

**A Survey on the Manuscripts of *Kitāb al-Ṭīb*
by Muḥammad b. al-Ḥasan b. Ibrāhīm al-Khāzin**

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Abstract

The treatise called “*Kitāb al-Ṭīb*” is a work composed by Muḥammad b. al-Ḥasan b. Ibrāhīm al-Khāzin (living in 421/1030), dealing with aromatic substances. There are four known copies of this work, the oldest one (Princeton, Garrett, 174B) dated 590/1194 is incomplete and disorderly in its present situation. Rearranging this manuscript and clarifying the relationship between all extant manuscripts of the work seem necessary for a critical edition of it. Based on the repetition of a note referring to the contents and order of treatises in three codices, similarities in the colophon of them, different readings of same words in each of these manuscripts, as well as the text confluences, the most probable explanation is that the Princeton manuscript has been the basis of copying the other three manuscripts.

Keywords: *Jawāhir al-Ṭīb*, *Kitāb al-Ṭīb*, Muḥammad b. al-Ḥasan b. Ibrāhīm al-Khāzin.

Introduction

*Kitāb al-Ṭīb*¹ is a conventional title² for a work written by Muḥammad b. al-Ḥasan b. Ibrāhīm al-Khāzin (living in 421/1030) dealing with aromatic substances and contains a variety of information about some of the most commonly used perfumes in the Islamic lands.

The author described the features of every principal aromatic (musk, ambergris, aloeswood, and camphor) and explained how to detect their potential impurities and enumerated the places where these aromatics are obtained from. He described the compound ones as well; including recipes for Nadd (such as principal, ternary, and saffron Nadd), freshened aloeswood, Lakhlakha (Sulaymāniya, black Lakhlakha, white Lakhlakha), Ghāliya, Dharīra, Rāmik, Suk, and the Ben oil.

الند الاول، الند المثلث، الند الزعفراني، العود المطري، اللخلخة السليمانية، اللخلخة السوداء، اللخلخة البيضاء، غالية، ذريرة، رامك، سك، دهن البان.

Neither the author nor even the work itself is mentioned in the historical sources or classic bio-bibliographies³. Nevertheless, its importance and position in the perfumery tradition of the Islamic period can only be known when its time of composition and its impacts on later works considered. Before any discussion about the work, a critical edition should be available for researchers⁴. However, *Kitāb al-Ṭīb* has been published earlier, conflated with Ibn Māsawayh's *Jawāhir al-Ṭīb*. As the first work, the editor, mentions only one manuscript (that of the Princeton University) among four extant copies (see below), paying little attention to the displacement of the folios.

1. We have followed the *Encyclopaedia Islamica*'s "System of Transliteration for Arabic and Persian Characters" (see: <https://referenceworks.brillonline.com/entries/encyclopaedia-islamica/system-of-transliteration-of-arabic-and-persian-characters-transliteration>).

2. For more explanation about the title of the work, see: (Karamati and Qosi 189–211).

3. Sezgin has identified him as Muḥammad b. al-Ḥasan b. Ibrāhīm al-ʿAṭṭār al-ʿAsʿardī, the author of *Mukhtaṣar fī al-Ḥisāb*, that the only manuscript of which (no. 4857) is preserved in the Hagia Sophia Library: (Sezgin 355) Also no mention of al-ʿAsʿardī was found in the historical and bio-bibliographical sources.

4. We have prepared a critical edition of this text that will publish in another article.

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The present study seeks to explore the *Kitāb al-Ṭīb*'s manuscripts and their relationships¹.

The Manuscripts

The codices, containing four known copies of *Kitāb al-Ṭīb*, chronologically, are as follows.

PG = Princeton University, Garrett collection, MS. 174 B

This collection consists of two treatises on perfumes² (see Table 1).

