὁ μὲν οὖν τῶν κλάδων χυλὸς αὐστηρός ἐστίν ἐξ ὑδατώδους οὐσίας χλιαρᾶς καὶ γεώδους ψυχρᾶς συγκείμενος ὁμοίας δὲ τούτου φύσεως ἔστι καὶ ὁ καλούμενος ἐγκέφαλος ἐδώδιμος ὑπάρχων [...] ὥστε δεόντως ἐπὶ τῶν σηπεδονωδῶν ἑλκῶν αὐτῷ χρῶνται καὶ τοῖς συνάγουσι τὰ κεχαλασμένα τῶν ἄρθρων φαρμάκοις μιγνύουσι καὶ ταῖς ἡπατικαῖς τε καὶ στομαχικαῖς δυνάμεσιν ἔξωθεν τε καὶ ἔσωθεν, see MGO 12/151f.

treatment of) burns, frostbite on the hands and the feet, open fractures of the bones, and burst (hydro)cele—in case of rheumatism (however) it is only used if there is no pain and no ache involved, that is if the swelling is painless or almost painless; (further it is suitable for the treatment of) gastric and hypogastric tumours as well as a contusion of (certain) organs when fixed above them in a bandage; and it is useful (against) the bloatedness and bluish-green discolouration that result from a punch

Old unsalted pig's fat melted and cleared from its (gelatinous) coating two ratl; old pure olive oil three ratl; litharge three (ratl); iron sulphate which is a kind of yellow vitriol four *ūqīya*. Grind the iron sulphate and the litharge finely, mix the two (substances) together with the aforesaid fat and olive oil in a mortar, and beat them gently; then put it all in a cauldron, (cook it), and stir it with the branch of a skinned palm-leaf, having cut what remained of the leaf into small pieces and thrown these in the decoction so that the liniment absorbs the moisture (not only) from the branch that has been deprived of the leaves which were rooted in it (but also) from the other (parts like) the peeled-off and chopped-up (skin and leaves); then, when (the mixture) has gained the consistency of a liniment, remove from it the bulk of the palmleaf. For (those patients who have) robust constitutions you may add (from the beginning) another  $\bar{u}q\bar{v}a$  or two of iron sulphate, up to (a total amount of) half a ratl; but the palm-leaf must be freshly (cut) for its moisture to pass over into the concoction. Ibn at-Tilmīd says: "If the aforementioned swellings are recent or (still) growing, this liniment should be diluted with a very astringent but not very mature wine which is less strong than must, pure, of fine quality, (a wine) which feeds into the faculty of the remedy whilst enhancing its liquidity, and of which you admix to the liniment as much as it can absorb; if (the swellings however) are fully developed, forget about the wine altogether and use old olive oil instead when diluting the liniment, (again) with the intention to strengthen its dissolvent (effect)-for the astringency of the wine (used) in the first (instance) aims at nothing but a limitation (of the remedy's power). Using castor oil instead of old olive oil is also an option. And where the liniment (amounts to), say, ten parts, the oil with which it is diluted should (amount to) nine parts—this is in spring and in summer; in winter (however only) seven (parts) of oil go into ten parts of liniment, such that the faculty of the remedy reveals itself (in a form) capable of resisting the cold season. Choosing rose oil will give (the remedy) an analgesic and desiccating (effect), and diluting it with vinegar will make it particularly effective in the treatment of burns. If (the patient) is very sensitive to physical (pain) and has bad chymes, add to this liniment when treating open fractures a narcotic sap, which may be (obtained from) fresh henbane or (from) the roots or ripe fruits of the mandrake or it may be opium and also horn poppy (sap), and (further) the saps of lettuce, endive, knotgrass, forget-me-not, and water moss-except that the sap of forget-me-not hardly cools; and if these saps are not readily available (take) vinegar and water, in which case the cooling (effect) of the remedy (rests on the use of) ice or (very) cold waterexcept when (the skin) shows a bluish-green discolouration. (In general terms you should measure) for each *ratl* of liniment one  $\bar{u}q\bar{v}a$  of sap, increasing or decreasing (the amount) as you see fit. Rose oil, too, is (an) appropriate (complement) in such a situation. (This liniment) is (also) used for (the treatment of) hot bloodshot swellings whose nature resembles the (kind of) swelling called ervthema,<sup>211</sup> together with rose oil and the saps of nightshade or unripe grapes or purslane or houseleek—except that the sap of unripe grapes is very astringent and therefore, out of harm's way, not used in this (case) on its own but (only) in combination with purslane sap".

> Chapter Thirteen on Cataplasms and Ointments

#### (310)

# A hospital cataplasm for (the treatment of) hernia

Mastic, the bark of the frankincense(-tree), the cones and leaves of the cypress, myrrh, sarcocolla, and fish-glue in equal parts. Grind (this) except the glue which is dissolved in wine vinegar and tepid water; once dissolved, mix it together with the (other) ingredients,

 $<sup>^{211}</sup>$  The term used here for "erythema", i.e. humra, is a calque of ἐρύθημα lit. "redness", see Liddell/Scott Lexicon 692.

and spread it all on a stone slab; once dried, grind it (again), wet it with water, and use it.

## (311)

#### The *bone-setting* cataplasm

Gum-senegal, glossostemon root, aloe, Armenian bole, marshmallow, and asphodel which is the root of  $hunt\bar{a}$  and (also) called 'shoemaker asphodel'<sup>212</sup> one part of each. (This) is pounded, wet with myrtlewater, and used.

#### (312)

## Another cataplasm for the setting of bones

Glossostemon root five *mann*; Armenian bole one and a half *mann*; pale-coloured marshmallow one *mann*; myrtle and mung beans one *mann* of each; gum-senegal and asphodel just one *rațl* of each; and from aloe six  $\bar{u}q\bar{i}ya$ . All (this) is pounded, strained, and used.

#### (313)

# A cataplasm for (the treatment of) the hot stomach

Fresh myrtle-water, quince-water, rose-water, apple-water, gum-senegal, hard dry dates, biscuit, sandalwood, ladanum soaked in rosewater, and sometimes also oak galls and saffron. (This) is brought together, and used.

#### (314)

## A cataplasm for (the treatment of) gastric debility if there is no heat, (if) the disposition (of the patient) is lax, and (if) there is vomiting

Add to the previous cataplasm mastic, aloe, absinthe, and myrrh, put these together with one part of all those (other ingredients), and prepare from it a liniment with wax and rose  $oil.^{213}$ 

 $<sup>^{\</sup>scriptscriptstyle 212}$  huntā is another name for asphodel Asphodelus spp., see Löw Pflanzennamen 290ff.; the additional synonym 'shoemaker asphodel' (šarās al-asākifa) looks like a one-off to me.

 $<sup>^{\</sup>rm 213}$  In categorical terms, the present prescription is on the borderline between cataplasms and liniments; for the original "liniment with wax and rose oil" see recipe 304.

### (315)

## A cataplasm for (the treatment of) soft tumours in the extremities

Sulphur, cow's dung, and fenugreek in equal parts. (This) is wet with wine vinegar, and used.

#### (316)

# A cataplasm for (the treatment of) indurate hydrocele

Seedless raisins, fresh goat's fat, peeled boiled broad beans, lentils, alkekengi leaves, barley meal, egg yolk, and rose oil are prepared like a liniment, and applied as a cataplasm.

### (317)

#### The *soft lumps* cataplasm

Fermented wheat dough three parts; Armenian borax, Roman nettle, salt, calamint, pigeon's droppings, and dry mint (one part of each). (This) is ground, kneaded with olive oil, and used.

#### (318)

## A cataplasm for (the treatment of) abscesses

Dry yellow figs are heated in water until they are well-cooked, (then) ground, and mixed together with borax, sesame oil, cow's ghee, and olive oil.

#### (319)

# A cataplasm for (the treatment of) nervous convulsions

Bdellium mukul one  $\bar{u}q\bar{l}ya$ ; chicken's grease, duck's grease, and the bone marrow from a cow's shank half a *rațl* of each. Dissolve the bdellium by submerging it in hot water, (then) mix it all in a mortar, and use it.

#### (320)

# A cataplasm for (the treatment of) inflamed and swollen nerves

Peeled sesame and the fresh leaves of sweet marjoram are squashed in a mortar, and this (mixture) is smeared over a piece of cloth and put onto (the affected area).

## (321)

## The *fig* cataplasm

### for (the treatment of) sclerosis of the spleen

Bdellium mukul two  $\bar{u}q\bar{i}ya$ ; ammoniacum one  $\bar{u}q\bar{i}ya$ ; broad bean meal, lupine meal, melilot, fenugreek, linseed, chamomile, and Indian spikenard five *dirham* of each; dry yellow figs one *rațl*. Cook the figs until they disintegrate and become, when pounded, like a liniment; (then) throw the (other) ingredients on it in a mortar, having dissolved the ammoniacum and the bdellium in water, mix it (all) with chamomile oil or rue oil, and use it.

### (322)

A cataplasm (which is) like a liniment for (the treatment of) Persian fire,<sup>214</sup> and burns and blisters (in general)

(Burnt) lime, slaked seven times (then) drained (and) dried, four  $\bar{u}q\bar{i}ya$ ; beet leaves two  $\bar{u}q\bar{i}ya$ ; wax four  $\bar{u}q\bar{i}ya$ ; rose oil half a *rațl*. All (this) is finely ground in a mortar, and (then) used.

### (323)

An ointment for (the treatment of) hot tumours—it is known by (the name of) *nard* 

Red sandalwood and cimolite five *dirham* of each; white sandalwood and horn poppy powder three *dirham* of each; Armenian bole ten *dirham*; areca, gum-senegal, and lycium two *dirham* of each; ceruse and litharge one *dirham* of each. All (this) is finely ground, kneaded with endive-water, prepared like the *nard* (ointment should be prepared), and when required scraped off.<sup>215</sup>

<sup>&</sup>lt;sup>214</sup> That is anthrax.

<sup>&</sup>lt;sup>215</sup> It is not clear to me how and when the Persian word *nard*, denoting a kind of

### (324)

# An ointment for (the treatment of) desquamation (of the skin)

Garden cress, the peels of the caper root, and hellebore in equal parts. (This) is pounded, kneaded, wet with wine vinegar and honey, and applied as an ointment in the bathhouse.

## (325)

#### An ointment for (the treatment of) 'black' lichen

Rocket seeds, garden cress, radish seeds, baby's breath, mustard, and musk melon seeds (in) equal (parts). (This) is pounded, strained, wet with wine vinegar and honey, and used in the bathhouse.

#### (326)

## A remedy for (the treatment of) moist scables

Ceruse, kamala, babul, Bengal quince, tabasheer, and pomegranate flowers half a *rațl* of each; potsherds one *rațl*. (This) is pounded, and kneaded with wine vinegar and rose oil.

#### (327)

## A remedy for (the treatment of)

## dry scabies

Pomegranate flowers and turmeric one part of each; pine resin, lentils, myrrh, Chinese greater celandine, and 'long' birthwort half a part of each. (This) is pounded, and kneaded with wine vinegar.

#### (328)

## A fragrant paste for (the treatment of) mange

Greater celandine, horn poppy powder, sweet alecost, mahaleb kernels, *rattah* which is Indian hazelnut,<sup>216</sup> the 'honey' of white amber

board game, came to be used as the name of an ointment; equally unclear is why the Persians consider this word, when used in the latter sense, to be of Arabic provenance.

<sup>&</sup>lt;sup>216</sup> rattah is another name for Indian hazelnut Corylus avellana var. indica, see Löw *Pflanzennamen* 48f.

which is a variety of liquid storax,<sup>217</sup> and mercury one part of each. (This) is pounded, and kneaded with the oil from unripe olives.

#### (329)

## A hospital paste for (the treatment of)

mange—(according to) the complete  $copy^{218}$ 

Baby's breath, litharge, argentic slag, borax, salt, arsenic, alum from ruddy (earth), sal ammoniac, black cumin, potash, turmeric, 'deadened' mercury,<sup>219</sup> and whitish sulphur one part of each; oleander four parts. Pound all (this), steep it in sesame oil, and use it in the bathhouse, patiently waiting for the sweat to run and then washing it off with lye followed by mild detergents like barley meal and lentil (meal). Ibn at-Tilmīd says: "'Deadened' mercury is mercury into which salt and ashes have been mixed (and left) for a long time so as to form a cohesive mass".

#### (330)

## A paste for (the treatment of) moist mange in those who live a life of luxury

'Deadened' mercury,<sup>220</sup> argentic slag, litharge, and oleander are pounded and used with rose oil.

## (331)

## A paste for (the treatment of) mange according to Abū l-Ḥasan ibn Sinān<sup>221</sup> —it is proven by experience

Litharge, kamala, curcuma tubers, and oleander leaves in equal parts. (This) is steeped in two parts (of) rose oil and one part (of) wine vinegar, and (then) used.

 $<sup>^{\</sup>rm 217}$  For the equation of white amber and liquid storax Liquidambar orientalis see e.g. Schmucker <code>Ţabarī</code> 430f. and 494f.

<sup>&</sup>lt;sup>218</sup> This is probably a reference to Sābūr ibn Sahl's (d. 255/869) *large* dispensatory in its unrevised and unabridged (hence "complete") form, of which only a few fragments have come down to us, see the diagram in Kahl *Sābūr*<sup>1</sup> 22 with Ullmann *Medizin* 301 note 1; cf. also note 133 above.

 $<sup>^{219}</sup>$  On how to 'deaden' mercury see Ibn at-Tilmīd's own brief comment at the end of this recipe; for a different though related method see recipe 389.

<sup>&</sup>lt;sup>220</sup> Compare the conclusion of recipe 329.

<sup>&</sup>lt;sup>221</sup> I guess this would be Abū l-Ḥasan Tābit ibn Sinān (d. 365/976, see e.g. Ibn al-Qiftī

#### (332)

## Another paste for (the treatment of) mange

Realgar two *dirham*; litharge the same; baby's breath four *dāniq*; 'deadened' mercury two and a half *dirham*; liquid storax one *dirham* and one third (of a *dirham*); sulphur one and a half *dirham*. Having 'deadened' the mercury as we mentioned (before),<sup>222</sup> steep everything in fifteen *dirham* (of) pure olive oil, and apply (the mixture) as a paste in the bathhouse with green lye and a little salt, patiently waiting for a short while before washing it off with detergents that mollify the burning sensation (on the skin) like barley meal, lentil (meal), musk melon seed (meal), and so on.

#### (333)

## A paste for (the treatment of)

## dry mange

Turmeric, borax, salt cake, myrrh, sweet alecost, and baby's breath two *dirham* of each; liquid storax five *dirham*. Steep (this) in rose oil, patiently wait for three hours (after its application), and (then) wash it off with tepid water.

#### (334)

## A dye which darkens the hair

Take barley meal, let it properly ferment so that it becomes sour, add to one handful of it one  $\bar{u}q\bar{i}ya$  (of)  $r\bar{u}sahta\check{g}$  which is oxidized copper,<sup>223</sup> pound (this), strain it through a cloth of silk, and liquefy it little by little with acid wine vinegar until that mixture of fermented dough and oxidized copper gains the consistency of pulped lote (fruits); then wrap it around the hair and stuff into it beet leaves or lettuce (leaves) or vine leaves or gourd leaves in order to prevent the dye from drying out (too soon); leave it (like this) for twelve hours, then take away (the leaves) and shake off (the dye) from the hair. Meanwhile you should have prepared twenty unpierced oak galls by burning them almost to the point of complete combustion, (then) by quenching them so that

 $Hukam\bar{a}$  109ff.), a grandson of Tābit ibn Qurra al-Harrānī and himself a distinguished physician; wherefrom Ibn at-Tilmīd got the present recipe is hard to say since Tābit ibn Sinān is not known to have written anything except one historical work.

<sup>&</sup>lt;sup>222</sup> Compare the conclusion of recipe 329.

<sup>&</sup>lt;sup>223</sup> Compare note 206 above.

they can (easily) be crushed whilst some of their faculty is (still left), and (finally) by grinding them, straining them through a cloth of silk, and wetting them with water; (now) wrap (this dye) around the hair, put leaves into it, and let it alone for twelve hours as (you did) before; then take away (the leaves) and wash off (the dye). This will bring out a long-lasting beautiful black colour.

#### (335)

## A paste for (the treatment of) 'white' lichen

Indian garden cress four  $\bar{u}q\bar{i}ya$ ; realgar one  $\bar{u}q\bar{i}ya$ ; baby's breath two  $\bar{u}q\bar{i}ya$ ; oxidized copper, lime, and potash one  $\bar{u}q\bar{i}ya$  of each. (These ingredients) are brought together by pounding and (then) wetting them with wine vinegar.

#### (336)

## A cataplasm for (dealing with) intestinal worms

As regards the cataplasm which kills them, (take) green vitriol and the treacle (made) with wormwood-water, bitter alecost-water, and southernwood-water; as regards the one which (merely) drives them out, (take) lupine kneaded with coniferous tar, colocynth pulp, and aloe, and put (that) on the umbilicus.

## (337)

## A cataplasm for (the treatment of) thin(-watery) dropsy

Barley meal, cyperus, the dung of small cattle, borax, and Armenian bole in equal parts. (This) is wet with vinegar and smeared (onto the skin).

#### (338)

## A cataplasm for (the treatment of) rheumatism and sciatica

Take fenugreek, throw it into a clay vessel, cast upon it a mix of vinegar and wine, and cook (that) on smouldering embers until (the fenugreek) is worn soft; now cast honey upon it, again boil it on the embers, (then) lift it off, and apply it as a cataplasm.

#### (339)

A cataplasm which has vomitive, purgative, and laxative (properties), depending on where it is placed —on the mouth of the stomach it causes vomiting, on the umbilicus it purges, and on the pubes it relaxes the menstrual blood

Embelia and the sap of wild serpent melon three  $mi\underline{q}al$  of each; white hellebore and litharge four *dirham* of each; the caul of a goat five *dirham*; the lees of olive oil ten  $mi\underline{q}al$ ; wax five *dirham*. Melt the wax in the lees of the oil, admix the (other) ingredients, smear (that) over (a piece of) paper, and stick it on.

#### (340)

A cataplasm which drains soft lumps

Chamomile, barley meal, dill, and marshmallow one handful of each; bdellium twenty *dirham*. Dissolve the bdellium in the mucus of linseed and wild marjoram seeds, and grind (that) together with the (other) ingredients after having pounded them (first); apply (this) on an empty stomach, and take it off at mealtimes until digestion is completed.

## (341)

## A cataplasm for (the treatment of)

## the bite of a rabid dog

Knead a bit of treacle with the ashes of vine stems,<sup>224</sup> and apply that as a cataplasm.

#### (342)

## A cataplasm for (the treatment of) sclerosis of the spleen

Cook five bunches (of) rue in half a *rațl* (of) wine vinegar together with five *dirham* (of) birthwort and five *dirham* (of) absinthe, strain off the vinegar, and (then) dissolve in it five *dirham* of ammoniacum; now take ten *dirham* each of barley meal and darnel meal, ten figs in number, and five *dirham* of tarfa leaves, pound (that), knead it with the

<sup>&</sup>lt;sup>224</sup> *šafš* "stems" is a Persian word which has no currency in the Arabic language.

vinegar, and apply (this), after having fomented the spleen with flannel soaked in hot vinegar, as a cataplasm by putting it on the sclerotic (area) for the whole night.

## (343)

## A cataplasm for (the treatment of) the cold stomach Cyperus, Indian spikenard, citronella, absinthe, lemon grass, and mastic are brought together with aged wine and quince-water.

#### (344)

# For (the treatment of) scurfy mange without heat (of the skin)

Grind roses in sour vinegar until (the mixture) gains (some) consistency; then admix to it ground sulphur in a quantity (equalling) one half of the roses, rub (this) over the body in the bathhouse, and wash it off with mild detergents.