Table 1. The content of The PG

	Title	Author	Folios
1	كتاب الطيب Kitāb al-Ṭīb	محمد بن حسن بن ابراهيم الخازن Muḥammad Ibn al-Ḥasan Ibn Ibrāhīm al-Khāzin	1a – 12b
2	جواهر الطيب المفردة بأسمائها وصفاتها ومعادنها Jawāhir al-Ṭīb al-Mufrada bi Asmā'ihā wa Ṣifātiha wa Ma'ādinihā	يوحنا بن ماسويه Yūḥannā Ibn Māsawayh	13a – 26b

The copying date of the manuscript, according to the colophon of the first treatise (Figure 1), is Monday, 10 Rabī' II 590 / 4 April 1194, and is taken from a holograph that was scribed by al-Khāzin on Thursday 21 Jamādī I 421 / 28 May 1030 in Ghazna (Figure 2). The beginning and the end of the manuscript are missing (Hitti et al. 651–52) and based on the conflation of the treatises (see section **Rearranging the PG**), it seems that the folios were bound again in a disorderly manner at a later time.

1. This work is particularly worth mentioning here: *Mukhtaṣar fī al-Ṭīb* attributed to Sahlān Ibn Kaysān (Sbath, “Abrégé”), for it is so similar to *Kitāb al-Ṭīb* that the manuscript of one may be regarded as the same as the other. Dealing with the accuracy of its attribution to al-Khāzin or Ibn Kaysān, is outside of the scope of the present study; nevertheless, for a critical edition of any of these two works, the manuscripts which have the other title should be used at least as a parallel text. Another treatise worth considering is *Risāla fī Uṣūl al-Ṭīb wa al-Murakkabāt al-Ṭriyya* attributed to Ibn Mandawayh (Dānīshpajhūh); The latter work is also very similar to *Kitāb al-Ṭīb* in terms of the content. The similarities and differences of these three works have been discussed in: (Karamati and Qosi)

2. The facsimiles of this manuscript is available in:
<http://publ.princeton.edu/viewer.php?obj=g445cd200#page/1/mode/2up>

TM = Tehran, Malek National Library and Museum, MS. 1569

This manuscript is a collection of treatises on alchemy, jewelry, and perfumes in Arabic¹. The ninth treatise under the title of “Şan‘at al-Ṭīb” with false attribution to Ibn Mandawayh² is indeed *Kitāb al-Ṭīb* composed by al-Khāzin (see Table 2).

Table 2. The content of the TM (based on the catalog of Malek National Library)

order	Title	Pages
1	كتاب الصنعة The book of Ars	1-55
2	باب آخر ملحق عن الشيخ العارف صلاح الدين موسى بن مبارز Another annexed chapter from the mystic sheik Şalāḥ al-dīn Mūsā b. Mubārīz	55-56
3	عمل الجواهر من اللتالي والدرر وغيرها Making Jewelry from Small and Large Pearls and so on.	56-65
4	قال أبو القاسم النوري ... Thus spake Abū al-Qāsim al-Nūrī ...	65
5	قال أبو طاهر بن مهدي ... Thus spake Abūṭāhir b. Maḥdī ...	65-66
6	كيميااء الأطفمة Foods' Alchemy	66-78
7	الترفق في العطر The Refinement on Perfume	79-87
8	كتاب فيه أعمال المسك والكافور ... A Book Contains Production of Musk, Camphor, etc.	88-97
9	صنعة الطيب Aromatics' Fabrication	99-126

1. For codicological information see: (Afshār, M. Dānīshpajhūh, et al. 293–95)

2. The cataloguer has attributed this treatise to Ibn Mandawayh without giving any reason or indication in the manuscript.

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order	Title	Pages
10	جواهر الطيب المفردة بأسمائها وصفاتها ومعادنها Simple Aromatic Substances, Their Names, Properties, and Provenance	127-137
11	صنعة المسك وإزالة الكتابة من الدفاتر (في الأصل: الدقائق) وشيء في إزالة الآثار The Musk Fabrication, Erasing the Writings from the Books (reads: al-daqa'iq = subtleties), and Something of Erasing the Stains	138-141
12	[باب من] كتاب الأحجار لأرسطاطاليس [A chapter of] Aristotle's On Stones	142-144
13	من كتاب الضمير لجابر From the Book of Conscience by Jābir	145-147
14	غسل الثوب Washing Dresses	149-151
15	في قلع الآثار والحبر وغيره On Erasing Stains, Ink and so on	151-158
16	صفة الياقوت Characteristic of Sapphire	159-170

According to the colophon of the ninth treatise, it was copied by Husayn Injū in Dhofar in 12 Dhu al-Qa'da 913/14 March 1508, through one intermediary, from the holograph that has been scribed by al-Khāzin on Thursday 21 Jamādī I 421/28 May 1030, in Ghazna (Figure 3).

LR = Leipzig University, Refaiya Collection, MS. 768

This manuscript¹ contains the same treatises with the PG, respectively in folios 1b – 30b and 31b – 51a; the title mentioned for *Kitāb al-Ṭīb* in this manuscript is *Mukhtaṣar fī Ma'rifat Ajnās al-Ṭīb*.

None of the treatises has a colophon, but the date of copying can be estimated. It belongs to the Refaiya collection (attributed to a

1. The facsimiles of this manuscript is available in:
https://www.refaiya.uni-leipzig.de/rsc/viewer/RefaiyaBook_derivate_00003727/vollers_768_002.jpg

Damascene family known as al-Rifā'ī) that was available to the Prussian consul, Johann Gottfried Wetzstein, by 'Umar Efendī al-Rifā'ī al-Ḥamawī in 1853(*Refaiya (English)*). So, the terminus ante quem for it is 1269/1853. On the other hand, the paper of the manuscript has the “trelvne” (3 crescents) watermark(*Refaiya: Vollers 0768*); Papers with this watermark were started to be used by the second half of the eleventh/ seventeenth century (Gacek 291). So, the terminus post quem for the codex is the eleventh/ seventeenth century.

CT = Cairo, Egyptian National Library, Tibb Taymur collection, MS. 236

It has been considered by the copyist as a manuscript of “*Jawāhir al-Ṭīb al-Mufrada bi-Asmā'ihā wa Ṣifātihā wa Ma'ādīnihā*, (جواهر الطيب (المفردة بأسمائها وصفاتها ومعادنها)”¹ written by Yūḥannā b. Māsawayh,”¹ however, as will be discussed, the text of this treatise seems a conflation of al-Khāzin's *Kitāb al-Ṭīb* and Ibn Māsawayh's treatise. As mentioned in the CT's colophon (Figure 4), it has been written in 1331/1912, and as the note of the title page shows (Figure 5), it has been copied from a manuscript dated 321/933.

Rearranging the PG

The first lines of folios 9, 17, 23, 24 and 26 are not the continuation of the final lines of the previous folios. Since this copy has neither an old leaf number nor catchword, for identifying the correct order of the folios of the PG, it should be compared with the other existing copies. The TM and LR have almost the same content and folio's order of *Kitāb al-Ṭīb*; from a conspectus comparison of the PG with the TM and LR, the right order of the folios of the PG can be obtained, and the texts of *Kitāb al-Ṭīb* and *Jawāhir al-Ṭīb* can be separated. As the number of the lines per page and the average number of words per line in the PG and LR is too similar (13 lines x 9 words), comparing these two can be useful in estimating the number of PG's missing folios with sufficient accuracy (see Table 3)

1. This manuscript is not listed in any of the catalogues of the Egyptian National Library. The present information comes from its facsimiles and the image of the data sheet of it. There is also a copy from this manuscript written in 1936 in the Aḥmad Taymūr Library which is preserved in the Sāmī Haddād Library (Samī Haddad and Bitterfield 31).

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Table 3. The corrected order of the PG's folios based on the LR

Treatise	LR*	PG
<i>Kitāb al-Ṭīb</i>	1b:1 – 5a:9	At least three missing folios
	5a:9 – 14a:7	1 – 8
	14a:7 – 15a:7	one missing folio
	15a:7 – 16a:13	26
	16a:13 – 23a:4	17 – 22
	23a:4 – 25a:9	24 – 25
	25a:9 – 26a:10	23
	26a:10 – 27a:12	one missing folio
	27a:12 – 30b:13	9 – 12
Jawāhir al- Ṭīb	31a:1 – 34b:12	13 – 16
*References are in format folio: line		

Estimating the Missing Folios of the PG

The quires' middle folios are marked with a sign similar to the Arabic letter “م” at the top of the gutter (half of which is placed in the right-hand folio continuing in the adjacent folio see Figure 2 & 6). The mentioned sign is seen in these folios: 4b¹, 13b – 14a, 22b – 23a. Thereupon, the PG in the present situation consists of three quires. The number of the folios of each quire can be determined given to the existing and lost single folios of the manuscript. As could be seen, in the correct order of the folios, between each successive pair of signs mentioned above, there is a nine folios distance. Given a missing folio between the eighth and ninth folios (see Table 3) and a missing one between eighteenth and nineteenth folios, in both cases, the distance in question is ten folios, that is to say, the quires are quinion (ten-folios quires).