#### (345)

And for (the treatment of) the itch Celery-water and vinegar (are applied) in the bathhouse.

(346)

Simples for (the treatment of) mange, to be compounded as necessary

Sulphur, orpiment, realgar, ammonium chloride, ammonium hydroxide, salt in (all) its varieties, ribes seeds, 'deadened' mercury,<sup>225</sup> the ashes of vine (stems), argentic slag, auric slag, litharge, oleander leaves, baby's breath, borax, alum from ruddy (earth), potash, black cumin, turmeric, kamala, liquid storax, greater celandine, horn poppy, alecost, and mahaleb kernels are prepared with olive oil or sesame oil or violet and rose oil as well as with vinegar and citron juice, and (their application) is followed by (the use of) lye and (other) kinds of detergents. (When prepared to treat) acute ulcerating mange during the summer in those who live a life of luxury or adolescents, the strength of some of these (drugs) can be broken by (adding) camphor.

<sup>&</sup>lt;sup>225</sup> Compare the conclusion of recipe 329.

#### (347)

## For (the treatment of) warts —Hunain's (remedy of) choice<sup>226</sup>

The fruit of the tarfa pounded in vinegar is applied as a cataplasm; or else bdellium africanum, pine resin, and the peels of the caper root with vinegar.

## (348)

## For (the treatment of) tetter Burnt staghorn with vinegar; also gum-arabic melted in vinegar.

#### (349)

## The toenail foot-wrap

Linseed and fenugreek are pounded, kneaded with honey and melted wax, and applied as a cataplasm.

#### (350)

#### For (the treatment of) moles on the face

White baby's breath one mitqal; six peeled almonds; white sugar one and a half mitqal. Apply this in the form of a paste over a period of ten days.

## (351)

## A paste for (the treatment of) freckles —Hunain's (remedy of) choice<sup>227</sup>

Mix ivory sawdust, fig seeds, red kidney beans, mung beans, and bitter almonds into barley-water, apply (this) as a paste at night, and set out in the early morning for the bathhouse.

<sup>&</sup>lt;sup>226</sup> On Hunain see note 12 above. The word "choice" (*iḫtiyār*) certainly contains an allusion to a lost pharmacological writing by Hunain entitled *al-Iḫtiyārāt* "The (Drugs of) Choice"; for references to some minor fragments of this text see Ullmann *Medizin* 300 note 1 and *GaS* 3/255 no. 6.

<sup>&</sup>lt;sup>227</sup> Compare note 226 above.

#### (352)

## A remedy for (the treatment of) lenticular warts Sepiolite one part; borax one part; peeled almonds two parts.

## (353)

## And (again) for that

Lupine meal and burnt sepiolite in equal (parts). (This) is softened in narcissus oil, and applied as a paste.

#### (354)

## For (the treatment of) black marks on the face

Barley meal, broad bean (meal), and the roots of the sky-coloured iris one *dirham* of each; sal ammoniac and gum ammoniac two *dirham* of each. (The ammoniacs) are dissolved in hot water, kneaded together with the remaining (ingredients), and made into pastilles; (or) they are dissolved in egg white and applied as a paste, as required.

#### (355)

## A paste for (the treatment of) speckles and freckles

Pigeon's droppings and borax in equal (parts). (This) is pounded, kneaded, and applied to the face many times.

### (356)

#### For (the treatment of) scrofula

The ashes of a jade's hoof (are mixed) with olive oil and applied as a cataplasm.

#### (357)

### A dye which darkens (the hair)

Mix the water from new walnut husks or sumach-water with henna, then with *wasma* which is indigo leaves,<sup>228</sup> (and also) with one *dirham* (of) clove, and use this for dyeing.

<sup>&</sup>lt;sup>228</sup> wasma is generally considered to denote the leaves of the indigo plant *Indigofera tinctoria*, see e.g. Schmucker *Ṭabarī* 534f.

### (358)

## Alecost oil delays ageing Black cumin oil (however) is stronger than that, or so they say.<sup>229</sup>

#### (359)

## A paste for (the treatment of) desquamation (of the skin)

Cantharides, arsenic, and garden cress are ground in vinegar and honey, and applied as a paste.

#### (360)

# A remedy from among the writings of ar-Rāzī for (the treatment of) dumbness $^{\rm 230}$

Sal ammoniac, pellitory, sweet flag, black pepper, and mustard in equal (parts). (This) is ground, and applied as a thick smear below and above the tongue several times a day.

#### (361)

## A paste for (the treatment of)

## dumbness

Pellitory, 'sea' alecost, and castoreum are ground, and applied to the tongue as a paste (whilst the patient) must not swallow his saliva.

#### (362)

# A paste which makes the traces of smallpox disappear

Litharge steeped (in oil), dry reed root, chickpea meal, decayed bones, rice meal, musk melon seeds, ben seeds, and the rinds of the sweet pomegranate (as much) as necessary of each. (This) is brought together, ground, applied at night as a paste with the water of musk melon seeds, and washed off the next morning in the bathhouse.

<sup>&</sup>lt;sup>229</sup> This brief 'recipe' looks like an interpolation, except that it is well-attested by the manuscript tradition; in any case, it should rather be expected to figure in chapter eleven on oils.

<sup>&</sup>lt;sup>230</sup> The relevant section in Muḥammad ibn Zakarīyā' ar-Rāzī's (d. 313/925 or 323/ 935) huge medical encyclopaedia al-Ḥāwī offers a number of very similar though not identical prescriptions, cf. Rāzī Ḥāwī 3/206–215.

## (363)

## A paste for (the treatment of) vitiligo

Garden cress, Asiatic crowfoot, larkspur, and the (dried) bodies of cantharides one part of each. (This) is kneaded with a decoction of madder and wine vinegar.

## (364)

### A paste for (dealing with) lice and (other) parasites in the beard

Stavesacre two *dirham*; borax, sumach, alecost, carob, and horn poppy powder one *dirham* of each. (This) is pounded, strained, kneaded with violet oil and wine vinegar, and applied as a paste.

#### (365)

## A paste for (the treatment of) 'white' lichen—(invented) by Ibn at-Tilmīd

Radish seeds and peppergrass seeds five *dirham* of each; green lye ten *dirham*; borax two *dirham*. (These ingredients) are pounded, kneaded with wine vinegar and honey, and applied as a paste before entering the bathhouse.

## Chapter Fourteen on Enemas and Suppositories

#### (366)

## A mild enema which is used in acute diseases

Husked crushed barley one handful; dry violet, nenuphar, marshmallow tied up in a cloth of linen, and bran tied up in a cloth of linen five *dirham* of each. Cook (this) in two *rațl* water until eight  $\bar{u}q\bar{i}ya$  (of it) are left, (then) strain it off, take from it fifty *dirham* altogether, dissolve in it one and a half  $\bar{u}q\bar{i}ya$  (of) violet oil or almond oil and one and a half  $\bar{u}q\bar{i}ya$  (of) sugar together with one *mitqāl* (of) salt cake, and use (that)—if nature responds, (then good); if not, repeat (the treatment).

### (367)

## A purgative 'medium' enema which is stronger than the previous

A bunch of finely chopped beet; twenty yellow figs in number; violet, nenuphar, and crushed barley a fistful of each; 'green' marshmallow and bran tied up in a cloth of linen five *dirham* of each; chamomile seven *dirham*. Cook all (this) in four *rațl* water until one third (of it) is left, (then) take eight  $\bar{u}q\bar{y}a$  from what has been strained off, mash up in it one and a half  $\bar{u}q\bar{y}a$  (of) purging cassia pods, two  $\bar{u}q\bar{y}a$  (of) red sugar, five *dirham* (of) *bzğy* oil,<sup>231</sup> five *dirham* (of) Nabataean garum, and two *dirham* (of) salt cake, and use (that liquid) tepid—if nature responds, (then good); if not, repeat (the treatment) as before.

(368)

An enema for (the treatment of)

colical pain due to moisture and flatus

Chamomile, melilot, caltrop, small centaury, dill, linseed, and safflower ten *dirham* of each; a bunch of chopped beet; twenty-five chopped yellow fig fruits; bran and marshmallow ten *dirham*. Cook (this) in two *rațl* water, strain it off as before, enforce it like you enforced the first (enema), and use it.

(369)

An enema for (the treatment of) pain in the back and ischia, the early stages of sciatica, uterine disorders, and the dryness that results from frequent sexual intercourse

Chamomile, melilot, violet, and nenuphar five *dirham* of each; a handful of barley; thirty sebesten fruits. Cook (this) in three *rațl* water until one third (of it) is left, (then) take from it sixty *dirham*, mix it with one  $\bar{u}q\bar{v}a$  (of) violet oil and five *dirham* each of chicken's grease, goat's suet, wax oil, and butter, and use (that).

<sup>&</sup>lt;sup>231</sup> Compare note 201 above.

#### (370)

An enema for (the treatment of) abrasion

Roasted crushed barley, red rice, millet, and peeled lentils one fistful of each; roses, pomegranate flowers, myrtle, plantain, and the inner skins of acorn-cups four *dirham* of each. Cook (this) in two *rațl* water until it is reduced to one half, (then) strain it off, take from it a weight of fifty *dirham*, and use (that) tepid together with egg yolk boiled in wine vinegar, five *dirham* (of) rose oil, and one of the *hypocistis* pastilles which are mentioned in the chapter on pastilles.<sup>232</sup>

## (371)

A suppository which stimulates nature whilst being gentle

Red sugar and salt cake one part of each. Melt the sugar, inspissate it with the ground salt, form (this) into an 'acorn', roll it in oil, and insert it (into the rectum). Sometimes borax is added to it, sometimes colocynth pulp, and sometimes it is made with pale-coloured marshmallow.

#### (372)

## A suppository which is inserted (into the rectum) in order to stop anal bleeding

Amber, pomegranate flowers, bdellium africanum, dragon's blood, mastic, gum-senegal, stalkless rosebuds, gum-arabic, and sarcocolla one part of each. The ingredients are pounded, strained, kneaded with the water of the leek herb, attached to a thread, and put in the shade to dry.

#### (373)

## The *thread* suppository for (the treatment of) dysentery and anal bleeding

Myrrh, opium, Oriental frankincense, and saffron in equal parts. (This) is kneaded with coriander-water, attached to the tip of a thread in a size (similar to that of) a service fruit or (a bit) bigger, inserted (into the rectum), and when required taken out by the thread.

<sup>&</sup>lt;sup>232</sup> See recipe 22.

#### (374)

## An enema fabricated by Zahrūn al-Ḥarrānī<sup>233</sup> for (the treatment of) abrasion

Red rice and barleymeal porridge fifteen *dirham* of each; dry myrtle, roses, pomegranate flowers, and the inner skins of acorn-cups ten *dirham* of each; dry plantain ten *dirham*. Boil (this) in six *rațl* water until one third (of it) is left, (then) strain off three  $\bar{u}q\bar{v}ya$ , mix into it one egg yolk boiled in sumach-water or vinegar or both, three *dirham* (of) rose oil, and two *dirham* from the *abrasion* catapasm,<sup>234</sup> and use that as an enema—cold in summer, tepid in winter.

#### (375)

A comprehensive enema which resolves most kinds of colic

Fenugreek and linseed one  $\bar{u}q\bar{i}ya$  of each; the fresh seeds of the castor oil plant thirty *dirham*; black 'king figs'<sup>235</sup> ten in number; safflower pulp thirty *dirham*; a small bunch of fresh rue; cumin one  $\bar{u}q\bar{i}ya$ ; a handful of bran; peeled almonds one  $\bar{u}q\bar{i}ya$ ; sebesten, beet root, and cabbage root two  $\bar{u}q\bar{i}ya$  of each. Cook (this), strain it off, and if you do not shun the heat of resins (also) put half an  $\bar{u}q\bar{i}ya$  (of) bdellium and one *mitqāl* each of sagapenum, gum ammoniac, and opopanax into it. The (amount of) water (used for cooking) should be ten times as much as the total (amount of) ingredients, leaving one sixth of that water (as a product); the (amount of the) aforesaid resins to (contribute to) that given sixth depends on the exact amount of the preceding ingredients, on the whole adding or subtracting as appears necessary. The enema itself is used in an amount of five  $\bar{u}q\bar{i}ya$  (of) honey, and one  $\bar{u}q\bar{i}ya$  (of) melted chicken's grease.

## (376)

An enema designed for sexual potency

Take the head of a fat one-year-old sheep, its trotters, its testicles, its kidneys including the suet, its right side, and a piece from its fatty tail, and crash it (all) in a stone pot together with twenty *dirham* (of)

<sup>&</sup>lt;sup>233</sup> On Zahrūn al-Ḥarrānī cf. note 27 above.

<sup>&</sup>lt;sup>234</sup> See recipe 394.

<sup>&</sup>lt;sup>235</sup> On 'king figs' cf. note 125 above.

brayed wheat, just as much chickpeas, and five *dirham* each of caltrop, safflower, terebinth, carrot seeds, leek seeds, asparagus seeds, and lucerne seeds, all crushed. Cook this until it is worn soft, (then) strain off half a *ratl* from that greasy broth, add ten *dirham* (of) Syrian sugar, and (thus) use it—first (however) you must use an enema to (promote) the discharge of faeces, prepared from beet-water, sesame oil, garum, and sugar, and injected twice so as to empty the bowels (completely); (now) send up the previous (enema), let (the patient) sleep on it wrapped tight in a napkin, and call it a day—if he can hold the liquid (inside) for three or four hours, be content.

#### (377)

The ashes water which, when injected as an enema towards the bladder, is useful against suppression of urine due to coagulated matter or a tumour in the (urinary) tube

Take acorn ashes or the ashes of vine wood, potash, and lime, pour (enough) water over these (ingredients) to cover them, and leave (this) for three days; then strain it, and inject (the liquid) through a pipette into the penis.

(378)

A tampon for (the treatment of) uterine tumours Iris sap together with fat and rose oil in a dark-blue cloth.

#### (379)

# An injection for (the treatment of) ulcers in the penis

Plantain-water, rose oil, and the white ophthalmic which is (normally) prepared to (treat) conjunctivitis<sup>236</sup> (but now) dissolved in mothers' milk and the oil of white jasmines are (all) mixed together, and (thus) used.

<sup>236</sup> See recipe 263.

#### (380)

An enema for (the treatment of) rheumatism

Fenugreek, bitter almonds, castor oil plant, and linseed one handful of each; bay laurel seeds, chamomile, and dill thirty *dirham* of each; caltrop thirty *dirham*; meadow saffron, bdellium, and white hellebore ten *dirham* of each; centaury twenty-five *dirham*; ammoniacum, sagapenum, opopanax, and colocynth six *dirham* of each; celery seeds fifteen *dirham*; dill seeds and rue seeds twelve *dirham* of each; Hulwān figs<sup>237</sup> ten in number; Ğurğān jujubes<sup>238</sup> ten in number; sebestens forty in number. Bring (this) together, cook it on a low flame in an earthen pot, and leave it in the oven until the next morning; (then) take eight  $\bar{u}q\bar{v}a$  (from it), cast one  $\bar{u}q\bar{v}a$  each of cow's ghee and gillyflower oil upon it, and use that tepid as an enema.

#### (381)

An enema which is useful for (the treatment of) intestinal ulcers

(Take) twelve *dirham* each of rice-water and barley mash cooked together with unsalted goat's suet, and throw the following ingredients on it, all pounded (and) strained—ceruse, burnt papyrus, gumarabic, gum-senegal, and dragon's blood one *dirham* of each; three egg yolks boiled in wine vinegar and rose oil. Mix it all well, and use that as an enema.

## (382)

# A powder for (the treatment of) ulcers in the ear

Sarcocolla, dragon's blood, frankincense, myrrh, sepiolite, Armenian borax, iron oxide, verdigris, and aloe (as much) as necessary of each. Pound (this) finely, setting it up as a powder, and drop some of it (mixed) with vinegar and water several times into the ear; then twine a wick, besmear it with honey, pass it through this (powdery) remedy, and plug it into the ear.<sup>239</sup>

<sup>&</sup>lt;sup>237</sup> On Hulwān see note 172 above.

<sup>&</sup>lt;sup>238</sup> On Šuržān see note 173 above.

<sup>&</sup>lt;sup>239</sup> This remedy, a powder applied through a plug to the ear, seems out of place in a chapter that deals with enemas and suppositories; the point of classification therefore must be its final design when administered, which may well be compared to that of a suppository.

## Chapter Fifteen on Dry Preparations and Dentifrices

#### (383)

A corrosive remedy from Chalcis<sup>240</sup> which is made in June, July, and August<sup>241</sup>

Orpiment and realgar—(that is) the one which is (commonly) used together with lime—half a *rațl* of each; borax, sal ammoniac, and verdigris half a *rațl* of each; potash three *rațl*; (burnt but) not slaked lime as much as the total (weight). Grind the ingredients, throw them into a trough, cast upon them wine vinegar, stir them with a piece of wood, leave them exposed to the sun (for a while), restore whatever (amount of) vinegar may have evaporated, and repeat this three times—but make sure the vinegar (which you choose) is (very) sour (and) of a white colour; now dry the ingredients, put them into a fired oven onto a brick that has acquired the intense heat of the oven, and leave them inside until the oven cools down; (then) take the remedy out, store it away, and when required grind it and use it.

#### (384)

The (remedy called) *sūrintīhān*<sup>242</sup>

for (the treatment of) putrid and squashy gums

Turmeric, alum, gum-senegal, pomegranate flowers, oak galls, sumach, pomegranate rinds, and salt in equal parts. Pound (this), use it with vinegar, and afterwards rinse (the mouth) with sumach-water and rose oil. The appropriate procedure is (to take) a surgical stick, wrap around its tip a piece of soft cloth, wet it with the vinegar, pass it through the ground remedy, and reach out for those areas of the gums which need (treatment)—(all) that is done by a physician in a bright place. Sometimes also the fleshy tissue in the corners of the mouth, when putrid, is embrocated with this (preparation).

<sup>&</sup>lt;sup>240</sup> Qalqidīqūn "from Chalcis" < Χαλκιδικόν, see Liddell/Scott Lexicon 1973.</p>

<sup>&</sup>lt;sup>241</sup> The summer months June-July-August are represented here by their Syriac names  $Haz \tilde{i}ran$ -Tamm $\tilde{u}z$ -Ab for the obvious reason that the Muslim lunar year takes no account of seasonal change.

 <sup>&</sup>lt;sup>242</sup> sūrintīhān < Syriac sūrīntīkon "medicamentum pro morbis oris, ex arsenico etc.</li>
 [?] compositum", see Payne Smith Thesaurus 2/2586.

#### (385)

## The *rose* coolant for (the treatment of) feverish and blistered gums—it is called *uduntī*hān<sup>243</sup>

Roses, the gall-apples of the Oriental tamarisk, pellitory, roasted coriander, and purslane seeds in equal parts. (This) is pounded, stored, and used. If the heat (of the gums) is overwhelming, (the remedy) is made without pellitory.

#### (386)

## The *blocker* for (the treatment of) flabbiness and prolapse of the rectum

The inner skins of acorn-cups, frankincense and the bark of its tree, burnt wormwood, oak galls, burnt pomegranate flowers, staghorn, litharge, burnt mussel shells, and cadmia which is *iqlīmiyā*<sup>,244</sup> in equal parts. (This) is ground, and used.

### (387)

## The dry remedy to stop (the emission of) blood from a wound

Pomegranate flowers, the bark of the frankincense(-tree), dragon's blood, sarcocolla, myrrh, burnt cyperus, burnt staghorn, and burnt Egyptian papyrus one part of each; washed Armenian bole one part. (This) is pounded, stored, and used.

#### (388)

## An adhesive plaster to stop

## (the emission of) blood from the arteries

Dragon's blood, sarcocolla, alum, yellow vitriol, gum-senegal, pomegranate flowers, aloe, and frankincense dregs one part of each; gumarabic two parts. (This) is pounded, kneaded with egg white, put onto (a piece of) hare's fur, placed (over the cut), fixed, and not removed for a few days.