1. In this case, because of the sewing type, the continuation of the sign in the present form of the adjacent page (Figure 7) cannot be seen.

At the top of the folio 9a in the PG, occurs the word “*al-rābi‘at ‘ashar*” (fourteen), which is the quire signature of the manuscript (Figure 8). Also, the recto of the first five folios of each quire is numbered¹ by an Indian digit and abjad number, at the top-left corner. However, because of damaged corners of the folios, some of them are defective and illegible, but on folios 9a, 10a, 11a, it occurs as “۱ید”, “۲ید”, “۳ید” and on the two next folios, part of it can be seen which may be “۴ید” and “۵ید”. Also, in the next quire, though the first leaf is missing, the numbers of the following folios – 19a, 20a, 21a, and 22a – are seen as: “[۲یه]”, “۳یه”, “۴یه”, “۵یه”² (see for example Figure 1). Also, in the few first folios of the manuscript, because of damaged corners of the folios, no trace of quire signature has remained, and only on f. 3a the Indian digit ۴ can be seen which should be part of the phrase “۴یج”³. Thereupon, the PG’s existing folios have been parts of the thirteen to fifteen quires of the original form of the codex, and assuming that the numbering of the folios does not exceed five, the assumption that the quires are quinion is supported.

According to the note in the title page of *Jawāhir al-Ṭīb* (see Table 4), this treatise and its following content, were altogether two quires and five folios. As the note has been written in the middle of the fifteenth quire, considering four extant folios of *Jawāhir al-Ṭīb* and the last missed folio of the fifteenth quire, it can be concluded that there were two other quires after the fifteenth one. Thus, the PG has originally had seventeen quires. Assuming that all the quires have been quinion, the original codex has had 170 folios, of them only twenty-six folios have survived, and the other 144 folios have been lost or separated from the codex.

It is not clear when and how the binder of the manuscript has fallen apart. Possibly, the manuscript has not initially been bound and remained as a set of quires not sewn for a long time. What increases this possibility is untrimmed edges of its papers (*Princeton University*

1. As each quire consisted in fact of five folios folded from the middle, the other side of the folios (the other five folios of the quire), need not to be numbered.

2. “۱ید” in abjad stands for fourteen and “۲یه” for fifteen.

3. “۴یج” stands for thirteen in abjad.

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Digital Library -- Item Overview), for after scribing and before binding, the edges of the papers were usually cut off (Sayyid Yūsuf Husayn 8–9).

The Genealogy of the Manuscripts

A similar note in the PG, TM and, LR referring to the content and order of the treatises, the information presented in the colophons, different variants in the TM and LR and finally, the same text conflation in the PG and CT, can be useful for recognizing the relationships between the manuscripts of *Kitāb al-Ṭīb*.

Inferring from a Note about the Treatises' Order in the Codices

In all three codices, PG, TM and LR, there are similar notes after *Kitāb al-Ṭīb* and before *Jawāhir al-Ṭīb* which introduce the next treatises. The similarities between these notes are more than to be considered as accidental (see Table 4).

Table 4. The similar notes in codices

PG (f. 13a)	TM (p. 126)	LR (f. 31a)
<p>وفي آخره قوائم فيها شئ من صنعة المسك وإزالة الكتابة من الدفاتر وشئ من إزالة الآثار وغير ذلك</p> <p>And at its end, there are some folios, containing something about musk fabrication, erasing the writings from the books, something about erasing the stains and so on</p>	<p>وفي آخرها من كتاب آخر من صنعة المسك وإزالة الكتابة من الدفاتر (في الأصل: دقايق) وشئ من إزالة الآثار وغير ذلك</p> <p>And at its end, from another book on musk fabrication, erasing the writings from the books (reads: al-daqa'iq), something about erasing the stains and so on</p>	<p>وفي آخر قولهم فيها شئ من صنعة المسك وإزالة الكتابة من الدفاتر وشئ من إزالة الآثار وغير ذلك</p> <p>And at their utterance end, there is Something about musk fabrication, and erasing the writings from the books, and something about erasing the stains, and so on</p>
<p>الجميع في كراسين وقائمة</p> <p>The whole in two quires and one folio</p>	–	<p>الجميع في كراستين</p> <p>the whole in two quires</p>
<p>وباقى المجلد أربع قوائم فيها أبواب من الصنعة</p> <p>and the rest of the volume is in four folios containing chapters from the Ars</p>	<p>وباقى المجلد فيه أبواب من الصنعة الخبيصة</p> <p>and the rest of the volume contains chapters from the specific Ars</p>	–

Following pieces of evidence indicate the common origin of the notes and copying the codices from another codex too:

1. The place of appearing all three notes is the same: after *Kitāb al-Ṭīb* and before *Jawāhir al-Ṭīb*.

The order of the promised materials in the notes is equal.

The first part of the note in the LR does not carry proper meaning, and it is clear that its correct form is the PG's version. Evidently, the LR's copyist has read the word *qawā'im* قوائم (plural form of *qā'ima* قائمة: a folio; see Al-Zubaydī, vols.17, 595) as *qawlihim* قولهم (their utterance), and in order to make this reading meaningful, inevitably he has also deemed *ākhirihī* آخره (the end of it) as *ākhir* آخر (the end) (see Figure 9). However, it is interesting to note that in the PG, according to the customary rule of *Ta'liq* script, the two letters of *alif* (الف) and *yā'* (ى) are written attached in this word, and it is not unlikely that *qawā'im* would be read as "*qawlihim*" (see Figure 6).

PG's copyist has clearly expressed that "the rest of the volume" in four folios is devoted to "chapters of the Ars." TM's copyist has made the same statement, with no reference to "the four folios," while in the TM after *San'at al-Misk* (promised in the first part of the note), five treatises with various subjects appear in 14 folios (each folio of the TM almost twice as much the folios of The PG) without any reference to them in the note. If this note would be a comment by the copyist rather than copying from another manuscript, it is unlikely that he would have been referring to a short treatise such as *San'at al-Misk* (eleventh treatise) and not mentioning other more detailed treatises (see Table 2, rows 12–16).

Some material promised in the note is copied in the manuscripts as they are, but there are no traces of others in the manuscripts, as is shown in Table 5.

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Table 5. Comparing the order of the treatises in the notes and the codices

Order of the treatises in the notes	Order of the treatises		
	PG	TM	LR
كتاب يوحنا بن ماسويه في جواهر الطيب المفردة بأسمائها وصفاتها ومعادنها Yūḥannā b. Māsawayh's Book on Simple Aromatic Substances, Their Names, Properties, and Provenance	2 nd	10 th	2 nd
صنعة المسك وإزالة الكتابة من الدفاتر وشيئ من إزالة الآثار وغير ذلك Musk Fabrication, Erasing the Writings from the Books, Something about Erasing the Stains and so on	–	11 th	–
أبواب من الصنعة Chapters from the Ars	–	?	–

The absence of some promised material can be due to the missing folios from the manuscripts, or maybe those treatises have not been copied. Some of the folios from the end of the PG, which could have contained these materials, are lost. The TM has at least a part of the material (treatise 11)¹. There is no sign of missing folios in the LR; thus, it seems that the copyist has copied the note from the exemplar without copying its promised material.

The differences between these three notes have no contradiction with their copying either:

1. The LR's copyist has not mentioned the word "قائمة *qā'ima*" in the second part, which cannot be considered as related to the difference of the leaf numbers in the two copies; because these have not to be written in the manuscript (see Table 5). So it is likely that the omission of this word would be related to the misreading of *qawā'im* قوائم, as explained before.

The third part of the note does not appear in the LR. The appropriate text has not been copied either.

There is no mention about the number of folios or quires in the TM's note, which can be due to the difference in the codices' dimensions.

1. The content of what is described as "chapters from the Ars" is not clear, and it may well be considered one of the treatises after the eleventh one of the TM.