<sup>&</sup>lt;sup>243</sup> uduntīhān < ἀδοντικόν "dental" (scil. remedy), see Liddell/Scott Lexicon 1198.</p>

<sup>&</sup>lt;sup>244</sup> The two terms used here to denote "cadmia" *ZnO* are *qadmiyā*' < καδμεία (scil.  $\gamma \hat{\eta}$ ) and *iqlīmiyā*' which is an alteration of the former parallel to Mediaeval Latin *calamina*, cf. Schmucker *Tabarī* 83ff. and 337.

#### (389)

## The (remedy called) *dīk bar dīk* —that is 'pot upon pot'

Take orpiment, potash, lime, and verdigris half a *rațl* of each; mercury and sal ammoniac one fourth of a *rațl* each. Grind (this) in the *prime water*—whose description follows—so long as it takes for the mercury to 'die',<sup>245</sup> (then) dry it, put it into the device which the alchemists call aludel,<sup>246</sup> heat it with a fire from below such that (the substance) vaporizes, and (on cooling) collect the sublimate in a flask. You can sprinkle (this preparation) on whatever you want to get rid of, like for example a fistula, (using it) in place of cautery.

#### (390)

#### The prime water

Take one part each of unhydrated lime and potash, grind the latter, pour over the two (ingredients) six times as much water, put it aside, and whip (the mixture) three times daily over (a period of) three days; now strain off (the liquid), cook it until it gains the density of the (aromatic called)  $hal\bar{u}q$ ,<sup>247</sup> and (then) leave it in the sun so as to thicken. (This preparation), once made into pastilles, is dried, stored in a place where it cannot be affected by dampness, when required finely ground, and (so) used.

#### (391)

## (Another) dry remedy to stop (the emission of) blood from a wound<sup>248</sup>

Pomegranate flowers, dragon's blood, and washed haematite one part of each; gum-arabic two parts. (This) is pounded, kneaded with egg white, put onto (a piece of) hare's fur, placed (over the wound), fixed, and not removed for a few days.

<sup>&</sup>lt;sup>245</sup> For a different though related method see the conclusion of recipe 329.

<sup>&</sup>lt;sup>246</sup> utāl "aludel" < αἰθάλιον "Apparat zum Destillieren und Sublimieren trockener Stoffe", see Ullmann NGw 265.

<sup>&</sup>lt;sup>247</sup> halūq is "eine Art von flüssigem Parfüm, das aber eine dicke Konsistenz besitzt; es besteht aus Safran und anderen Substanzen. Die rote und gelbe Farbe überwiegen in ihm [...] Rezepte für die Herstellung der *Chalûq* selbst habe ich bisher nicht finden können, wohl aber [...] solche für das 'Wasser der *Chalûq*', das nachher destilliert wird. Eines [...] teile ich mit: [recipe follows]", see Wiedemann *Aufsätze* 2/128 note 1.

<sup>&</sup>lt;sup>248</sup> See also recipe 387.

### (392)

## The mouth coolant

Purslane seeds, roses, tabasheer, coriander, pomegranate flowers, sumach, yellow myrobalan, and peeled lentils one part of each. (This) is pounded, and a little camphor is added to it.

#### (393)

A polish for the teeth which also tightens the gums and improves the smell of the breath Ibn at-Tilmīd says: "It is proven by experience"

Burnt barley, white salt, and sepiolite ten *dirham* of each; pellitory, cubeb, and the fruits of the tarfa five *dirham* of each; Yemenite alum two *dirham*; sumach four *dirham*; clove two *dirham*. These ingredients are brought together, pounded, strained, and used.

#### (394)

### The abrasion catapasm

Ceruse, roasted gum-arabic and starch, salsify sap, plantain sap, Armenian bole, and Cyprian bole two *dirham* of each; amber, washed haematite, gum-senegal, and dragon's blood one *dirham* of each. (This) is pounded, and used.

## (395)

## And to stop (the emission of) blood

from the arteries

Egg white, (burnt but) not slaked lime, hare's fur, and soft linen threads are applied as a plaster and firmly fixed.<sup>249</sup>

#### (396)

# A dentifrice which is useful against loose teeth

Pomegranate flowers, roses, the gall-apples of the Oriental tamarisk, and alum one part of each. (This) is finely pounded, and stuck against the gums. Sometimes one part each of sandalwood sawdust, yellow myrobalan, coriander, and turmeric is added to it.

<sup>&</sup>lt;sup>249</sup> Compare the procedure described in recipe 388.

#### (397)

## A dentifrice for (the treatment of) toothache caused by coldness

Black pepper ten *dirham*; pellitory, ginger, and larkspur four *dirham* of each; Armenian borax six *dirham*. (These ingredients) are brought together by pounding (and) straining, and (then) they are pressed on the teeth.

#### (398)

## A remedy for (the treatment of) smelly armpits

Yemenite alum two *dirham*; myrrh three *dirham*; roses six *dirham*; litharge eight *dirham*; myrtle six *dirham*. Pound (this) finely, wash the armpits with lye, and (then) use it.

## Chapter Sixteen on Nutrition

#### (399)

### A nourishing (preparation)

Glossostemon root, orchil, sea lavender, zerumbet, tragacanth, poppy seeds, and amber three *dirham* of each. Pound (this), fry it in a little ghee, mix it with two *mann* wheat mush and one *mann* sugar, take from all (that) twenty *dirham* every day, cook it in one *rațl* fresh milk, cast upon it a bit of sweet fresh ghee or, for those who dislike ghee, some sweet almond oil, and sip it hot.

#### (400)

#### A nourishment for the hot-tempered

Peeled broad beans and peeled gourd seeds one part of each. Pound (this) finely, knead it with almond oil, take a handful from it, cook it in about one *rațl* barley-water, drink (that), and afterwards have pome-granate-water.

### (401)

### A nourishment for the well-tempered

Immerse chickpeas fully in fresh milk, and leave (this) until the milk is absorbed; now dry (the product), take one part from it, and cook (that) very thoroughly in milk; once it is well-cooked, throw into it three parts each of dried pounded semolina and white sugar candy, add (more) milk to make it like soup, perhaps strew on it (some) cumin, and (then) have it.

## (402)

## Another nourishment

Semolina meal one *kailağa*; light-coloured sarcocolla one and a half  $\bar{u}q\bar{v}a$ . Grind the sarcocolla finely, mix it with the meal, blend (this) with cow's ghee or almond oil into a saturated dough, knead (that), let it ferment and dry, and take from it ten *dirham* daily with cold water for a few consecutive days.

#### (403)

### A good nourishment

White chickpeas soaked in fresh milk (then) dried (and) pounded fifty *dirham*; broad beans, mung beans, white rice, husked wheat, husked barley, peeled lentils, white glossostemon root, light-coloured poppy, peeled almond 'hearts', peeled pumpkin seeds, and the best part of biscuit twenty-five *dirham* of each; the pulp of serpent melon seeds, almond mucilage, cucumber seed pulp, washed (and) dried purslane seeds, peeled sesame, and tragacanth seven *dirham* of each. Pound all (this) finely, strain it, take a handful from it, cook it in fresh milk (to make it) like soup, throw salt, a little cumin, and almond oil into it, lift it off (the fire), sip it, sucking out a sourish pomegranate before and after, and have that over a period of fifteen days.

### (404)

### Another nourishment

Tragacanth, white sea lavender, dark-coloured and light-coloured poppy, orchil, and visnaga ten *dirham* of each. Bring (this) together, pound it, strain it, fry it in ghee, mix it into one *makkūk* (wheat) mush, and drink from it in the morning.

## Chapter Seventeen on Snuffs and Gargles

#### (405)

Some snuffs which are healthy for those who suffer from facial paralysis and hemiplegia Dry ground mountain mint perhaps mixed with a little baby's breath and ground small centaury; cyclamen is strong, and so is baby's breath on its own.

#### (406)

Some (more) errhines for these (patients) Burnt black cumin (mixed) with the water of dog's violet or sweet marjoram-water and castoreum in this (case) or pennyroyal-water; useful against hemiplegia (in particular) is to sniff (the scent of) wild thyme, sweet marjoram—especially (when) dry—, and irises—(both) the skycoloured ones and the (ones known as) Rāziqī which are white; jasmine oil, too, is good for them (as) an unguent.

#### (407)

A snuff which is useful against hemiplegia, facial paralysis, and headache resulting from coldness

White hellebore four *dirham*; aloe, black cumin, spurge, and opopanax three *dirham* of each; Armenian borax and baby's breath two *dirham* of each; castoreum and saffron one and a half *dirham* of each. All (this) is pounded, kneaded with beet-water, formed into small pills, and when required a weight of one  $q\bar{r}a\bar{t}$  from it is used with gillyflower oil.

### (408)

A gargle which is useful against hemiplegia, facial paralysis, and apoplexy

*Hiera picra*,<sup>250</sup> sweet flag, mustard, larkspur, pellitory, ginger, black cumin, pennyroyal, savory, the root of the sky-coloured iris, and the

<sup>&</sup>lt;sup>250</sup> On *hiera picra* see note 40 above.

peels of the celery root five *dirham* of each. All (this) is finely pounded each single (ingredient) separately—, (then) mixed together, strained through (a cloth of) silk, stored in a vessel, and used as a gargle with oxymel or honey-water in the bathhouse.

#### (409)

A snuff which is useful against rheumy pannus, and swollen and moist eyelids

Baby's breath one *dirham*; myrrh, saffron, and Socotra aloe two *dāniq* of each; lycium one *dāniq*. Pound (this), strain it, knead it with sweet marjoram-water or sweet basil-water, form it into pills similar to lentils, and put it in the shade to dry; when required take from it one pill, dissolve it in maid's milk and violet oil, and use (some of) that as a snuff and some to massage the forehead and the nose.

Chapter Eighteen on Rhinorrhoeal Preparations

#### (410)

First wash the nostrils with good wine vinegar; (then) take one  $q\bar{r}a\bar{t}$  each of Egyptian opium and saffron, and pound the two (ingredients) finely; (now) make a wick from a shred of linen, wet it with wine vinegar, roll it in the remedy, and introduce (such a wick) into each one of the two nostrils.

#### (411)

## A snuff which stops nosebleed

Burnt papyrus, gum-senegal, alum, Egyptian opium, date *rāmik*,<sup>251</sup> and camphor five *dirham* of each; vitriol, pomegranate flowers, black bry-ony, oak gall *rāmik*,<sup>252</sup> burnt mussel shells, burnt oak galls slaked with

 $<sup>^{251}</sup>$  *rāmik* is the name of a 'perfume' which is made from unripe dates, oak galls, pomegranate rind, honey, musk, and certain other aromatics in varying proportions of mixture, and whose prevailing ingredient may serve as an additional label, cf. Wiedemann *Aufsätze* 2/118f. and Levey *Kindī* 270f.

<sup>&</sup>lt;sup>252</sup> On *rāmik* see note 251 above.

wine vinegar, and plantain ten *dirham* of each; salsify sap, dragon's blood, and burnt wormwood seven *dirham* of each; dry burnt coriander eight *dirham*. All (this) is finely pounded, kneaded with plantainwater, formed into pastilles, and when required two *dāniq* from it are used with plantain-water.<sup>253</sup>

#### (412)

# A remedy which is useful against nosebleed

Yemenite alum, burnt yellow vitriol, white vitriol, (Egyptian) vitriol,<sup>254</sup> burnt papyrus, washed (then) dried (and) burnt staghorn, washed (then) dried (and) burnt mussel shells, burnt oak galls slaked in wine vinegar, and camphor (as much) as necessary. (This) is pounded, and blown into the nose through a tube (made) from reed or silver after the nostrils have been washed with wine vinegar.

#### (413)

## And again for (the treatment of) nosebleed

Snuff up the water of the bitter serpent melon or the water (obtained) from salsola; or (make) a wick from a shred of linen, steep it in ink, sprinkle vitriol on it, and put it into the nose.

#### (414)

## Another (remedy) for (the treatment of) nosebleed

The bark of the frankincense(-tree), burnt papyrus, and Egyptian vitriol five *dirham* of each. All (this) is finely pounded, strained, and blown into the nose after having washed the nostrils with wine vinegar.

<sup>&</sup>lt;sup>253</sup> This is another example of 'fluid' classification since the remedy on hand could just as well have been incorporated into the chapter on pastilles, never mind its *ultimate* form of application.

 $<sup>^{\</sup>rm 254}$  The addition of a qualifying marker is required by the context, and "Egyptian" has been chosen in analogy to recipe 414.

## Chapter Nineteen on Emetical Preparations

#### (415)

A remedy to (induce) vomiting —it expels the yellow and the black bile, and is used as an emetic in nonacute fevers Artichoke gum, nux vomica, rocket seeds, radish seeds, dill seeds, orache seeds, and Indian salt in equal parts. (These ingredients) are brought together in ground form, taken as appropriate, and drunk with hot water and honey.

#### (416)

# A remedy which causes the vomiting forth of black bile and poison that was drunk

Indian salt, wild serpent melon sap, and borax one part of each; mustard half a part. (This) is pounded, brought together, strained, and drunk with honey-water and dill-water.

#### (417)

#### Another (remedy) to (induce) vomiting

Chopped radish twenty *dirham*; dill stalks ten *dirham*; Indian salt, musk melon seeds, and orache seeds five *dirham* of each. Cook (this) in four *rațl* fresh water until one third (of it) is left, (then) strain off the remaining water, immerge in it more or less two  $\bar{u}q\bar{i}ya$  (of) honey or sour-honey, and drink (that) tepid—it is a very reliable emetic.

#### (418)

#### Another (remedy) to (induce) vomiting

Nux vomica, artichoke gum, and radish seeds two *dirham* of each; mustard and Indian salt one *dirham* of each; orache seeds three *dirham*. Pound (this), take from it three *dirham*, (mix it) together with thirty *dirham* (of) oxymel in which chopped radish had been soaked over night (and some) hot water in which dill had been boiled, and drink (that)—it is (also) a very reliable emetic.

#### (419)

## A remedy which causes the vomiting forth of yellow-biliousness

(Mix together) orache-water, hollyhock-water, and dill-water in which had been cooked savory, oxymel, and beer, (then) throw a portion of coarse salt into (the mixture), and drink (that) tepid.

## (420)

# A remedy which stops yellow-bilious vomiting and settles qualmishness

Barberry seeds, the seeds of the sour pomegranate, and sumach ten *dirham* of each; tabasheer, roses, the seeds of unripe grapes, and the 'outer' shells of the pistachio five *dirham* of each. (This) is brought together, pounded, strained, and two *dirham* from it are drunk with apple-water, quince-water, and the *minty pomegranate* beverage.<sup>255</sup>

## Chapter Twenty on What Promotes and Suppresses Perspiration

#### (421)

To promote perspiration Armenian borax dissolved in chamomile oil is applied to the body as an ointment; chamomile oil on its own (also) promotes perspiration.

#### (422)

## Another

Pellitory cooked in sesame oil is applied to the body as an ointment this (preparation) shakes out the sweat, and is (also) useful against the coldness that occurs in fevers.

<sup>&</sup>lt;sup>255</sup> See recipe 200.

#### (423)

## To prohibit perspiration

(Take) ten *dirham* each of dry coriander, pure sumach, and rice that has been washed repeatedly, cook all (this) in three *rațl* water until one third of it is left, then strain it, drink from it three  $\bar{u}q\bar{l}ya$  every day, and also anoint the body with quince oil; (further) you may sprinkle over the body Armenian bole, myrtle, and tarfa leaves, all pounded (to become as fine) as dust; likewise you may anoint (the body) with myrtle oil and willow (oil).

## (424)

## Something that prevents perspiration

Wipe the body with rose oil and myrtle oil, besplash it with rosewater, air it with fans, and let the patient sleep in a place which has been decorated with willow leaves, vine leaves, myrtle, pear, and apple (leaves).

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b. Arabic—English

 $ab\bar{a}r \rightarrow lead$  $abhal \rightarrow savin$  $\bar{a}d\bar{a}n al-fa'r \rightarrow \text{forget-me-not}$ 'adas → lentil  $af\bar{a}w\bar{i}h \rightarrow spices$  $af_s \rightarrow oak gall$ afsantin  $\rightarrow$  absinthe  $aft\bar{m}\bar{u}n \rightarrow dodder$ *aftīmūn iqrītī*  $\rightarrow$  Cretan dodder  $afv\bar{u}n \rightarrow opium$ afyūn misrī  $\rightarrow$  Egyptian opium  $\hat{a}\hat{a} \rightarrow ivory$  $aht\bar{a}$  al-bagar  $\rightarrow$  cow's dung  $ak\bar{a}ri^{\circ}ad-da^{\circ}n \rightarrow$  sheep's trotters alsinat al-'aṣāfīr  $\rightarrow$  common ash alyat ad-da'n  $\rightarrow$  sheep's fatty tail amīrbārīs → barberry *amlağ* → emblic *'anbar*  $\rightarrow$  ambergris anbida  $\rightarrow$  wines  $an\check{q}ud\bar{a}n \rightarrow asafoetida$ *anğura* → Roman nettle  $an\bar{s}\bar{s}\bar{u}n \rightarrow anise$ 

anzar $\overline{u}t \rightarrow \text{sarcocolla}$ anzarūt abyad  $\rightarrow$  sarcocolla, light-coloured  $aq\bar{a}qiy\bar{a} \rightarrow gum-senegal$ 'aqārib → scorpions ʿāqir qarḥā → pellitory  $aruzz \rightarrow rice$ aruzz abyad  $\rightarrow$  rice, white aruzz ahmar  $\rightarrow$  rice, red  $\bar{a}s \rightarrow myrtle$  $as\bar{a} r - r\bar{a}\bar{i} \rightarrow knotgrass$ 'asal  $\rightarrow$  honey *'asal (al-)lubn* $\bar{a} \rightarrow$  storax, liquid 'asal an-nahl  $\rightarrow$  bee honey *'asal šahd*  $\rightarrow$  honeycomb *'asal at-tabarzad*  $\rightarrow$  honey, candied 'asal at-tīn  $\rightarrow$  fig honey 'asal az-zabīb  $\rightarrow$  raisin honey *asārūn* → asarabacca 'asīr → must  $a \check{s} r \bar{a} \bar{s} \rightarrow a sphodel$ *'ausağ*  $\rightarrow$  boxthorn  $azf\bar{a}r at-t\bar{t}b \rightarrow \text{snail shell opercula}$ 