Accordingly, these similar notes suggest the common origin of the notes as well as copying the codices from a common exemplar.

Inferring from the Colophons

The LR has no colophon, while there are similarities between the colophons of the PG and TM (See Table 6).

Table 6. Comparing the colophons of the PG and TM

PG	TM
<p>فرغ منه يوم الإثنين عاشر ربيع الآخر من سنة تسعين وخمسمائة</p> <p>It Finished on Monday tenth of Rabī' al-Akhir 590 (April 4, 1194)</p>	-
<p>نقل من نسخة بخط مصنفها محمد بن الحسن الخازن وكان في آخرها</p> <p>It quoted from a copy by the hand of its author, Muḥammad b. al-Ḥasan al-Khāzin and at the end of it</p>	<p>نقلت من نسخة نسخت من خط مصنفها محمد بن الحسن الخازن وكان في آخرها</p> <p>I have quoted from a copy that (in turn) copied from the hand of its author, Muḥammad b. al-Ḥasan al-Khāzin and at the end of it</p>
<p>فرغ من كتابته محمد بن الحسن ابن ابراهيم الخازن المكتنى بأبي بكر بغزنه في يوم الخميس الحادي والعشرين من جمادي الاولى من سنة إحدى وعشرين وأربعمائة</p> <p>The text completed by Muḥammad b. al-Ḥasan b. Ibrahīm al-Khāzin nicknamed as Abī Bakr in Ghazna on Thursday 21 Jamādi al-Ūlā 421 (May 28, 1030).</p>	Same as the PG
-	<p>[حرره] حسين إنجو في بلدة ظفار في إثني عشر ذي القعدة سنة ٩١٣</p> <p>[wrote it] Husain Injū in the city of Dhofar in 12 Dhu al-Qa'da 913 (March 14, 1508).</p>

The PG and TM have transmitted the colophon of a holograph dated 421/1030, accepting the copyists' claims; the PG has copied directly from the holograph and the TM by an intermediary.

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The Relation between the TM and LR

If the estimated date of the LR is acceptable, then the TM is older than the LR, and it cannot be copied from the LR. Again, Many TM errors have not occurred in LR (see Table 7). Therefore, the latter has been copied from a manuscript other than the TM.

Table 7. Some variants of the PG, TM, and LR

PG	TM	LR
فَإِنْ إلتَرَقَ مِنْ لَوْنِ الْمِسْكِ بِالْخَرْقَةِ شَيْءٌ (f. 1b)	الشرق (p. 103)	التزق (f. 6a)
العَنْبَرُ؛ فَالْأَجُودُ مِنْهُ الشَّحْرِيُّ (f. 2a)	الشجر (p. 103)	الشحري (f. 6b)
وَعِنْدَ الْكَسْرِ يَكُونُ أَغْبَرٌ يَضْرِبُ إِلَى الْحَمْرَةِ (f. 2b)	ابيض بضرب (p. 104)	اغبر يضرب (f. 7a)
وَمِنْهُ لَوْنٌ آخَرٌ يُعْرَفُ بِالْمَنْدِ (f. 3a)	بالهندي (p. 104)	بالمند (f. 7b)
يَسْتَعْمَلُهُ الْعَوَامُّ فِي الذُّوبِ فِي الْمَعْجُونَاتِ مَكَانَ الْعَنْبَرِ (f. 4a)	الدود (p. 105)	الذوب (f. 8b)
وَفِيهِ قَبْرٌ كَثِيرٌ يَحْتَاجُ إِلَى حَازِقٍ يُخْرِجُ مِنْهُ (f. 4a)	قير (p. 105)	قبر (f. 9a)
يَثْقُبُ وَيَجْعَلُ فِي كُلِّ قِطْعَةٍ ثَقْبَيْنِ (f. 15a)	صين (p. 118)	ثقبين (f. 22a)

The Relation between the CT and PG

Noting that the same texts conflated in both manuscripts, comparing the order of the chapters and content of the PG and CT can be useful to recognize the relationship between them (see Table 8).

Table 8. Comparing chapters which regarded as *Jawāhir al-Ṭīb* in The PG and CT

Title (in The PG) ^[1]	CT (pp.)	PG (ff.)
1. Musk	2–6	13b–15b
2. Ambergris	7–12	15b–16b
3. Aloeswood	12–21	16b–17a

4. Another recipe like the first ^[2]	21	17a
5. Recipe of the ternary Nadd	21–22	17
6. Another recipe of the ternary	22–26	17b–19a
7. Recipe of Nadd in a mold	26–27	19
8. Recipe of Nadd with the Suk of Musk in it	27–28	19b–20a
9. Recipe of the principal saffron Nadd known as al-Mukhammas	28–29	20
10. Recipe of another variety of it	29–30	20b–21a
11. Kinds of freshened aloeswood, so the first is graded ^[2]	30–31	21
12. Another kind of it	31–32	21b
13. Another kind of it	32	22a
14. Another new one	–	22
15. Another kind of it	–	22b–23a
16. Recipe of black Lakhlakha	–	23
17. Recipe of white Lakhlakha for bathing	–	23b–24a
18. Recipe of the incense aloeswood with al-Suk	–	24
19. Recipe of improving incense aloeswood with ambergris	–	24b–25a
20. Recipe of Lakhlakha known as al-Sulaymāniya	–	25a–26b
21. Another recipe of the principal Nadd ^[2]	33	26b
[1] Chapters 4 to 21 are related to <i>Kitāb al-Ṭīb</i> .		
[2] Different titles in the CT are as follows: 4. A conclusion in <i>Nadd</i> production: recipe of Nadd; 11. Kinds of freshened aloeswood: the first is graded; 21. Another recipe of <i>Nadd</i>		

Among chapters 4–21 (which were considered as parts of *Jawāhir al-Ṭīb* in the current situation of the PG, while they are parts of *Kitāb al-Ṭīb*), the CT's copyist, has copied only chapters 4–13 and 21, as is

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shown in Table 8. Note that the chapters 4–13 (ff. 17a–22a) are all in one quire, and the content is uninterrupted, while the next folios have been displaced, and as a result, the content of these folios is discontinuous. Therefore, it can be said that the copyist of the CT has copied it –directly or indirectly– from the present situation of the PG, omitting the chapters 14-20, which he has recognized as confused.

Besides, the two first chapters of *Jawāhir al-Ṭīb* in the CT are a conflation of existing parts of the musk and ambergris chapters of *Kitāb al-Ṭīb* and *Jawāhir al-Ṭīb*. Table 9 tries to separate them.

Table 9. The sources of CT's text

	CT	Source	PG
1	المسك أجناس « وهو يتفاضل «أقوى منه وأذكى» : 1 : p. 3: 1	<i>Jawāhir al-Ṭīb</i> , chapter of musk	13a: 1-14a: 1
2	«وأصل كل مسك هو دم» : 1 : p. 3: «قد حال عليه الحول» : 5 : p. 4: 5	<i>Kitāb al-Ṭīb</i> , chapter of musk	1a: 1-1b: 1
3	«وأجود المسك في الرائحة» : 1 : p. 4: «والمنظر وهو على نصف القيمة من «الجيد أو نحوها» : 1 : p. 5:	<i>Jawāhir al-Ṭīb</i> , chapter of musk	14b: 1-15a, 1
4	«وإن وقع شك في مسك» : 1 : p. 5: «هو فاسد من نداوة أصابته» : 1 : p. 6: «فغيرته»	<i>Kitāb al-Ṭīb</i> , chapter of musk	1b: 1-2a: 1
5	Three final lines of p. 6	<i>Jawāhir al-Ṭīb</i> , chapter of musk	15a: 1-15b: 1
6	«العنبر» : 1 : p. 7: «وإنما سمي الزنجي لسواده» : 1 : p. 9:	<i>Jawāhir al-Ṭīb</i> , chapter of ambergris	15b: 1-16b: 1
7	«أجود العنبر الشحري» : 1 : p. 9: «ولا يصلح منه شيء» : 1 : p. 21:	<i>Kitāb al-Ṭīb</i> , chapters of ambergris and aloeswood	2a: 1-8a: 1

The copyist of the CT or the intermediary between it and the PG has so modified the conflated texts that they seem uniform. These modifications are as follows:

1. The copyist of the CT, at the beginning of the text, has written the principal aromatics as three: musk, ambergris, and aloeswood, as it remained in the current situation of the PG. While all copies of *Jawāhir al-Ṭīb* refer to the five principals including musk, ambergris, aloeswood, camphor, and saffron.