 $b\bar{a}b\bar{u}na\check{q} \rightarrow chamomile$  $b\bar{a}dar\bar{u}\check{q} \rightarrow sweet basil$  $b\bar{a}d\bar{a}ward \rightarrow giant thistle$  $b\bar{a}dirna\check{a}b\bar{u}ya\bar{h} \rightarrow$  lemon balm  $bahman \rightarrow sea lavender$ *bahman abya* $d \rightarrow$  sea lavender, white *bahman ahmar*  $\rightarrow$  sea lavender, red  $bahman\bar{a}n \rightarrow sea lavenders, two$ *bahūr maryam* → cyclamen baid  $\rightarrow egg$ *baid an-na*' $\bar{a}m \rightarrow \text{ostrich egg}$  $bal\bar{a}dur \rightarrow marking nut$  $balah \rightarrow date$  $balas\bar{a}n \rightarrow balm$  $balīlağ \rightarrow$  myrobalan, beleric  $ball\overline{u}t \rightarrow acorn$  $b\bar{a}n \rightarrow ben$  $banafsağ \rightarrow violet$ banafsağ 'askarī  $\rightarrow$  'Askar violet  $ban\check{q} \rightarrow henbane$ *banğ abya* $d \rightarrow$  henbane, white  $b\bar{a}q\bar{l}l\bar{a} \rightarrow broad bean$ *baqla* ( $hamq\bar{a}$ )  $\rightarrow$  purslane  $ba'r ad-dabb \rightarrow lizard droppings$  $ba'r al-ganam \rightarrow cattle's dung$  $barb\bar{a}r\bar{i}s \rightarrow barberrv$  $barn\bar{i} \rightarrow date, exquisite$ baršiyāwušān → maidenhair bārzad → galbanum  $basal \rightarrow onion$ basbāsa → mace  $basb/f\bar{a}yi\check{g} \rightarrow polypody$ basfāyiğ fustuqī  $\rightarrow$  polypody, pistachio-coloured  $basta\check{q} \rightarrow frankincense$ *baul aş-şibyān*  $\rightarrow$  children's urine  $bauraq \rightarrow borax$ *bauraq arman* $\overline{i} \rightarrow$  Armenian borax bayād (al-)baid  $\rightarrow$  egg white *biranğ* → embelia *bittīh*  $\rightarrow$  musk melon  $bitt\bar{l}h$  filast $\bar{l}n\bar{l} \rightarrow Palestinian$  melon *bittīh hindī*  $\rightarrow$  Indian musk melon  $bitt\bar{t}h$  raqq $\bar{t} \rightarrow \text{Raqqa}$  melon  $bizrkattan \rightarrow linseed$  $bizrgatuna \rightarrow fleawort$ bundug hindī  $\rightarrow$  Indian hazelnut *busr*  $\rightarrow$  date, unripe *busr ğaisuwān* → Ğaisuwān date *bussad*  $\rightarrow$  coral, red  $butm \rightarrow terebinth$  $b\bar{u}z\bar{i}d\bar{a}n \rightarrow$  green-winged orchid bzğy 291, 297, 367

 $\underline{d}ahab \ ibr\overline{i}z \rightarrow gold, pure$ dam al-ahawain  $\rightarrow$  dragon's blood  $d\bar{a}r fulful \rightarrow \log pepper$  $d\bar{a}r s\bar{n}\bar{n} \rightarrow cinnamom$  $dar\bar{a}r\bar{i}h \rightarrow cantharides$  $dar\bar{u}na\check{g} \rightarrow great \ leopard's \ bane$  $dar\bar{u}na\check{g}r\bar{u}m\bar{i} \rightarrow Greek$  great leopard's bane  $difl\bar{a} \rightarrow oleander$ duhn ad- $dağağ \rightarrow$  chicken's grease  $d\bar{u}q\bar{u} \rightarrow carrot$  $durr\bar{a}\check{q} \rightarrow \text{francolin}$  $f\bar{a}kiha \rightarrow fruits$ fanğankušt → agnus castus *fānī₫* → candy  $f\bar{a}n\bar{l}d haz\bar{a}'in\bar{l} \rightarrow \text{pomegranate-candy}$ conserve  $f\bar{a}n\bar{l}dsigz\bar{l} \rightarrow Sigist\bar{a}ncandy$ *farāsiyūn*  $\rightarrow$  horehound, white *farrūğ* → pullet  $f\bar{a}$ sarastīn  $\rightarrow$  bryony, white  $f\bar{a}\bar{s}r\bar{a} \rightarrow bryony, red$  $fatrasaliyun \rightarrow parsley$ faufal  $\rightarrow$  areca *fāwāniyā* → paeony fidda sāfiya  $\rightarrow$  silver, unalloyed fil/ranğmušk  $\rightarrow$  sweet basil fīlzahrah → lycium *f*ū → valerian  $f\bar{u}dan\check{q} \rightarrow pennyroyal$  $f\bar{u}dan\check{q} \check{q}abal\bar{\iota} \rightarrow mountain mint$  $f\bar{u}dan\check{q}$  nahr $\bar{l} \rightarrow$  watermint *fuğl* → radish *fulful (aswad)*  $\rightarrow$  pepper, black fulful abyad  $\rightarrow$  pepper, white *fulfulmuwaih*  $\rightarrow$  long pepper root  $fuqq\bar{a}^{\circ} \rightarrow beer$ *furbiyūn* → spurge *fustuq* → pistachio fūtanğ → pennyroyal  $f\bar{u}tan\check{q}$  bust $\bar{a}n\bar{l} \rightarrow garden pennyroyal$ fūtanǧ ǧabalī  $\rightarrow$  mountain mint  $f\bar{u}wa$  (' $\bar{i}d\bar{a}n$ )  $\rightarrow$  madder  $f\bar{u}wat as-sabb\bar{a}g\bar{n} \rightarrow dyer's madder$  $\check{g}a'da \rightarrow germander$ *ġāfit* → agrimony  $\check{g}amh\bar{u}r\bar{l} \rightarrow$  wine boiled down to one half  $\check{g}anb ad-da'n al-aiman → sheep's right$ side  $\check{q}antiy\bar{a}n\bar{a} \rightarrow gentian$ 

*ğantiyānā rūmī* → Greek gentian

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 $\dot{q}\bar{a}r \rightarrow bay laurel$  $\dot{q}ar\bar{a}$  s-samak  $\rightarrow$  fish-glue  $\dot{q}\bar{a}r\bar{l}q\bar{u}n \rightarrow agaric$  $\dot{q}\bar{a}r\bar{q}\bar{u}n abyad \rightarrow agaric, white$ *ăauz* → walnut  $\tilde{q}auz bauw\bar{a} \rightarrow nutmeg$ ğauz ğundum → orchil  $\check{g}auz al-qai' \rightarrow nux vomica$ *ğāwars* → millet *ğāwšīr* → opopanax  $\check{g}azar \rightarrow carrot$ ăirăīr → rocket  $\dot{g}$ ubairā'  $\rightarrow$  service *qudār sīnī*  $\rightarrow$  Chinese porcelain *ğullāb* → julep  $\check{g}$ ullanār  $\rightarrow$  pomegranate flower *ğullanār fārisī*  $\rightarrow$  Persian pomegranate flower  $\check{q}$ undbā/īdastar → castoreum habat al-hadīd  $\rightarrow$  iron oxide habat al-hadīd al-basrī → Basra iron oxide *habbat as-saudā*'  $\rightarrow$  cumin, black hāfir al-birḏaun → jade's hoof hağar arman $\overline{i} \rightarrow$  Armenian stone hağar ad-dam  $\rightarrow$  'bloodstone' hağar yahūdī  $\rightarrow$  Jews' stone  $hail \rightarrow cardamom$ *haiy al-'ālam*  $\rightarrow$  houseleek hāl (bauwā) → cardamom *halāl*  $\rightarrow$  porridge *halīlağ aswad*  $\rightarrow$  myrobalan, black *halīlağ kābulī*  $\rightarrow$  myrobalan, chebulic hall  $\rightarrow$  sesame oil  $hall \rightarrow vinegar$ *hall (al-)hamr*  $\rightarrow$  wine vinegar hamāmā → grape ivy *hamīr*  $\rightarrow$  dough, fermented ĥamr → wine  $hanzal \rightarrow colocynth$  $harbag \rightarrow hellebore$ harbag abyad  $\rightarrow$  hellebore, white harbag aswad  $\rightarrow$  hellebore, black hardal → mustard hardal abyad  $\rightarrow$  mustard, white harīr → silk  $harmal \rightarrow harmala$ harrūb ša'mī  $\rightarrow$  Syrian carob  $h\bar{a}\check{s}\bar{a} \rightarrow calamint$  $hasak \rightarrow caltrop$  $hašhaš \rightarrow poppy$ *hašhāš abyad*  $\rightarrow$  poppy, light-coloured hašhāš aswad  $\rightarrow$  poppy, dark-coloured

hašhāš aswad misrī  $\rightarrow$  Egyptian poppy, dark-coloured  $hass \rightarrow lettuce$  $hatm\bar{i} \rightarrow marshmallow$ hatmī ahdar  $\rightarrow$  marshmallow, 'green' hatmī(ya) abyad/baidā'  $\rightarrow$  marshmallow, pale-coloured  $haz\bar{a}^{2} \rightarrow globe thistle$ *hazaf at-tann* $\bar{u}r \rightarrow \text{potsherd}$ *hazārğašān* → bryony, red *hibr* → ink  $hilaf \rightarrow willow$ *hiltīt*  $\rightarrow$  asafoetida resin hilyaun → asparagus himmas  $\rightarrow$  chickpea *himmas abya*,  $\rightarrow$  chickpea, white himmas aswad  $\rightarrow$  chickpea, dark-coloured hindab $\bar{a}$   $\rightarrow$  endive *hindabā' murra*  $\rightarrow$  endive, bitter *hinnā*' → henna *hinta* → wheat  $h\bar{i}r\bar{i} \rightarrow gillyflower$ *hirwa*  $\rightarrow$  castor oil plant *hisrim*  $\rightarrow$  grape, unripe  $hiy\bar{a}r \rightarrow cucumber$ *hiyār šanbar*  $\rightarrow$  purging cassia hubbāzā → hollyhock ĥuḍaḍ → lycium  $h\bar{u}f\bar{a}qist\bar{u}d\bar{a}s \rightarrow$  'hypocistis' *hūlanǧān* → galingale hulba → fenugreek hulba ša'mīya  $\rightarrow$  Syrian fenugreek humāhan → agate ňummād → sorrel hummād barrī  $\rightarrow$  sorrel, wild  $hund\bar{q}\bar{q}\bar{n} \rightarrow condite$ *hun<u>t</u>ā →* asphodel  $hurf \rightarrow garden peppercress$  $hurn\bar{u}b \rightarrow carob$ hurnūb nabatī → Nabataean carob *hurnūb ša'mī*  $\rightarrow$  Syrian carob *hurram* → bean hurū' al-hamām → pigeon's droppings husyatā d-da'n  $\rightarrow$  sheep's testicles *ibran*ă → embelia *ibrană kābulī* → Kabul embelia  $ibr\bar{s}am \rightarrow silk cocoon$  $idhir \rightarrow citronella$ 

iğğāş → plum iğğāş ḥulwānī → Ḥulwān plum ihlīlağ → myrobalan ihlīlağ asfar → myrobalan, yellow *ihlīlağ aswad* → myrobalan, black *ihlīlağ aswad hindī*  $\rightarrow$  Indian myrobalan, black *ihlīlağ kābulī*  $\rightarrow$  myrobalan, chebulic *iklīl al-malik*  $\rightarrow$  melilot *ilk*  $\rightarrow$  mastic ʻilk al-anbāț → Nabataean gum *ilk rūmī*  $\rightarrow$  Greek mastic *`inab* → grape *inab at-ta lab*  $\rightarrow$  nightshade *infahat arnab*  $\rightarrow$  hare's rennet infahat zaby  $\rightarrow$  gazelle's rennet iqlimiya  $\rightarrow$  cadmia  $iql\bar{l}miy\bar{a}^{\prime}addahab/dahab\bar{l} \rightarrow slag, auric$ iqlimiya al-fidda/fiddi  $\rightarrow$  slag, argentic  $\bar{i}ris\bar{a} \rightarrow \text{water flag}$ isb/fidaă (ar-rașaș)  $\rightarrow$  ceruse  $isb\bar{i}db\bar{a}\check{g}a \rightarrow$  bouillon, thick *iskanğubīn* → oxymel iskanğubīn al-'asal  $\rightarrow$  sour-honey *isqīl* → squill *itmid* → stibium  $iz\bar{a}m b\bar{a}liya \rightarrow bones, decayed$  $kab\bar{a}ba \rightarrow cubeb$  $kabar \rightarrow caper$ kabīkağ → Asiatic crowfoot kadar  $\rightarrow$  pandanus kādī → pandanus  $k\bar{a}f\bar{u}r \rightarrow \text{camphor}$ kāfūr fanşūrī → Fanşūr camphor  $kahrub\bar{a}' \rightarrow amber$  $ka^{k} \rightarrow biscuit$ kākanğ → alkekengi  $kam\bar{a}dariy\bar{u}s \rightarrow wall germander$  $kam\bar{a}f\bar{i}t\bar{u}s \rightarrow \text{ground pine}$ kammūn → cumin kammūn kirmānī → Kerman cumin  $kankarzad \rightarrow artichoke gum$  $karafs \rightarrow celery$ karafs nabatī  $\rightarrow$  Nabataean celery  $karm \rightarrow vine$  $k\bar{a}rub\bar{a} \rightarrow amber$ karwiyā' → caraway  $k\bar{a}\check{s}im \rightarrow lovage$  $ka \tilde{s} u t \rightarrow flax dodder$ *kašūt baģdādī*  $\rightarrow$  Baghdad flax dodder  $kat\bar{i}r\bar{a}^{\prime} \rightarrow tragacanth$ kauz kundum  $\rightarrow$  orchil  $kazm\bar{a}za\check{q} \rightarrow Oriental tamarisk$  $kibr\bar{l}t \rightarrow sulphur$ *kibrīt abya*d  $\rightarrow$  sulphur, whitish  $kirsinna \rightarrow vetch$  $kuhl \rightarrow kohl$ kuhl šalwadī  $\rightarrow$  Šalwad kohl

kulyatā d-da'n  $\rightarrow$  sheep's kidneys  $kummatr\bar{a} \rightarrow pear$ *kundur*  $\rightarrow$  frankincense *kundur dakar*  $\rightarrow$  Oriental frankincense *kundus*  $\rightarrow$  baby's breath kundus abyad  $\rightarrow$  baby's breath, white  $kurkum \rightarrow curcuma$  $kurr\bar{a}t \rightarrow leek$  $kurunb \rightarrow cabbage$  $kus/zb/fara \rightarrow coriander$  $laban \rightarrow milk$ *laban ğāriya*  $\rightarrow$  maid's milk laban halīb  $\rightarrow$  milk, fresh *laban (al-)mā*'*iz*  $\rightarrow$  goatmilk *laban an-nisā*'  $\rightarrow$  mothers' milk *laban aš-šāh*  $\rightarrow$  sheepmilk laban al-utun  $\rightarrow$  ass's milk *lādan* → ladanum *lādan qubrusī* → Cyprian ladanum *lahm samīn*  $\rightarrow$  meat, fat  $lakk \rightarrow lac$  $lauz \rightarrow almond$ *lauz hulw*  $\rightarrow$  almond, sweet *lauz murr*  $\rightarrow$  almond, bitter  $l\bar{a}zward \rightarrow lapis lazuli$ *lihyat at-tais*  $\rightarrow$  salsify *līmū* → lemon *lisān al-ʿaṣāfīr* → common ash *lisān al-hamal*  $\rightarrow$  plantain *lisān* ( $a\underline{t}$ -) $\underline{t}aur \rightarrow borage$ *lisān a<u>t</u>-<u>t</u>aur al-<u>ğ</u>abalī → mountain borage lubān* → olibanum  $lub\bar{a}n \, \underline{d}akar \rightarrow Oriental \, frankincense$  $l\bar{u}biy\bar{a}$ '  $ahmar \rightarrow kidney bean, red$ *lubnā abya* $d \rightarrow$  amber, white  $luff\bar{a}h \rightarrow mandrake$  $lu'lu' \rightarrow pearl$  $m\bar{a}^{2} \rightarrow water$  $m\bar{a}$ ' 'adb  $\rightarrow$  water, fresh  $m\bar{a}$  bārid  $\rightarrow$  water, cold  $m\bar{a}$ '  $f\bar{a}tir \rightarrow$  water, tepid  $m\bar{a}^{\circ} al$ - $\check{q}ubn \rightarrow$  cheese-water  $m\bar{a}$  hārr  $\rightarrow$  water, hot  $m\bar{a}$ ' al-matar  $\rightarrow$  rainwater  $m\bar{a}$ '  $qar\bar{a}h \rightarrow$  water, limpid  $m\bar{a}$ ' sāfin  $\rightarrow$  water, clear  $m\bar{a}h\bar{z}ahrah \rightarrow cocculus$  $mahlab \rightarrow mahaleb$  $mahm\bar{u}da \rightarrow scammony$ *mahmūda antākī*  $\rightarrow$  Antioch scammony  $mai'a \rightarrow storax$ *mai*'a *s* $\bar{a}$ '*i*la  $\rightarrow$  storax, liquid *maibah*  $\rightarrow$  quince wine

*maibahūša*  $\rightarrow$  Greek spikenard *maifuhtağ*  $\rightarrow$  wine boiled down to one quarter  $mais\bar{a}b \rightarrow juice, mixed$ *maisūsan*  $\rightarrow$  iris wine *maiwīzağ* → larkspur  $m\bar{a}m\bar{r}\bar{a}n \rightarrow \text{greater celandine}$  $m\bar{a}m\bar{i}r\bar{a}n\,\bar{s}\bar{i}n\bar{i}$   $\rightarrow$  Chinese greater celandine  $m\bar{a}m\bar{i}t\bar{a} \rightarrow horn poppy$ marārat al-bagar  $\rightarrow$  oxgall marārat al-bāzī  $\rightarrow$  falcon's gall marārat al-hağal  $\rightarrow$  quail's gall marārat al-kurkī  $\rightarrow$  crane's gall marārat aš-šabbūt  $\rightarrow$  carp's gall marārat al-'uqāb  $\rightarrow$  eagle's gall *marmāhūz*  $\rightarrow$  marjoram, wild  $m\bar{a}rqa\check{s}\bar{\iota}t\bar{a} \rightarrow marcasite$  $marqašīta dahabī \rightarrow marcasite, 'golden'$  $martak \rightarrow litharge$  $marw \rightarrow marjoram$ , wild marw abyad  $\rightarrow$  marjoram, wild white marzan $\check{q}\bar{u}\check{s} \rightarrow$  marjoram, sweet  $m\bar{a}\bar{s} \rightarrow mung bean$ mashaq $\bar{u}$ niy $\bar{a} \rightarrow g$ lass-slag  $mastak\bar{a} \rightarrow mastic$  $m\bar{a}zariy\bar{u}n \rightarrow mezereon$  $milh \rightarrow salt$ *milh* al-'ağīn  $\rightarrow$  salt cake *milh* dar'ānī  $\rightarrow$  salt, white *milh hind* $\overline{i} \rightarrow$  Indian salt *milh naft* $\overline{i}$   $\rightarrow$  naphthalene *misann ğadīd*  $\rightarrow$  whetstone, new  $misk \rightarrow musk$ *misk tibit* $\overline{i} \rightarrow$  Tibetan musk mišmiš hurāsānī  $\rightarrow$  Hurāsān apricot  $m\bar{u} \rightarrow spignel$  $mu\dot{q}\bar{a}\underline{t} \rightarrow \text{glossostemon root}$  $mu\dot{q}\bar{a}\underline{t} abyad \rightarrow glossostemon root, white$  $muql \rightarrow bdellium mukul$ *muql azraq*  $\rightarrow$  bdellium africanum muql al-yahūd  $\rightarrow$  bdellium  $m\bar{u}rd\bar{a}na\check{q} \rightarrow myrtle$ murdāsanā  $\rightarrow$  litharge murdāsanğ dahabī  $\rightarrow$  litharge of gold  $murr \rightarrow myrrh$  $murr\bar{i} \rightarrow garum$ murrī nabatī  $\rightarrow$  Nabataean garum *mutallat*  $\rightarrow$  wine boiled down to one third *muzauwara*  $\rightarrow$  vegetable stuff  $nab\bar{l}d\,qi\bar{s}mi\bar{s}\bar{l} \rightarrow currant$  wine

 $nabig dismiss \rightarrow current wine nabig tamri \rightarrow date wine nabig az-zabib/zabibi \rightarrow raisin wine$ 

 $nab\bar{l}d az-zab\bar{l}b wal-'asal \rightarrow raisin wine,$ honeyed  $nabiq \rightarrow lote$  $nammam \rightarrow thyme, wild$  $na'na' \rightarrow mint$  $n\bar{a}nhaw\bar{a}h \rightarrow visnaga$ nārdīn → nard  $n\bar{a}rd\bar{i}n iql\bar{i}t\bar{i} \rightarrow Greek spikenard$ narğis → narcissus  $n\bar{a}rmu\bar{s}k \rightarrow pomegranate$  $naš\bar{a}^{2} \rightarrow starch$  $natr\bar{u}n \rightarrow natron$  $n\bar{l} \rightarrow indigo$  $n\bar{l}an\check{q} \rightarrow lilac$  $n\bar{l}\bar{u}far \rightarrow nenuphar$ *nuhāla* → bran  $nuhas muhraq \rightarrow copper, oxidized$  $n\bar{u}ra \rightarrow lime$  $nu/\bar{u}\bar{s}\bar{a}dir \rightarrow sal ammoniac$  $n\bar{u}$ šādir maʿdinī  $\rightarrow$  ammonium chloride  $n\bar{u}$ šādir masnūʻ  $\rightarrow$  ammonium hydroxide  $qadmiy\bar{a}^{2} \rightarrow cadmia$ *qais* $\bar{u}m \rightarrow$  southernwood  $qalqad\bar{s} \rightarrow vitriol, white$  $qalqant \rightarrow vitriol, green$  $qalqatar \rightarrow vitriol, yellow$  $qalqatar \rightarrow$  iron sulphate  $qant\bar{u}riy\bar{u}n \rightarrow centaury$  $qant\bar{u}riy\bar{u}n daq\bar{q} \rightarrow small centaury$  $q\bar{a}qiy\bar{a} \rightarrow \text{gum-senegal}$  $q\bar{a}qull\bar{a} \rightarrow salsola$  $q\bar{a}qulla$  (kib $\bar{a}r$ )  $\rightarrow$  grains of paradise  $q\bar{a}qulla sig\bar{a}r \rightarrow Malabar cardamom$  $qar' \rightarrow gourd$  $qar' hulw \rightarrow gourd, sweet$  $qaranful \rightarrow clove$  $qaraz \rightarrow babul$  $qardam\bar{a}n\bar{a} \rightarrow caraway$ , wild *qarn aiyal*  $\rightarrow$  staghorn  $qart\bar{a}s \rightarrow papyrus$ *qarțās miṣrī* → Egyptian papyrus  $qasab \rightarrow reed$ *qasab ad-darīra*  $\rightarrow$  lemon grass  $qasb \rightarrow date$ , hard dry  $qataf \rightarrow$  garden orache  $q\bar{a}tir \rightarrow dragon's blood$  $qatran \rightarrow tar$ , coniferous  $qilqil \rightarrow pomegranate, wild$  $qily \rightarrow potash$ qinbīl → kamala  $qinna \rightarrow galbanum$  $qirfa \rightarrow canella$ *qišmiš* → currant  $qitt\bar{a}^{'} \rightarrow$  serpent melon

*qittā' al-himār*  $\rightarrow$  serpent melon, wild  $qult \rightarrow saxifrage$  $qurtum \rightarrow safflower$  $qust \rightarrow alecost$ qust bahrī  $\rightarrow$  'sea' alecost qust hulw  $\rightarrow$  alecost, sweet *qust murr*  $\rightarrow$  alecost, bitter  $qu s \bar{u} r al-bai d \rightarrow egg shells$  $qutn \rightarrow \text{cotton}$  $r\bar{a}$ *ib*  $\rightarrow$  curd  $raih\bar{a}n \rightarrow$  sweet basil  $ramad \rightarrow ashes$ ramād al-'agārib  $\rightarrow$  scorpions' ashes *ramād as-saratānāt an-nahrīya*  $\rightarrow$  crayfish ashes rāmik → ramie *ra's ad-da'n*  $\rightarrow$  sheep's head  $rašad \rightarrow peppergrass$  $r\bar{a}\check{s}an \rightarrow \text{elecampane}$ rasās aswad muhraq  $\rightarrow$  lead, black oxidized  $ratba \rightarrow lucerne$  $r\bar{a}t\bar{n}a\check{g} \rightarrow pine resin$  $rattah \rightarrow$  Indian hazelnut  $r\bar{a}wand \rightarrow rhubarb$  $r\bar{a}wand s\bar{n}\bar{n} \rightarrow Chinese rhubarb$  $r\bar{a}ziq\bar{i} \rightarrow jasmine oil$ rāziyānağ → fennel *ri'at at-ta'lab*  $\rightarrow$  fox lung  $r\bar{l}b\bar{a}s \rightarrow ribes$  $r\bar{v}wand \rightarrow rhubarb$  $r\bar{i}wand s\bar{i}n\bar{i} \rightarrow Chinese rhubarb$  $ruh\bar{a}m \rightarrow marble$ *rummān* → pomegranate *rummān barrī*  $\rightarrow$  pomegranate, wild  $r\bar{u}sahta\check{q} \rightarrow copper, oxidized$  $sa`afa \rightarrow palm-leaf$  $s\bar{a}b\bar{a}bak \rightarrow dog's violet$  $šabb \rightarrow alum$ *šabb al-humra*  $\rightarrow$  alum from ruddy earth šabb yamānī → Yemenite alum sabir  $\rightarrow$  aloe sabir suqūtarī/usqūtarī  $\rightarrow$  Socotra aloe  $sabistan \rightarrow sebesten$  $sad\bar{a}b \rightarrow rue$  $s\bar{a}da\check{a} \rightarrow laurel$ sāḏaǧ hindī → Indian laurel  $š\bar{a}dana\check{g} \rightarrow haematite$ safarğal → quince  $š\bar{a}h \ ball\bar{u}t \rightarrow sweet \ chestnut$  $š\bar{a}hasfaram \rightarrow$  sweet basil *šahdānağ* → marijuana  $\check{s}ahm \rightarrow fat$ 

*šahm al-batt*  $\rightarrow$  duck's grease *šahm ad-da* $\tilde{q}a\tilde{q} \rightarrow$  chicken's grease *šahm hinz* $\overline{i}r \rightarrow pig's fat$ šaļm kulā l-mā iz  $\rightarrow$  goat's suet *šahm kulyatai d-da'n*  $\rightarrow$  sheep's suet šaļm al-mā'iz  $\rightarrow$  goat's fat  $š\bar{a}htarag \rightarrow fumitory$  $\check{sailam} \rightarrow darnel$  $\check{s}a\check{i}r \rightarrow barley$  $\check{s}a\check{\imath}rabyad \rightarrow barley, white$ sakabīnağ → sagapenum sakanğubīn  $\rightarrow$  oxymel salīha → cassia šam<sup>°</sup> → wax  $šam'abyad \rightarrow wax, white$  $\check{s}am'asfar \rightarrow wax, yellow$  $samak \rightarrow fish$  $sam\dot{g}$  ('arabī)  $\rightarrow$  gum-arabic *samg* (al-)butm  $\rightarrow$  turpentine samġ fārisī  $\rightarrow$  'Persian gum' *samġ al-kankar*  $\rightarrow$  artichoke gum  $sam\overline{i}d \rightarrow semolina$  $samn \rightarrow ghee$ samn (al-)bagar  $\rightarrow$  cow's ghee sanā → senna sanā makkī → Meccan senna  $san\bar{a}m al$ - $\check{g}amal \rightarrow$  camel's hump sanaubar  $\rightarrow$  pine sandal  $\rightarrow$  sandalwood sandal abyad  $\rightarrow$  sandalwood, white sandal abyad maqāsīrī  $\rightarrow$  Maqāsīr sandalwood, white sandal ahmar  $\rightarrow$  sandalwood, red sandal ahmar maqāsīrī  $\rightarrow$  Maqāsīr sandalwood, red *şandal maqāşīrī* → Maqāşīr sandalwood  $s\bar{a}q al-baqar \rightarrow cow's shank$ saqamūniyā → scammony saqamūniyā antākī  $\rightarrow$  Antioch scammony  $\check{s}ar\bar{a}b \rightarrow \check{w}ine$ *šarāb muʿassal mufauwah*  $\rightarrow$  honey wine, spiced *šarāb rai*hānī  $\rightarrow$  wine, aromatic *sarafān*  $\rightarrow$  date, heavy red sarahs  $\rightarrow$  male fern *šarās al-asākifa*  $\rightarrow$  'shoemaker asphodel' saratān bahrī  $\rightarrow$  lobster sarmaq  $\rightarrow$  orache  $sarw \rightarrow cypress$  $sasāliyūs \rightarrow moon carrot$ *šašbandān*  $\rightarrow$  bryony, white *šašą* $\bar{a}$ *qul*  $\rightarrow$  parsnip  $sa'tar \rightarrow savory$ sausan  $\rightarrow$  iris

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sausan abyad  $\rightarrow$  iris, white sausan  $\bar{a}$ sm $\bar{a}$ n $\bar{q}$  $\bar{u}$ n $\bar{i} \rightarrow$  iris, sky-coloured sausan  $\bar{a}z\bar{a}d a\bar{b}yad \rightarrow iris$ , wild white sausan  $r\bar{a}ziq\bar{i} \rightarrow R\bar{a}ziq\bar{i}$  iris  $sawiq \rightarrow flour$ *šibi<u>tt</u> → dill*  $\tilde{s}h \rightarrow wormwood$  $š\bar{i}h$  turk $\bar{i} \rightarrow$  Turkish wormwood  $silq \rightarrow beet$ simsim  $\rightarrow$  sesame  $\tilde{s}ra\check{q} \rightarrow sesame oil$  $s\bar{i}tara\bar{q} \rightarrow garden cress$ *šīțarağ hindī*  $\rightarrow$  Indian garden cress *siyāh dāwarān*  $\rightarrow$  bryony, black  $su'd \rightarrow cyperus$ *șufrat (al-)baid(a)* → egg yolk  $suhalat ad-dahab \rightarrow gold filings$  $suhalat al-fidda \rightarrow silver filings$  $suhalat al-yaqut al-ahmar \rightarrow ruby filings$  $šuk\bar{a}\bar{a} \rightarrow bull thistle$  $sukkar \rightarrow sugar$ sukkar abyad  $\rightarrow$  sugar, white sukkar ahmar  $\rightarrow$  sugar, red sukkar hūzī → Hūzistān sugar sukkar ša'mī  $\rightarrow$  Syrian sugar sukkar tabarzad  $\rightarrow$  sugar candy, white sukkar al-'ušar  $\rightarrow$  yercum sugar  $sulafa \rightarrow wine$ sulafat (al-)'inab  $\rightarrow$  grape wine  $summaq \rightarrow sumach$ *summāq ša'mī*  $\rightarrow$  Syrian sumach sunbul  $(at-t\bar{b}) \rightarrow$  Indian spikenard sunbul hindī  $\rightarrow$  Indian spikenard sunbul  $r\bar{u}m\bar{i} \rightarrow Greek spikenard$  $\tilde{suniz} \rightarrow \text{cumin, black}$  $s\bar{u}rin\check{g}\bar{a}n \rightarrow$  meadow saffron  $s\bar{u}s \rightarrow liquorice$  $tab\bar{a}s\bar{i}r \rightarrow tabasheer$  $tab\bar{a}\bar{s}\bar{i}r abyad \rightarrow tabasheer, white$ taģīrā 257 *taihūğ* → partridge  $taiyil \rightarrow dog's grass$  $tal' \rightarrow palm spadix$  $tal\check{q} \rightarrow ice$  $talq \rightarrow talc$  $tamr \rightarrow date$ *tamr hairūn* → Hairūn date

 $tal' \rightarrow palm spadix$   $tal\check{g} \rightarrow ice$   $tal\check{g} \rightarrow talc$   $tamr \rightarrow date$   $tamr hairūn \rightarrow Hairūn date$   $tamr ṣaihānī \rightarrow Medina date$   $tamrhindī \rightarrow tamarind$   $tamrhindī makkī \rightarrow Meccan tamarind$   $taran\check{gub}n \rightarrow alhagi$   $taratītī \rightarrow Bengal quince$  $tarb al-mā'iz \rightarrow goat's caul$   $tarf\bar{a}^{'} \rightarrow tarfa$  $til\bar{a}^{2} \rightarrow wine$  $t\bar{l}n \rightarrow fig$  $t\bar{l}n arman\bar{l} \rightarrow Armenian bole$  $t\bar{l}n asfar \rightarrow fig, yellow$  $t\bar{t}n$  aswad šāhanǧ $\bar{t}r \rightarrow$  'king fig', black tīn hulwānī → Hulwān fig  $t\bar{t}n maht\bar{u}m \rightarrow sealing bole$  $t\bar{t}n q\bar{t}m\bar{u}liy\bar{a} \rightarrow cimolite$  $t\bar{t}n qubrus\bar{t} \rightarrow Cyprian bole$  $t\bar{i}n r\bar{u}m\bar{i} \rightarrow Greek bole$  $t\bar{t}n\,\bar{s}\bar{a}han\check{q}\bar{t}r \rightarrow 'king\,fig'$  $t\bar{u}b\bar{a}l al-had\bar{u}d \rightarrow iron scoriae$  $t\bar{u}b\bar{a}l an-nuh\bar{a}s \rightarrow copper scoriae$  $t\bar{u}dar\bar{i} \rightarrow wallflower$ tū₫arī abyaḍ → wallflower, white  $t\bar{u}dar\bar{i}ahmar \rightarrow wallflower, red$  $tuff\bar{a}h \rightarrow apple$  $tuhlub \rightarrow$  water moss  $turbad \rightarrow turpeth$ turbad abyad  $\rightarrow$  turpeth, white turbad ağwaf  $\rightarrow$  turpeth, 'hollow' *turmus*  $\rightarrow$  lupine  $t\bar{u}t \rightarrow mulberry$  $t\bar{u}t\,\check{s}a\,\check{m}\bar{\iota}$   $\rightarrow$  Syrian mulberry  $t\bar{u}tiy\bar{a}^{'} \rightarrow tutty$  $t\bar{u}tiy\bar{a}$ ' hind $\bar{i} \rightarrow$  Indian tutty  $t\bar{u}tiy\bar{a}$ ' kirmānī  $\rightarrow$  Kerman tutty  $t\bar{u}tiy\bar{a}$ '  $tab\bar{a}s\bar{i}r\bar{i} \rightarrow tutty, white-coloured$ 

 $\hat{u}d \rightarrow \text{lignaloes}$  $i\bar{u}d$  hind $\bar{i} \rightarrow$  Indian lignaloes  $\hat{u}d as - sal\bar{v}b \rightarrow paeony$  $i\bar{u}d$  sanfi  $\rightarrow$  Sanf lignaloes ufurbiy $\bar{u}n \rightarrow spurge$  $unfaq \rightarrow olive, unripe$  $unn\bar{a}b \rightarrow jujube$ *ʿunnāb ǧurǧānī →* Ǧurǧān jujube *'unsul*  $\rightarrow$  squill  $ur\bar{u}q (aş-sabbāgīn/aş-sibg) \rightarrow turmeric$ *ušna* → usnea  $ušnan \rightarrow lye$ ušnān aḥḍar → lye, green  $usq\bar{u}l\bar{u}findriy\bar{u}n \rightarrow rusty back fern$  $uššaq/q \rightarrow ammoniacum$  $u\check{s}\check{s}aq \rightarrow gum ammoniac$  $ust\bar{u}h\bar{u}dus \rightarrow French lavender$ utruğğ → citron

wabar al-arnab  $\rightarrow$  hare's fur wada'  $\rightarrow$  mussel shell wağğ  $\rightarrow$  sweet flag ward  $\rightarrow$  rose ward ahmar  $\rightarrow$  rose, red ward fārisī  $\rightarrow$  Persian rose wasma  $\rightarrow$  indigo  $yabr\bar{u}h \rightarrow mandrake$ yaqțīn → pumpkin  $y\bar{a}q\bar{u}t ahmar \rightarrow ruby$ yāsamīn → jasmine *zabad al-bahr*  $\rightarrow$  sepiolite zabad al-qawārīr  $\rightarrow$  glass-slag  $zab\bar{b} \rightarrow raisin$ *zabīb ğabalī*  $\rightarrow$  stavesacre  $zab\bar{i}b r\bar{a}ziq\bar{i} \rightarrow R\bar{a}ziq\bar{i} raisin$ za farān  $\rightarrow$  saffron  $z\bar{a}\check{q} \rightarrow vitriol$  $z\bar{a}\check{g} a sfar \rightarrow vitriol, yellow$  $z\bar{a}\check{g} basr\bar{i} \rightarrow Basra vitriol$  $z\bar{a}\check{g}misr\bar{i} \rightarrow Egyptian vitriol$ *zait*  $\rightarrow$  olive oil *zanbaq* (al-) $b\bar{l}d \rightarrow jasmine oil, white$ zanğabīl → ginger  $zan \check{a} ab \bar{l} s \bar{l} n \bar{l} \rightarrow Chinese ginger$  $zar\bar{a}wand \rightarrow birthwort$ *zarāwand mudahraš*  $\rightarrow$  birthwort, 'rolled' *zarāwand tawīl*  $\rightarrow$  birthwort, 'long'  $zarnab \rightarrow orache$  $za^{t}ar \rightarrow savory$ *zaufarā*  $\rightarrow$  globe thistle  $zi'baq \rightarrow mercury$ *zi'baq maqt* $\bar{u}l \rightarrow$  mercury, 'deadened' *zibl al-hamām*  $\rightarrow$  pigeon's droppings  $zift \rightarrow pitch$ *zift rūmī*  $\rightarrow$  Greek pitch  $zin \check{gar} \rightarrow ver digris$  $z\bar{i}rb\bar{a}\check{q}$  muhallan  $\rightarrow$  spoon-meat, sweetened  $z\bar{i}rb\bar{a}\check{g}a \rightarrow$  spoon-meat *zirišk*  $\rightarrow$  barberry *zirišk*īya  $\rightarrow$  barberry relish  $zirnih \rightarrow arsenic$ zirnīḥ aḥmar → realgar *zirnīh aşfar*  $\rightarrow$  orpiment *zirr ward*  $\rightarrow$  rosebud  $zubd \rightarrow butter$ zūfā yābis → hyssop  $zu\check{g}a\check{g}\check{g}\check{g}amiliam$  Syrian glass *zurunbā* $d \rightarrow$  zerumbet

# 2. Pathology and Anatomy

# a. English—Arabic

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# b. Arabic-English

 $abd\bar{a}n \rightarrow body(ies)$   $abd\bar{a}n \, sulba \rightarrow constitutions, robust$   $a'd\bar{a}' \rightarrow limb(s)$   $adan \rightarrow damage$   $`addat al-kalb al-kalib \rightarrow bite of rabid dog$   $adw\bar{a}r \rightarrow paroxysms$   $agf\bar{a}n \rightarrow eyelids$   $agras \rightarrow ulcerations$   $ahlat \rightarrow humours$   $ahlat jalīza \rightarrow humours, tenacious$  $ahlat raqīqa \rightarrow humours, delicate$  'ain → eye a'lāl bārida → disorders, cold alam → ache alam bi-maq'ada → pain, rectal am'ā' → bowels amrād balģamīya → diseases, phlegmatic amrād hādda → diseases, acute amrād as-saudā'/saudāwīya → diseases, black-bilious amzāğ hārra → mixtures, hot  $amz\bar{a}\check{q}h\bar{a}rra \rightarrow tempers, hot$  $ana \rightarrow pubes$  $anf \rightarrow nose$ 'araq  $\rightarrow$  perspiration 'arag  $\rightarrow$  sweat arwah al-bawasīr  $\rightarrow$  cramps, haemorrhoidal arwāh as-sabal  $\rightarrow$  pannus, rheumy a'sāb  $\rightarrow$  nerves  $ašd\bar{a}q \rightarrow mouth$ , corners of  $ash\bar{a}n \rightarrow \text{fever}$ , those who are heated by  $asn\bar{a}n \rightarrow teeth$  $\bar{a}t\bar{a}r al$ - $\check{g}udar\bar{l} \rightarrow$  smallpox, traces of  $\bar{a}_{\bar{t}}\bar{a}r s\bar{u}d f\bar{i}l$ -wa $\check{g}h \rightarrow face, black marks on$  $atas \rightarrow thirst$  $au\check{g}\bar{a}$  al-'ain  $\rightarrow$  eye, pains in auǧāʿ bārida fī l-aḥšāʾ  $\rightarrow$  bowels, cold pains in  $au\tilde{g}\bar{a}^{\circ} al-kabid \rightarrow liver, pains in$  $au\check{q}a\check{q}aulan\check{q}iya \rightarrow pain(s), colical$  $au\check{q}\bar{a}`at-tih\bar{a}l \rightarrow$  spleen, pains in  $auram \rightarrow swelling(s)$  $aur\bar{a}m \rightarrow tumour(s)$ aurām al-'āna  $\rightarrow$  tumours, hypogastric aurām fī l-muntahā  $\rightarrow$  swellings, fully developed aurām al-ḥanǧara → tumours, laryngeal aurām hārra  $\rightarrow$  tumours, hot aurām hārra damawīya  $\rightarrow$  swellings, hot bloodshot  $aur\bar{a}m al-ma'ida \rightarrow tumours, gastric$ aurām mubtadi'a  $\rightarrow$  swellings, recent aurām mutazaiyida  $\rightarrow$  swellings, growing aurām ar-rahim  $\rightarrow$  tumours, uterine  $badan \rightarrow body(ies)$  $b\bar{a}h \rightarrow \text{potency, sexual}$  $bahaq \rightarrow lichen$ bahaq abyad  $\rightarrow$  lichen, 'white'  $bahaq aswad \rightarrow lichen, 'black'$  $bahar \rightarrow halitosis$  $bal\bar{a}\dot{q}im \rightarrow residues$ , phlegmy balġam → phlegm balġam ġalīz  $\rightarrow$  phlegm, tough balġam laziğ  $\rightarrow$  phlegm, viscid  $baq\bar{a}y\bar{a}$  *l*-hummay $\bar{a}t \rightarrow$  fevers, remnants of  $baq\bar{a}y\bar{a}r$ -ramad  $\rightarrow$  conjunctivitis, remnants of  $baras \rightarrow vitiligo$ baras abyad hadīt  $\rightarrow$  vitiligo, acute white  $bard \rightarrow coldness$ bard al-ahš $\bar{a}$   $\rightarrow$  bowels, coldness of *bard al-ğauf*  $\rightarrow$  belly, coldness of *bard al-ma*'*ida*  $\rightarrow$  stomach, coldness of  $b\bar{a}rid al-miz\bar{a}\check{g} \rightarrow cold-tempered$ 

 $basar \rightarrow sight$  $b\bar{a}s\bar{u}r \rightarrow haemorrhoids$  $batn \rightarrow belly$  $batr \rightarrow pimples$  $baul \rightarrow urine$ *baul ad-dam*  $\rightarrow$  urinating blood *baul al-midda*  $\rightarrow$  urinating purulent matter *baul salis*  $\rightarrow$  urine, trickling  $baw\bar{a}s\bar{i}r \rightarrow haemorrhoids$ bayad (fī l-'ain)  $\rightarrow$  albugo *bayād ģalīz*  $\rightarrow$  albugo, felty billat al-ma'ida  $\rightarrow$  moisture, gastric  $buh\bar{u}ha \rightarrow hoarseness$  $bur\bar{u}da \rightarrow coldness$ *burūz al-maq*'ada  $\rightarrow$  rectum, prolapse of  $but\bar{u}r \rightarrow blisters$  $but\bar{u}r \rightarrow pimples$ *dam min ǎirāha*  $\rightarrow$  wound, blood from dam min al-mag'ada  $\rightarrow$  bleeding, anal  $dam a \bar{s} - \bar{s} a \bar{r} \bar{a} \bar{y} \bar{n} \rightarrow arteries$ , blood from  $dam'a \rightarrow lachrymation$  $darba tusib al-a'da' \rightarrow organs,$ contusion of  $d\bar{i}d\bar{a}n f\bar{i}l$ -batn  $\rightarrow$  worms, intestinal  $d\bar{i}d\bar{a}n\,kib\bar{a}r \rightarrow$  worms, large  $dihn \rightarrow mind$ *dimāģ* → brain  $diyabita \rightarrow diabetes$  $dubail\bar{a}t \rightarrow lumps, soft$  $d\bar{u}d \rightarrow \text{worms}$  $du'f \rightarrow \text{frailty}$  $du'fal-basar \rightarrow sight, weakness of$  $du'fal-haš\bar{a} \rightarrow bowels, weakness of$  $du'fal-kabid \rightarrow debility, hepatic$  $du'f al-ma'ida \rightarrow debility, gastric$  $du'f q\bar{u}wa \rightarrow$  strength, lack of *fadl laziğ luʿābī*  $\rightarrow$  residue, viscid mucous faid rutūba  $\rightarrow$  moisture, superfluity of *fāliğ* → hemiplegia  $fam \rightarrow mouth$ *fam al-ma*'*ida*  $\rightarrow$  stomach, mouth of fasād al-laun  $\rightarrow$  complexion, bad fasād al-mizāğ → putridity, humoral fatq → hernia  $fud\bar{u}l \rightarrow residues$ fuḍūl laziğa → residues, viscid  $fut\bar{u}r \rightarrow feebleness$  $\check{g}abha \rightarrow forehead$  $\check{g}abr \rightarrow bones$ , setting of *ġalabat al-marār*  $\rightarrow$  biliousness, predominance of

 $\check{g}arab \rightarrow eruptions$ , scaly *ğarab* → mange ğarab 'atīq → eruptions, inveterate scaly ğarab ġalīz → mange, scurfy *ğarab mutaqarri*h hādd → mange, acute ulcerating  $\check{g}arab ratb \rightarrow$  eruptions, moist scaly  $\check{g}arab ratb \rightarrow mange, moist$ *ğarab yābis* → mange, dry  $\dot{q}a\dot{s}\bar{a}wa \rightarrow floaters$ *ġatayān* → nausea  $\dot{q}aty \rightarrow qualmishness$ *ġilaz al-ağfān* → eyelids, swollen  $\check{q}im\bar{a}$   $\rightarrow$  intercourse, sexual  $\check{a}udar\bar{i} \rightarrow smallpox$  $\check{g}um\bar{u}d midda \rightarrow matter, coagulated$ *ğušā*' *hāmid* → belching, acid *habb al-qar*  $\rightarrow$  flukes  $hafaq\bar{a}n \rightarrow palpitations$ hafaqān al-qalb  $\rightarrow$  heart, palpitations of hafaqān saudāwī  $\rightarrow$  palpitations, black-bilious  $h\bar{a}l \rightarrow condition$  $half \rightarrow back$  $h\bar{a}mm \rightarrow \text{smells, foul}$ ĥanāzīr → scrofula *hanāzīr saʿba*  $\rightarrow$  scrofula, severe harakat al-asnān  $\rightarrow$  teeth, loose  $har\bar{a}ra \rightarrow heat$ harāra fī s-sadr  $\rightarrow$  chest, heat in *harq an-nār*  $\rightarrow$  burns harr al-ahšā'  $\rightarrow$  bowels, heat of *hārr al-mizāğ*  $\rightarrow$  hot-tempered  $hasan \rightarrow kidney stones$  $hasba \rightarrow measles$  $hidda \rightarrow harshness$  $hifz \rightarrow memory$ *hifz as-sihha*  $\rightarrow$  health, preservation of *hikka*  $\rightarrow$  itch *hikkat* (al-'ain)  $\rightarrow$  eye, itchiness of  $h\bar{l}an f\bar{l} - wagh \rightarrow face, moles on$  $hilfa \rightarrow diarrhoea$ *hilfa safrāwīya*  $\rightarrow$  diarrhoea, yellow-bilious *hilt galiz*  $\rightarrow$  humours, tenacious hudb al-'ain  $\rightarrow$  eyelashes *hudra*  $\rightarrow$  discolouration, bluish-green hul̇́ūw al-maʿida → stomach, empty  $humm\bar{a} \rightarrow \text{fever(s)}$ *hummā l*-'ain  $\rightarrow$  fever, ophthalmic hummā hādda  $\rightarrow$  fever, acute  $humm\bar{a} l$ -kabid  $\rightarrow$  fever, hepatic hummā l-litāt  $\rightarrow$  gums, feverish *hummā mutatāwila*  $\rightarrow$  fever, prolonged

 $humm\bar{a} r-rib^{\circ} \rightarrow fever, quartan$ hummayāt  $\rightarrow$  fever(s) hummayāt 'atīga  $\rightarrow$  fevers, inveterate hummayāt balģamīya  $\rightarrow$  fevers, phlegmatic hummayāt ģair hādda  $\rightarrow$  fevers, nonacute hummayāt tawīla balģamīya  $\rightarrow$  fevers, long phlegmatic hummayāt tawīla saudāwīya  $\rightarrow$  fevers, long black-bilious *humra* → erythema  $humra \rightarrow redness$  $hur\bar{a}\check{q}\bar{a}t \rightarrow abscesses$ hurga fī l-'ain  $\rightarrow$  eye, burning sensations in *hurgat al-baul*  $\rightarrow$  sensations, burning urinary hurūğ aš-ša'r  $\rightarrow$  hair, growth of *husr*  $\rightarrow$  retention *hušūna fī* s-sadr  $\rightarrow$  chest, raucity in hušūnat al-hanğara  $\rightarrow$  throat, sore  $ibrada \rightarrow chill$ *ibtidā*'  $\rightarrow$  stages, early  $idrar \rightarrow urination$  $ihl\bar{l} \rightarrow urethra$ *ihtibās al-baul*  $\rightarrow$  urine, suppression of  $ihtilaf \rightarrow$  regurgitation *'ilal al-arhām*  $\rightarrow$  disorders, uterine *'ilal bārida*  $\rightarrow$  disorders, cold  $in^{i}\bar{a}z \rightarrow desire$ , sexual *inhilāl al-bațn*  $\rightarrow$  belly, laxity of *inhilāl at-tab*  $\rightarrow$  constitution, lax *insibāb al-marār*  $\rightarrow$  biliousness, downflow of *'irg an-nasā*  $\rightarrow$  sciatica  $ish\bar{a}l qad\bar{m} \rightarrow diarrhoea, long-standing$ *istifrāģ* → evacuation *istimr* $\bar{a}$   $\rightarrow$  digestion *istințāf al-atfāl*  $\rightarrow$  faeces, discharge of *istirhā' al-ağfān*  $\rightarrow$  eyelids, relaxation of *istirḥā' al-liṯāt* → gums, squashy *istirhā*' al-ma'ida  $\rightarrow$  stomach, laxity of *istirhā*' al-mag'ada  $\rightarrow$  rectum, flabbiness of istisqā' → dropsy *istisqā' luhamī*  $\rightarrow$  dropsy, membranous *istisqā*' ragqī  $\rightarrow$  dropsy, thin-watery *istițlāq al-bațn*  $\rightarrow$  disorder, abdominal i'tiqāl  $\rightarrow$  cramp  $i'y\bar{a}' \rightarrow fatigue$ *kabid hārra*  $\rightarrow$  liver, hot

kaimūsāt radī'a  $\rightarrow$  chymes, bad kalaf  $\rightarrow$  freckles  $karb \rightarrow anxiety$ kasr al-'izām wa-fash al-lahm  $\rightarrow$  bones, open fractures of *katifān*  $\rightarrow$  shoulders *katīr al-hiss*  $\rightarrow$  sensitivity to physical pain *kubr*  $at-tihal \rightarrow$  spleen, enlargement of  $kumna \rightarrow ptosis$  $lad^{\circ} \rightarrow$  skin, burning sensation on  $lad' \rightarrow stings$  $lahm \rightarrow tissue$ , fleshy *lahm rahw*  $\rightarrow$  tissue, soft  $laqwa \rightarrow paralysis$ , facial  $laun \rightarrow complexion$ *lihya*  $\rightarrow$  beard  $lita \rightarrow gums$  $m\bar{a}^{2} \rightarrow \text{eyewater}$  $m\bar{a}^{2} \rightarrow saliva$  $mabrudun martubun \rightarrow cold-moist$ temper, those who have  $mafasil \rightarrow joints$  $mafasil \rightarrow rheumatism$  $ma\check{q}ami$  al-'asab  $\rightarrow$  clusters, nervous mağāmi' al-'urū $q \rightarrow$  clusters, venous  $mags \rightarrow gripes$  $ma'ida \rightarrow stomach$ ma'ida bārida  $\rightarrow$  stomach, cold *ma*'*ida* da'*ī* $fa \rightarrow$  stomach, weak *ma*'*ida*  $h\bar{a}rra \rightarrow$  stomach, hot  $mal\bar{a}sat al-ma'ida \rightarrow stomach, soft$ *mālī*hūliyā → melancholia  $ma'q \rightarrow eye$ , inner corner of *marār asfar*  $\rightarrow$  yellow-biliousness  $mar\vec{i} \rightarrow oesophagus$  $martubun \rightarrow moist$  temper, those who have  $martub\bar{u}n mabrud\bar{u}n \rightarrow moist-cold$ temper, those who have  $masl\bar{u}l\bar{u}n \rightarrow consumption sufferers$ *mašy ad-dam*  $\rightarrow$  blood, increased afflux of  $mat\bar{a}na \rightarrow bladder$  $math\bar{u}l\bar{u}n \rightarrow$  spleen disease sufferers maudi al-bay $\overline{a}d \rightarrow$  spot, albugineous maudi' as-sa'fa  $\rightarrow$  area, scabious *mi* ad bārida ratba  $\rightarrow$  stomachs. cold-moist *midda*  $\rightarrow$  matter, purulent *minharān*  $\rightarrow$  nostrils *mirra saudā*'  $\rightarrow$  black bile *mizā* $\dot{a}$  (*al*-)*kabid*  $\rightarrow$  liver, humoral mixture in

*mizāğ al-ma'ida*  $\rightarrow$  stomach, humoral mixture in *mubalġamūn*  $\rightarrow$  phlegm, those who are affected by  $m\bar{u}sara\check{q} \rightarrow melanoma, chorioid$ muta'akkil  $\rightarrow$  area, decayed *mu*'*tadil al-mizāğ*  $\rightarrow$  well-tempered  $nafh \rightarrow flatulence$ *nafh al-ma`ida*  $\rightarrow$  flatulence, gastric  $n\bar{a}fid \rightarrow shivering$ naft 'asir al-buruz mun'aqid  $\rightarrow$  sputum, clotted and hard to cough up *naft ad-dam*  $\rightarrow$  expectoration, bloody *naft al-midda*  $\rightarrow$  coughing up purulent matter *nahw al-'āna*  $\rightarrow$  region, pubic  $nakha \rightarrow breath, smell of$  $namaš \rightarrow speckles$  $n\bar{a}r f\bar{a}ris\bar{i} \rightarrow Persian fire$  $nasl \rightarrow arrowhead(s)$  $n\bar{a}s\bar{u}r \rightarrow fistula(e)$ *natn al-ibt*  $\rightarrow$  armpits, smelly  $naw\bar{a}hin \rightarrow organs, adjacent$  $nawasir \rightarrow fistula(e)$  $nazf(ad-dam) \rightarrow bleeding$ *niqris*  $\rightarrow$  gout  $nisyan \rightarrow forgetfulness$  $nuf\bar{u}r al-asab \rightarrow nerves$ , inflamed  $nuqs\bar{a}n a\bar{s}-\bar{s}ahwa \rightarrow appetite, loss of$  $nus\bar{u}l \rightarrow arrowhead(s)$  $qad\bar{l}b \rightarrow penis$  $qai' \rightarrow vomiting$ *qai*  $dari \rightarrow$  vomiting, torrential *qai' safrāwī*  $\rightarrow$  vomiting, yellow-bilious *aalb*  $\rightarrow$  heart *gaml fī l-lihya*  $\rightarrow$  beard, lice in  $qamq\bar{a}m f\bar{i}$  *l*-lihya  $\rightarrow$  beard, parasites in *qarw ğāsī*  $\rightarrow$  hydrocele, indurate *qaulan* $\check{q} \rightarrow colic$ *qaulan* $\check{q}$ *i* $\bar{y}$ *ū* $n \rightarrow$  colic sufferers *qawābī* → tetter  $q\bar{l}a ba'd \check{s}aqqih\bar{a} \rightarrow hydrocele, burst$  $qiv\bar{a}m ad-dam \rightarrow haemorrhage$  $q\bar{u}b\bar{a}^{'} \rightarrow \text{tetter}$ audd $\bar{a}m \rightarrow \text{front}$  $aur\bar{u}h \rightarrow ulcers$  $qur\bar{u}h(al-ain) \rightarrow ulcers, ophthalmic$  $qur\bar{u}h$  al-am' $\bar{a}$ '  $\rightarrow$  ulcers, intestinal qurūh al-farğ  $\rightarrow$  vulva, ulcers of qurūh fī r-riğlain min qibal at-talğ  $\rightarrow$  feet, frostbite on

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qurūh fī l-yadain min qibal at-tal $\check{q} \rightarrow$ hands, frostbite on qurūh al-matāna  $\rightarrow$  ulcers, vesical  $qur\bar{u}hal-qad\bar{b} \rightarrow penis, ulcers in/of$ quru h ar-ra's  $\rightarrow$  head, ulcers of  $qur\bar{u}h al-udn \rightarrow ear$ , ulcers in  $q\bar{u}wa \, da' \bar{i}fa \rightarrow \text{strength}, \text{lacking}$ quwan qaulan $\check{q}_{\bar{i}} \rightarrow powers, colicky$ *rabw*  $\rightarrow$  asthma *ramad* (*al-'ain*)  $\rightarrow$  conjunctivitis *ramad* ' $at\bar{i}q \rightarrow conjunctivitis$ , inveterate *ramad hadī* $\underline{t} \rightarrow$  conjunctivitis, acute ramad harr  $\rightarrow$  conjunctivitis, hot  $ra's \rightarrow head$ ra'ša  $\rightarrow$  tremor  $rib' \rightarrow quartan$  $riğlan \rightarrow feet$  $r\bar{h} \rightarrow flatus(es)$ *riqqat al-hašā*  $\rightarrow$  bowels, softness of  $riy\bar{a}h \rightarrow flatus(es)$  $riyah \rightarrow$  wind, trapped *riyā*h *bārida*  $\rightarrow$  flux, cold rivāh al-bawāsīr  $\rightarrow$  cramps, haemorrhoidal  $ru^{i}\bar{a}f \rightarrow nosebleed$  $rut\bar{u}ba \rightarrow moisture$  $rutubat al-agfan \rightarrow eyelids, moist$ *rutūbat al-ma'ida*  $\rightarrow$  stomach, moistness of  $sabal \rightarrow pannus$ sabal 'atīq  $\rightarrow$  pannus, inveterate sabil al-matāna  $\rightarrow$  tube, urinary  $sadr \rightarrow chest$  $sa'fa \rightarrow scabies$  $sa'fa muzmina \rightarrow scabies, chronic$ sa fa ratba  $\rightarrow$  scabies, moist *sa*'*fa y* $\bar{a}$ *bisa*  $\rightarrow$  scabies, dry safra<sup>i</sup>  $\rightarrow$  yellow bile *safrāwīyūn*  $\rightarrow$  yellow bile, those who are affected by  $sahar \rightarrow insomnia$  $sah\check{g} \rightarrow abrasion(s)$  $šahwa \rightarrow appetite$ *šahwat at-tīn*  $\rightarrow$  geophagism  $\dot{s}aib \rightarrow ageing$  $sakta \rightarrow apoplexy$ *salābat al-kabid*  $\rightarrow$  liver, sclerosis of *salābat at-ți*h*ā*l  $\rightarrow$  spleen, sclerosis of salas al-baul  $\rightarrow$  urine, incontinence of  $samm \rightarrow poison(s)$  $sar' \rightarrow epilepsy$  $\check{s}a'r \rightarrow \text{eyelashes}$ 

 $\check{s}a'r \rightarrow hair$ *šaraq*  $\rightarrow$  choking *šatr al-ģibb*  $\rightarrow$  tertian, alternation of saudā'  $\rightarrow$  black bile saudāwīvūn  $\rightarrow$  black bile, those who are affected by sayalān ad-dam  $\rightarrow$  hyperaemia *šidda suʿāl*  $\rightarrow$  coughing, heavy  $sill \rightarrow consumption$  $s\bar{u}$  al-fativa  $\rightarrow$  juvenility, calamities of  $s\bar{u}$  al-hadm  $\rightarrow$  indigestion  $s\bar{u}$  mizāģ hārr fī l-kabid  $\rightarrow$  liver, bad hot humoral mixture in  $s\bar{u}$ ' mizāģ hārr fī l-ma'ida  $\rightarrow$  stomach, bad hot humoral mixture in  $su`al \rightarrow cough(ing)$  $su`al muzmin \rightarrow cough, chronic$ suʿāl muzmin bārid ġalīz al-mādda  $\rightarrow$ coughing, cold tough-mattered chronic  $su`al qadim \rightarrow cough, long-standing$  $su`al ratb \rightarrow cough, moist$  $su`al yabis \rightarrow cough, dry$  $sud\bar{a}^{i} \rightarrow headache$ sudā' bārid balġamī  $\rightarrow$  headache, cold phlegmatic sudā hārr  $\rightarrow$  headache, hot  $sudad \rightarrow obstruction$ sudad al-kabid  $\rightarrow$  liver, obstruction of  $suh\bar{u}q \rightarrow abrasion(s)$  $suh\bar{u}lat at-tab' \rightarrow disposition, frail$  $sulaq \rightarrow blepharitis$  $sum\bar{u}m \rightarrow poison(s)$ sum $\bar{u}m$  min ad-daw $\bar{a}bb \rightarrow poisons$  from vermin *sumūm min al-hawāmm*  $\rightarrow$  poisons from reptiles *sumūm qattāla*  $\rightarrow$  poisons, lethal  $\check{s}uq\bar{u}q \rightarrow fissures$ , anal  $surra \rightarrow$  umbilicus  $ta^{a}$ iīl  $\rightarrow$  warts  $ta'\bar{a}l\bar{l}l'adas\bar{l}ya \rightarrow warts, lenticular$  $ta^{\dagger}\bar{a}m \rightarrow food$  $ta'aqqud al-'asab \rightarrow$  nerves, swollen  $tab' \rightarrow disposition$  $tab' \rightarrow nature$  $tab\bar{t}a \rightarrow disposition, natural$ tabī`a → nature  $tafassuh wa-kasr \rightarrow fractures, open$  $tafazzu' \rightarrow fear$  $tahabbuǎ \rightarrow bloatedness$  $talahhub \rightarrow$  sensations, flaming

 $tamt \rightarrow blood$ , menstrual *tanaffut al-litāt*  $\rightarrow$  gums, blistered tašannuğ al-'aşab  $\rightarrow$  convulsions, nervous *tasarru*' a*š*-*š*a*ib*  $\rightarrow$  old age, advance of  $tazahhur \rightarrow tenesmus$ *tihāl salib*  $\rightarrow$  spleen, indurated *tiql al-lisān*  $\rightarrow$  dumbness  $udw \rightarrow limb(s)$ *'ufūnat al-litāt*  $\rightarrow$  gums, putrid  $unq \rightarrow neck$  $usr \rightarrow detention$  $usr al-baul \rightarrow detention, urinary$ *'usr al-baul*  $\rightarrow$  ischuria *'usr an-nafas*  $\rightarrow$  breathing, difficulty in wadah  $\rightarrow$  skin, desquamation of wağa'  $\rightarrow$  pain wağa' al-ādān  $\rightarrow$  ears, pain in wağa' al-asnān  $\rightarrow$  toothache wağa' al-ğauf  $\rightarrow$  belly, pain in wağa' al-hālibain  $\rightarrow$  pelvic bones, pain in wağa' al-hāsira  $\rightarrow$  hip, pain in wağa' al-mafāsil  $\rightarrow$  rheumatism wağa' al-ma'ida  $\rightarrow$  stomach, pain in

wağa 'al-qaulanğ  $\rightarrow$  pain(s), colical

wağa' ar-ra's  $\rightarrow$  headache wağa' al-'umūr  $\rightarrow$  gums, painful wağa' al-warkain  $\rightarrow$  ischia, pain in wağa' az-zahr  $\rightarrow$  back, pain in wağh  $\rightarrow$  face wakz  $\rightarrow$  punch waram  $\rightarrow$  swelling(s) waram  $\rightarrow$  tumour(s) waram 'atīq fī l-ma'ida  $\rightarrow$  stomach, inveterate tumour in waram al-kabid  $\rightarrow$  liver, tumours of waram ralwa fī l-aṭrāf  $\rightarrow$  extremities, soft tumours in waswās  $\rightarrow$  delusions

yadān  $\rightarrow$  hands yaraqān  $\rightarrow$  jaundice yaraqān aşfar  $\rightarrow$  jaundice, yellow yubs  $\rightarrow$  dryness yubs al-lahawāt  $\rightarrow$  uvula, dryness of

zafara → pterygium zahir → dysentery zalq al-ma'ida → stomach, slippery zukam → catarrh zulma → vision, loss of zulmat al-baṣar → sight, loss of

#### 3. Generic Drug Names

The symbol + before a number indicates that the corresponding drug name is mentioned in the *context* of this recipe.

abrasion (catapasm) +374, 394 absinthe (oil) 287 absinthe (pastille) 18, +227 Abū Mīlī (beverage) 213 agrimony (pastille) 8 ailāwus (pastille) 38 almond (linctus) 154 aloe (infusion) 234, 235 aloe (pill) 58 amber (pastille) 15 amrūsiyā (electuary) +225 anğūr afšurağ (beverage) 214 apostles (liniment) 305 apple (beverage) 196 apple (rob) 162 asafoetida resin (electuary) 118 ash-coloured (collyrium) 248 ashes (enema) 377 *astringent quince* (stomachic) +50, 134

Barmakī (pastille) 31, +32 basil (oil) 284 *bāsilīqūn* (collyrium) 250 *bdellium-and-hump* (liniment) 306 *bishop's* (stomachic) 141 black (liniment) 294 blocker (powder) 386 bole (powder) 76 *bone-setting* (cataplasm) 311 *brimfull hiccup* (pastille) 37 *caltrop* (oil) 288 *caper* (pastille) 9 *cardamom* (stomachic) 152 *carob* (stomachic) +50 *chebulic myrobalan* (decoction) +241 citron (beverage) 197, 198 *coin of gold* (beverage) 190 crayfish (powder) 82

*cuminy* (stomachic) 144 curcuma (electuary) +225 daizağ (ophthalmic) 264 *dark-coloured poppy* (lohoch) 157 *datish* (stomachic) +75, 145 deliverer (catapasm) 260 dīk bar dīk (powder) 389 diyāhilūn (liniment) 296 155 diyāgūd (lohoch) *dodder* (decoction) 242 *dust-coloured* (collyrium) 245 egg (oil) 281 fanğnūš (stomachic) 138 fenugreek (lohoch) 177 fig (beverage) 203 fig (cataplasm) 321 fig (decoction) +158, +159 fig (lohoch) 173 fruit (beverage) 215 *Ğaisuwān date* (rob) 167 galls (ophthalmic) 270 *gourd* (oil) 283 grape (lohoch) 156 Greek Filūniyā (electuary) +75, 119 *Greek sealing bole* (electuary) 111 *gum-senegal* (pastille) 13 haematite (catapasm) 278 haematite (liniment) 298 halūq (perfume) +390 hammer-scale (stomachic) 133, 138 happy end (electuary) 110, 123 *hiera* (electuary) 69 hiera (pill) 57 hiera Hermes (electuary) +131 *hiera picra* (electuary) 56, +57, +63, +67, +71, +75, +237, +408 hospital (decoction) 230 *hospital backup* (potion) 231 hypocistis (pastille) 22, +370 hyssop (decoction) +170, 224, 232, 233 hyssop (lohoch) 159 Indian tutty (collyrium) 271 *iris* (pastille) 19 *iţrīfal* (electuary) 122 *joints* (pill) 60 kaukab (pastille) 24 kings (stomachic) 148

lā mazdahyānā (pastille) 24 *lac* (pastille) 29, +302 large barberry (pastille) 4 *large marking-nutty* (electuary) 129 larger itrīfal (electuary) 107 lead (ophthalmic) 268 lemon (beverage) 187 *light-coloured poppy* (rob) 169 lignaloes (pastille) 28 *liquorice rob* (lohoch) 170 *malkāvā* (collyrium) 258 *maqliyātā* (powder) 83, 84 mastic (oil) 282 *meadow saffron* (pill) 59 mezereon (pastille) 27 *mighty* (collyrium) 249 *minty* (electuary) 109 *minty pomegranate* (beverage) +23, +194, 200, +420 mountain alkekengi (pastille) 16 mouth (coolant) 392 *mulberry* (rob) 164 mūrdānağ (rob) 174 mūrdānağ only (rob) 175 musk (pill) 70 musk (stomachic) 149 myrtle (beverage) 199, 216 *myrtle* (coolant) 275 *myrtle* (oil) 280 *myrtle* (rob) +13, +50, 166 *myrtle only* (rob) +2nard (ointment) 323 *painters* (coolant) 252 pandanus (beverage) 183 perfumer (ophthalmic) 273 *Persian Filūniyā* (electuary) +75, 120 pitch (liniment) 294 plum (lohoch) 61 *polisher* (collyrium) 246 pomegranate (beverage) +7, +10, 194, +228, +229, +244 *pomegranate* (coolant) 252 pomegranate (rob) 176 pomegranate flower (pastille) 11, +50 pomegranate only (rob) 163 pomegranate seed (powder) 77 poppy (beverage) +229 poppy (pastille) 10 prime water (powder) +389, 390 prophets (liniment) 305 *purgative powder* (powder) 86 *purgative quince* (stomachic) 135

quicklime (liniment) 295 quince (beverage) +39, 195 *quince* (rob) 161 *quince only* (rob) +76 qūqāyā (pill) 65 raisin (electuary) 108 *rāmik* (perfume) +411 *red coral* (pastille) 12 *resin* (pastille) 30 rhubarb (pastille) 14 ribes (beverage) 193 roots (decoction) 240 rose (beverage) 184 rose (coolant) 385 rose (pastille) 25, 26 rosy (collyrium) 261 rūšanā'ī (collyrium) 251 šabyār (pill) 64 *šahriyārān* (electuary) +75 sandalwood (beverage) 192 seed (pill) 20, 72 seed (stomachic) 147 small barberry (pastille) 3 small marking-nutty (electuary) 130, +131*smaller itrīfal* (electuary) 106 soft lumps (cataplasm) 317 *soft-rinded pomegranate* (lohoch) 180 sour apple (rob) +50 sour citron (rob) 168 spikenard (pastille) 41

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# 4. Botanical Index

a. English—Latin

absinthe: Artemisia absinthium acorn: Quercus spp. agaric: Polyporus officinalis agnus castus: Vitex agnus-castus agrimony: Agrimonia eupatoria alecost: Tanacetum balsamita alhagi: Alhagi maurorum alkekengi: Physalis alkekengi almond: Prunus amvadalus almond, bitter: Prunus amara almond, sweet: Prunus dulcis aloe: Aloe vera ammoniacum: Dorema ammoniacum anise: Pimpinella anisum apple: Malus sylvestris areca: Areca catechu

artichoke [gum]: Cynara scolymus asafoetida: Ferula assa-foetida asarabacca: Asarum europaeum Asiatic crowfoot: Ranunculus asiaticus asparagus: Asparagus officinalis asphodel: Asphodelus spp.

babul: Acacia nilotica baby's breath: Gypsophila paniculata balm: Commiphora opobalsamum barberry: Berberis vulgaris barley: Hordeum spp. bay laurel: Laurus nobilis bdellium: Balsamodendron spp. bdellium africanum: Balsamodendron africanum bdellium mukul: Balsamodendron mukul bean: Phaseolus spp. beet: Beta vulgaris ben: Moringa oleifera Bengal quince: Aegle marmelos birthwort: Aristolochia clematitis birthwort, 'long': Aristolochia longa birthwort, 'rolled': Aristolochia rotunda borage: Borago officinalis boxthorn: Lycium barbarum broad bean: Vicia faba bryony, black: Tamus communis bryony, red: Bryonia dioica bryony, white: Bryonia alba bull thistle: Cirsium vulgare

cabbage: Brassica oleracea calamint: Calamintha sylvatica caltrop: Tribulus terrestris camphor: Cinnamomum camphora canella: Canella winterana caper: Capparis spinosa caraway: Carum carvi caraway, wild: Lagoecia cuminoides cardamom: Elettaria cardamomum carob: Ceratonia siliaua carrot: Daucus carota cassia: Cinnamomum cassia castor oil plant: Ricinus communis celery: Apium graveolens centaury: Centaurium spp. chamomile: Chamaemelum nobile chickpea: Cicer arietinum cinnamom: Cinnamomum zeylanicum citron: Citrus medica citronella: *Cymbopogon nardus* clove: Syzygium aromaticum cocculus: Anamirta cocculus colocynth: Citrullus colocynthis common ash: Fraxinus excelsior coriander: Coriandrum sativum cotton: Gossypium herbaceum cubeb: Piper cubeba cucumber: Cucumis sativus cumin: Cuminum cyminum cumin, black: Nigella sativa curcuma: Curcuma spp. currant: Vitis vinifera cyclamen: Cyclamen purpurascens cyperus: Cyperus rotundus cypress: Cupressus sempervirens Cyprian ladanum: Cistus cyprius

darnel: Lolium temulentum date: Phoenix dactylifera dill: Anethum graveolens dodder: Cuscuta epithymum dog's grass: Triticum caninum dog's violet: Viola canina dragon's blood: Dracaena draco dyer's madder: Rubia tinctorum

elecampane: Inula helenium embelia: Embelia ribes emblic: Phyllanthus emblica endive: Cichorium endivia

fennel: Foeniculum vulgare fenugreek: Trigonella foenum-graecum fig: Ficus carica flax dodder: Cuscuta epilinum fleawort: Plantago psyllium forget-me-not: Myosotis scorpioides frankincense: Boswellia spp. French lavender: Lavandula stoechas fumitory: Fumaria officinalis

galbanum: Ferula galbaniflua galingale: Alpinia galanga garden (pepper)cress: Lepidium sativum gentian: Gentiana lutea germander: Teucrium spp. giant thistle: Onopordum acanthium gillyflower: Dianthus caryophyllus ginger: Zingiber officinale globe thistle: Echinops ruthenicus glossostemon [root]: Glossostemon bruguieri gourd: Lagenaria vulgaris grains of paradise: Aframomum melequeta grape: Vitis vinifera grape ivy: Rhoicissus rhomboidea great leopard's bane: Doronicum pardalianches greater celandine: Chelidonium majus Greek spikenard: Valeriana celtica green-winged orchid: Orchis morio ground pine: Ajuga chamaepitys gum ammoniac: Dorema ammoniacum gum-arabic: Acacia arabica gum-senegal: Acacia senegal

harmala: Peganum harmala hellebore: Helleborus spp. hellebore, black: Helleborus niger hellebore, white: Veratrum album henbane: Hyoscyamus niger henbane, white: Hyoscyamus albus henna: Lawsonia inermis hollyhock: Althaea rosea horehound, white: Marrubium vulgare horn poppy: Glaucium flavum houseleek: Sempervivum tectorum [Hurāsān] apricot: Prunus armeniaca 'hypocistis': Cytinus hypocistis hyssop: Hyssopus officinalis

[Indian] hazelnut: Corylus avellana Indian lignaloes: Aquilaria malaccensis Indian musk melon: Cucumis melo sspp. Indian spikenard: Valeriana jatamansi indigo: Indigofera tinctoria iris: Iris spp. iris, sky-coloured: Iris persica iris, white: Iris albicans iris, wild white: Dietes grandiflora

jasmine: Jasminum officinale jujube: Ziziphus jujuba

kamala: Mallotus philippinensis kidney bean, red: Phaseolus vulgaris knotgrass: Polygonum aviculare

ladanum: Cistus ladaniferus larkspur: Delphinium spp. laurel: Laurus malabathrum leek: Allium porrum lemon: Citrus limon lemon balm: Melissa officinalis lemon grass: Cymbopogon citratus lentil: Lens esculenta lettuce: Lactuca sativa lignaloes: Aquilaria agallocha lilac: Syringa vulgaris linseed: Linum usitatissimum liquorice: Glycyrrhiza glabra long pepper: Piper longum lote: Ziziphus lotus lovage: Levisticum officinale lucerne: Medicago sativa lupine: *Lupinus albus* lycium: Lycium spp.

mace: Myristica fragrans madder: Rubia tinctorum mahaleb: Prunus mahaleb maidenhair: Adiantum capillus-veneris male fern: Dryopteris filix-mas mandrake: Mandragora officinarum Maqāṣīr sandalwood: Pterocarpus indicus marijuana: Cannabis sativa marjoram, sweet: Origanum majorana marjoram, wild: Origanum vulgare marjoram, wild white: Origanum vulgare ssp. album marking nut: Semecarpus anacardium marshmallow: Althaea officinalis marshmallow, 'green': Althaea syriaca sspp. mastic: Pistacia lentiscus meadow saffron: Colchicum autumnale melilot: Melilotus officinalis mezereon: Daphne mezereum millet: Panicum miliaceum mint: Mentha spp. moon carrot: Seseli tortuosum mountain mint: Clinopodium vulgare mulberry: Morus spp. mung bean: Vigna radiata musk melon: Cucumis melo mustard: Brassica nigra mustard, white: Brassica alba myrobalan: *Terminalia* spp. myrobalan, beleric: *Terminalia bellerica* myrobalan, chebulic: Terminalia chebula myrrh: Commiphora myrrha myrtle: Myrtus communis

Nabataean gum: Viscum album narcissus: Narcissus spp. nard: Nardostachys grandiflora nenuphar: Nymphaea spp. nightshade: Solanum nigrum nutmeg: Myristica fragrans nux vomica: Strychnos nux-vomica

oleander: Nerium oleander olibanum: Boswellia spp. olive [oil]: Olea europaea sspp. onion: Allium cepa opium: Papaver somniferum opopanax: Opopanax chironium orache: Atriplex hortensis orchil: Roccella tinctoria Oriental tamarisk: Tamarix orientalis

paeony: Paeonia officinalis Palestinian melon: Cucumis melo sspp. pandanus: Pandanus odoratissimus papyrus: Cyperus papyrus parsley: Petroselinum crispum parsnip: Pastinaca sativa pear: Pyrus communis pellitory: Anacyclus pyrethrum pennyroyal: Mentha pulegium pepper, black: Piper nigrum pepper, white: Piper nigrum peppergrass: Lepidium campestre 'Persian gum': Prunus amygdalo-persica Persian rose: Rosa persica pine: Pinus spp. pistachio: Pistacia vera plantain: Plantago major plum: Prunus domestica polypody: *Polypodium vulgare* pomegranate: Punica granatum poppy: Papaver spp. poppy, dark-coloured: Papaver rhoeas poppy, light-coloured: Papaver somniferum pumpkin: Cucurbita spp. purging cassia: Cassia fistula purslane: Portulaca oleracea

quince: Cydonia oblonga

radish: Raphanus sativus raisin: Vitis vinifera ramie: Boehmeria nivea Raqqa melon: Cucumis melo sspp. Rāziqī iris: Iris albicans reed: Arundo phragmites rhubarb: Rheum palmatum ribes: Rheum ribes rice: Oryza sativa sspp. rocket: Eruca sativa Roman nettle: Urtica pilulifera rose: Rosa spp. rose, red: Rosa gallica rue: Ruta graveolens rusty back fern: Asplenium ceterach

safflower: Carthamus tinctorius saffron: Crocus sativus sagapenum: Ferula persica salsify: Tragopogon porrifolius salsola: Salsola soda sandalwood: Santalum spp. sandalwood, red: Pterocarpus santalinus sandalwood, white: Santalum album Sanf lignaloes: Aquilaria malaccensis sarcocolla: Astragalus sarcocolla savin: Juniperus sabina savory: Satureja spp. saxifrage: Saxifraga spp. scammony: Convolvulus scammonia 'sea' alecost: Saussurea lappa sea lavender: *Limonium* spp. sea lavender, red: Limonium vulgare sea lavender, white: Centaurea behen sebesten: Cordia sebestena

senna: Cassia senna serpent melon: Cucumis flexuosus serpent melon, wild: Ecballium elaterium service: Sorbus domestica sesame: Sesamum indicum small centaury: Centaurium minus Socotra aloe: Aloe succotrina sorrel: Rumex acetosa sorrel, wild: Rumex acetosella southernwood: Artemisia abrotanum spignel: Meum athamanticum spurge: Euphorbia resinifera squill: Urginea maritima stavesacre: Delphinium staphisagria storax: Styrax spp. storax, liquid: Liquidambar orientalis sumach: Rhus coriaria sweet basil: Ocimum basilicum sweet chestnut: Castanea sativa sweet flag: Acorus calamus

tabasheer: Bambusa arundinacea tamarind: Tamarindus indica tarfa: Tamarix gallica terebinth: Pistacia terebinthus thyme, wild: Thymus serpyllum tragacanth: Astragalus tragacantha turmeric: Curcuma longa turpentine: Pistacia terebinthus turpeth: Operculina turpethum

usnea: Alectoria usneoides

valerian: Valeriana officinalis vetch: Vicia sativa vine: Vitis vinifera violet: Viola odorata visnaga: Ammi visnaga

wall germander: Teucrium chamaedrys wallflower: Erysimum spp. wallflower, red: Erysimum perofskianum wallflower, white: Erysimum cheiri walnut: Juglans regia water flag: Iris pseudacorus water moss: Lemna minor watermint: Mentha aquatica wheat: Triticum spp. willow: Salix spp. wormwood: Artemisia armeniaca

yercum [sugar]: Calotropis gigantea

zerumbet: Zingiber zerumbet

## b. Latin–English

Acacia arabica  $\rightarrow$  gum-arabic Acacia nilotica  $\rightarrow$  babul Acacia senegal  $\rightarrow$  gum-senegal Acorus calamus  $\rightarrow$  sweet flag Adiantum capillus-veneris  $\rightarrow$  maidenhair Aegle marmelos  $\rightarrow$  Bengal quince Aframomum melegueta  $\rightarrow$  grains of paradise Agrimonia eupatoria  $\rightarrow$  agrimony *Ajuga chamaepitys*  $\rightarrow$  ground pine Alectoria usneoides  $\rightarrow$  usnea Alhagi maurorum  $\rightarrow$  alhagi Allium cepa  $\rightarrow$  onion Allium porrum  $\rightarrow$  leek Aloe succotrina  $\rightarrow$  Socotra aloe Aloe vera  $\rightarrow$  aloe Alpinia galanga  $\rightarrow$  galingale Althaea officinalis  $\rightarrow$  marshmallow Althaea rosea  $\rightarrow$  hollyhock Althaea syriaca sspp.  $\rightarrow$  marshmallow, 'green' Ammi visnaga → visnaga Anacyclus pyrethrum  $\rightarrow$  pellitory Anamirta cocculus  $\rightarrow$  cocculus Anethum graveolens  $\rightarrow$  dill Apium graveolens  $\rightarrow$  celery Aquilaria agallocha  $\rightarrow$  lignaloes Aquilaria malaccensis  $\rightarrow$  Indian lignaloes Aquilaria malaccensis  $\rightarrow$  Sanf lignaloes Areca catechu  $\rightarrow$  areca Aristolochia clematitis  $\rightarrow$  birthwort Aristolochia longa  $\rightarrow$  birthwort, 'long' Aristolochia rotunda  $\rightarrow$  birthwort, 'rolled' Artemisia abrotanum  $\rightarrow$  southernwood Artemisia absinthium  $\rightarrow$  absinthe *Artemisia armeniaca* → wormwood Arundo phragmites  $\rightarrow$  reed Asarum europaeum  $\rightarrow$  asarabacca Asparagus officinalis  $\rightarrow$  asparagus Asphodelus spp.  $\rightarrow$  asphodel Asplenium ceterach  $\rightarrow$  rusty back fern Astragalus sarcocolla  $\rightarrow$  sarcocolla Astragalus tragacantha  $\rightarrow$  tragacanth Atriplex hortensis  $\rightarrow$  orache *Balsamodendron* spp.  $\rightarrow$  bdellium Balsamodendron africanum  $\rightarrow$  bdellium africanum

Balsamodendron mukul  $\rightarrow$  bdellium mukul Bambusa arundinacea  $\rightarrow$  tabasheer Berberis vulgaris  $\rightarrow$  barberry Beta vulgaris  $\rightarrow$  beet Boehmeria nivea  $\rightarrow$  ramie Borago officinalis  $\rightarrow$  borage Boswellia spp.  $\rightarrow$  frankincense Boswellia spp.  $\rightarrow$  olibanum Brassica alba  $\rightarrow$  mustard, white Brassica nigra  $\rightarrow$  mustard Brassica oleracea  $\rightarrow$  cabbage Bryonia alba  $\rightarrow$  bryony, white Bryonia dioica  $\rightarrow$  bryony, red

*Calamintha sylvatica*  $\rightarrow$  *calamint Calotropis qigantea*  $\rightarrow$  yercum [sugar] *Canella winterana*  $\rightarrow$  canella *Cannabis sativa*  $\rightarrow$  marijuana Capparis spinosa  $\rightarrow$  caper *Carthamus tinctorius*  $\rightarrow$  safflower Carum carvi  $\rightarrow$  caraway *Cassia fistula*  $\rightarrow$  purging cassia Cassia senna → senna *Castanea sativa*  $\rightarrow$  sweet chestnut *Centaurea behen*  $\rightarrow$  sea lavender, white *Centaurium* spp.  $\rightarrow$  centaury *Centaurium minus*  $\rightarrow$  small centaury *Ceratonia siliqua*  $\rightarrow$  carob *Chamaemelum nobile*  $\rightarrow$  chamomile *Chelidonium majus*  $\rightarrow$  greater celandine *Cicer arietinum*  $\rightarrow$  chickpea *Cichorium endivia*  $\rightarrow$  endive *Cinnamomum camphora*  $\rightarrow$  camphor Cinnamomum cassia → cassia *Cinnamomum zeylanicum*  $\rightarrow$  *cinnamom Cirsium vulgare*  $\rightarrow$  bull thistle *Cistus cyprius*  $\rightarrow$  Cyprian ladanum Cistus ladaniferus → ladanum *Citrullus colocynthis*  $\rightarrow$  colocynth *Citrus limon*  $\rightarrow$  lemon *Citrus medica*  $\rightarrow$  *citron Clinopodium vulgare*  $\rightarrow$  mountain mint *Colchicum autumnale*  $\rightarrow$  meadow saffron *Commiphora myrrha*  $\rightarrow$  myrrh *Commiphora opobalsamum*  $\rightarrow$  balm *Convolvulus scammonia*  $\rightarrow$  scammony Cordia sebestena  $\rightarrow$  sebesten *Coriandrum sativum*  $\rightarrow$  coriander *Corylus avellana*  $\rightarrow$  [Indian] hazelnut Crocus sativus  $\rightarrow$  saffron *Cucumis flexuosus*  $\rightarrow$  serpent melon *Cucumis melo*  $\rightarrow$  musk melon *Cucumis melo* sspp.  $\rightarrow$  Indian musk melon *Cucumis melo* sspp.  $\rightarrow$  Palestinian melon *Cucumis melo* sspp.  $\rightarrow$  Ragga melon *Cucumis sativus*  $\rightarrow$  cucumber *Cucurbita* spp.  $\rightarrow$  pumpkin *Cuminum cyminum*  $\rightarrow$  cumin

Cupressus sempervirens  $\rightarrow$  cypress Curcuma spp.  $\rightarrow$  curcuma Curcuma longa  $\rightarrow$  turmeric Cuscuta epilinum  $\rightarrow$  flax dodder Cuscuta epithymum  $\rightarrow$  dodder Cyclamen purpurascens  $\rightarrow$  cyclamen Cydonia oblonga  $\rightarrow$  quince Cymbopogon citratus  $\rightarrow$  lemon grass Cymbopogon nardus  $\rightarrow$  citronella Cynara scolymus  $\rightarrow$  artichoke [gum] Cyperus papyrus  $\rightarrow$  papyrus Cyperus rotundus  $\rightarrow$  cyperus Cytinus hypocistis  $\rightarrow$  'hypocistis'

Daphne mezereum → mezereon Daucus carota → carrot Delphinium spp. → larkspur Delphinium staphisagria → stavesacre Dianthus caryophyllus → gillyflower Dietes grandiflora → iris, wild white Dorema ammoniacum → ammoniacum Dorema ammoniacum → gum ammoniac Doronicum pardalianches → great leopard's bane Dracaena draco → dragon's blood Dryopteris filix-mas → male fern

Ecballium elaterium  $\rightarrow$  serpent melon, wild Echinops ruthenicus  $\rightarrow$  globe thistle Elettaria cardamomum  $\rightarrow$  cardamom Embelia ribes  $\rightarrow$  embelia Eruca sativa  $\rightarrow$  rocket Erysimum spp.  $\rightarrow$  wallflower Erysimum cheiri  $\rightarrow$  wallflower, white Erysimum perofskianum  $\rightarrow$  wallflower, red Euphorbia resinifera  $\rightarrow$  spurge

Ferula assa-foetida  $\rightarrow$  asafoetida Ferula galbaniflua  $\rightarrow$  galbanum Ferula persica  $\rightarrow$  sagapenum Ficus carica  $\rightarrow$  fig Foeniculum vulgare  $\rightarrow$  fennel Fraxinus excelsior  $\rightarrow$  common ash Fumaria officinalis  $\rightarrow$  fumitory

Gentiana lutea  $\rightarrow$  gentian Glaucium flavum  $\rightarrow$  horn poppy Glossostemon bruguieri  $\rightarrow$  glossostemon [root] Glycyrrhiza glabra  $\rightarrow$  liquorice Gossypium herbaceum  $\rightarrow$  cotton Gypsophila paniculata  $\rightarrow$  baby's breath

*Helleborus* spp.  $\rightarrow$  hellebore *Helleborus* niger  $\rightarrow$  hellebore, black Hordeum spp.  $\rightarrow$  barley Hyoscyamus albus  $\rightarrow$  henbane, white Hyoscyamus niger  $\rightarrow$  henbane Hyssopus officinalis  $\rightarrow$  hyssop

Indigofera tinctoria  $\rightarrow$  indigo Inula helenium  $\rightarrow$  elecampane Iris spp.  $\rightarrow$  iris Iris albicans  $\rightarrow$  iris, white Iris albicans  $\rightarrow$  Rāziqī iris Iris persica  $\rightarrow$  iris, sky-coloured Iris pseudacorus  $\rightarrow$  water flag

Jasminum officinale → jasmine Juglans regia → walnut Juniperus sabina → savin

*Lactuca sativa*  $\rightarrow$  lettuce Lagenaria vulgaris  $\rightarrow$  gourd Lagoecia cuminoides  $\rightarrow$  caraway, wild *Laurus malabathrum*  $\rightarrow$  *laurel* Laurus nobilis  $\rightarrow$  bay laurel Lavandula stoechas  $\rightarrow$  French lavender Lawsonia inermis → henna *Lemna minor*  $\rightarrow$  water moss *Lens esculenta*  $\rightarrow$  *lentil Lepidium campestre*  $\rightarrow$  peppergrass *Lepidium sativum* → garden (pepper)cress *Levisticum officinale*  $\rightarrow$  lovage *Limonium* spp. → sea lavender *Limonium vulgare*  $\rightarrow$  sea lavender, red *Linum usitatissimum*  $\rightarrow$  linseed *Liquidambar orientalis*  $\rightarrow$  storax, liquid *Lolium temulentum*  $\rightarrow$  darnel Lupinus albus  $\rightarrow$  lupine *Lycium* spp.  $\rightarrow$  lycium *Lycium barbarum*  $\rightarrow$  boxthorn

Mallotus philippinensis → kamala Malus sylvestris  $\rightarrow$  apple Mandragora officinarum  $\rightarrow$  mandrake *Marrubium vulgare*  $\rightarrow$  horehound, white Medicago sativa → lucerne Melilotus officinalis  $\rightarrow$  melilot Melissa officinalis → lemon balm Mentha spp.  $\rightarrow$  mint *Mentha aquatica*  $\rightarrow$  watermint *Mentha pulegium*  $\rightarrow$  pennyroyal *Meum athamanticum*  $\rightarrow$  spignel Moringa oleifera → ben Morus spp.  $\rightarrow$  mulberry *Myosotis scorpioides*  $\rightarrow$  forget-me-not Myristica fragrans  $\rightarrow$  mace *Myristica fragrans*  $\rightarrow$  nutmeg *Myrtus communis*  $\rightarrow$  myrtle

Narcissus spp. → narcissus Nardostachys grandiflora → nard Nerium oleander → oleander Nigella sativa → cumin, black Nymphaea spp. → nenuphar

Ocimum basilicum → sweet basil Olea europaea sspp. → olive [oil] Onopordum acanthium → giant thistle Operculina turpethum → turpeth Opopanax chironium → opopanax Orchis morio → green-winged orchid Origanum majorana → marjoram, sweet Origanum vulgare → marjoram, wild Origanum vulgare ssp. album → marjoram, wild white Oryza sativa sspp. → rice

*Paeonia officinalis*  $\rightarrow$  paeony Pandanus odoratissimus  $\rightarrow$  pandanus Panicum miliaceum  $\rightarrow$  millet *Papaver* spp.  $\rightarrow$  poppy Papaver rhoeas  $\rightarrow$  poppy, dark-coloured *Papaver somniferum*  $\rightarrow$  opium *Papaver somniferum*  $\rightarrow$  poppy, light-coloured *Pastinaca sativa* → parsnip Peganum harmala  $\rightarrow$  harmala *Petroselinum crispum*  $\rightarrow$  parsley *Phaseolus* spp.  $\rightarrow$  bean *Phaseolus vulgaris*  $\rightarrow$  kidney bean, red Phoenix dactylifera → date *Phyllanthus emblica*  $\rightarrow$  emblic *Physalis alkekengi*  $\rightarrow$  alkekengi *Pimpinella anisum*  $\rightarrow$  anise *Pinus* spp.  $\rightarrow$  pine Piper cubeba → cubeb *Piper longum*  $\rightarrow$  long pepper *Piper nigrum*  $\rightarrow$  pepper, black *Piper nigrum*  $\rightarrow$  pepper, white Pistacia lentiscus → mastic *Pistacia terebinthus*  $\rightarrow$  terebinth *Pistacia terebinthus*  $\rightarrow$  turpentine Pistacia vera → pistachio Plantago major  $\rightarrow$  plantain *Plantago psyllium*  $\rightarrow$  fleawort *Polygonum aviculare*  $\rightarrow$  knotgrass *Polypodium vulgare*  $\rightarrow$  polypody Polyporus officinalis  $\rightarrow$  agaric *Portulaca oleracea*  $\rightarrow$  purslane *Prunus amara*  $\rightarrow$  almond, bitter *Prunus amygdalo-persica*  $\rightarrow$  'Persian gum' *Prunus amygdalus*  $\rightarrow$  almond Prunus armeniaca → [Hurāsān] apricot Prunus domestica → plum

Prunus dulcis → almond, sweet Prunus mahaleb → mahaleb Pterocarpus indicus → Maqāşīr sandalwood Pterocarpus santalinus → sandalwood, red Punica granatum → pomegranate Pyrus communis → pear

## *Quercus* spp. $\rightarrow$ acorn

Ranunculus asiaticus  $\rightarrow$  Asiatic crowfoot Raphanus sativus  $\rightarrow$  radish *Rheum palmatum*  $\rightarrow$  rhubarb Rheum ribes  $\rightarrow$  ribes Rhoicissus rhomboidea  $\rightarrow$  grape ivy Rhus coriaria  $\rightarrow$  sumach *Ricinus communis*  $\rightarrow$  castor oil plant *Roccella tinctoria*  $\rightarrow$  orchil *Rosa* spp.  $\rightarrow$  rose Rosa gallica  $\rightarrow$  rose, red *Rosa persica*  $\rightarrow$  Persian rose Rubia tinctorum  $\rightarrow$  dyer's madder Rubia tinctorum  $\rightarrow$  madder Rumex acetosa  $\rightarrow$  sorrel *Rumex acetosella*  $\rightarrow$  sorrel, wild Ruta graveolens  $\rightarrow$  rue

*Salix* spp.  $\rightarrow$  willow Salsola soda  $\rightarrow$  salsola *Santalum* spp.  $\rightarrow$  sandalwood *Santalum album*  $\rightarrow$  sandalwood, white Satureja spp.  $\rightarrow$  savory *Saussurea lappa*  $\rightarrow$  'sea' alecost Saxifraga spp.  $\rightarrow$  saxifrage *Semecarpus anacardium*  $\rightarrow$  marking nut *Sempervivum tectorum*  $\rightarrow$  houseleek Sesamum indicum  $\rightarrow$  sesame Seseli tortuosum → moon carrot *Solanum nigrum*  $\rightarrow$  nightshade Sorbus domestica  $\rightarrow$  service Strychnos nux-vomica  $\rightarrow$  nux vomica *Styrax* spp.  $\rightarrow$  storax Syringa vulgaris  $\rightarrow$  lilac *Syzygium aromaticum*  $\rightarrow$  clove

Tamarindus indica → tamarind Tamarix gallica → tarfa Tamarix orientalis → Oriental tamarisk Tamus communis → bryony, black Tanacetum balsamita → alecost Terminalia spp. → myrobalan Terminalia bellerica → myrobalan, beleric Terminalia chebula → myrobalan, chebulic Teucrium spp. → germander Teucrium chamaedrys → wall germander Thymus serpyllum → thyme, wild Tragopogon porrifolius → salsify Tribulus terrestris → caltrop Trigonella foenum-graecum → fenugreek Triticum spp. → wheat Triticum caninum → dog's grass

Urginea maritima → squill Urtica pilulifera → Roman nettle

Valeriana celtica → Greek spikenard Valeriana jatamansi → Indian spikenard Valeriana officinalis → valerian Veratrum album → hellebore, white Vicia faba → broad bean Vicia sativa  $\rightarrow$  vetch Vigna radiata  $\rightarrow$  mung bean Viola canina  $\rightarrow$  dog's violet Viola odorata  $\rightarrow$  violet Viscum album  $\rightarrow$  Nabataean gum Vitex agnus-castus  $\rightarrow$  agnus castus Vitis vinifera  $\rightarrow$  currant Vitis vinifera  $\rightarrow$  grape Vitis vinifera  $\rightarrow$  raisin Vitis vinifera  $\rightarrow$  vine

Zingiber officinale  $\rightarrow$  ginger Zingiber zerumbet  $\rightarrow$  zerumbet Ziziphus jujuba  $\rightarrow$  jujube Ziziphus lotus  $\rightarrow$  lote