In the *Jawāhir al-Ṭīb*'s edition and copies (except the CT), after the principals, occurs spices (*Afāwīh*), while the CT and the current situation of the PG do not contain this part.

The content of the musk chapter of *Jawāhir al-Ṭīb* concerning some kinds of impurities in musk has been omitted (PG: f. 14a: 13 – f. 14b: 4) and replaced by similar and more detailed information in the text from the chapter of Musk of *Kitāb al-Ṭīb* (PG: f. 1b: 5 – f. 2a: 6).

The last lines of the *Jawāhir al-Ṭīb*'s chapter of ambergris which concerns its origin and properties have been omitted. The passage in *Jawāhir al-Ṭīb* about the origin of ambergris reads as:

يقال أن العنبر نبات في قرار البحر ويقال روث دابة تكون في البحر ويقال غطاء من غطاء البحر.

“It is said that ambergris is a plant in the seabed, and it is said that it is the excrement of a marine animal. It has also been described as the sea scum”.

The origin of ambergris in *Kitāb al-Ṭīb* is mentioned as:

أصل سائر العنبر هو أن لها عيون تنبع في البحر ... ومن قال أنه روث بقر وأشباه ذلك فهو غير مصيب.

“The origin of ambergris is that it has springs flowing in the sea ... and the one, who says that it is the bovine excrement and the like, is not right”.

The CT's copyist, to prevent a contradiction in the text, has just quoted the *Kitāb al-Ṭīb*'s argument.

A small part of the chapter of aloeswood of *Jawāhir al-Ṭīb* survived in the PG (six lines: f. 16b:8 – 13); this part is omitted in the CT and replaced by the chapter of the types of ambergris of *Kitāb al-Ṭīb*.

Describing the Genealogy

The points mentioned in section 5.4, can be summarized as the following arguments:

1. The PG, TM, and LR have a common exemplar (see section 5.1).
2. The PG has copied from a holograph by the author of *Kitāb al-Ṭīb* dated 421/1030 (see section 5.2).
3. The TM copied from the same holograph by an intermediary (see section 5.2).
4. The TM and LR have not been copied from each other (see section 5.3).
5. The copyist of the CT must have copied the PG through at least one intermediary, but this intermediary cannot be the TM or LR (see section 5.4).

Considering the first argument, the following assumptions are available:

C1- The common exemplar that contained the common note is not the oldest extant manuscript (PG), and the copyist of the PG transmitted the note from an older lost manuscript.

- a- The lost manuscript is an intermediary between the PG and the holograph 421.
- b- The lost manuscript is the holograph 421 scribed by al-Khāzin.

C2- The common exemplar that contained the common note is the oldest extant manuscript (PG).

The second argument refute (or at least weakens) the C1-a. Moreover there is a similar mistake in the copies that weakens the C1-b; In this case, the author of *Kitāb al-Ṭīb* (al-Khāzin) must have produced a copy of his book and the other three treatises mentioned in the note in one codex as the copyist of the holograph, that would not seem to be correct, for, in the PG, TM, and LR, there is an error that could not occur by al-Khazin in the holograph.

In the text of *Jawāhir al-Ṭīb*, “*Saqālibat al-Hind*” is mentioned in two places:

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1. Where it is introducing types of ambergris (PG f. 16a: 12; TM p. 129: 11; LR f. 34a: 10):

الشلاهطي والقاقلي يؤتا بهما من بلاد سقالية الهند.

“*Al-Shalāhitī* and *al-Qāqulī* were brought from the land of *Saqālibat al-Hind*.”

- Where it is introducing types of aloeswood (PG f. 16b: 10; TM p. 129: 19; LR f. 34b: 8):

السمندروني يؤتا بها من بلاد سمندرون بلاد سقالية الهند.

“*al-Samandarūnī* is brought from the land of *Samandarūn*, [of] the land of *Saqālibat al-Hind*.”

According to/ Considering the meaning of the passage¹ and the spelling of the word in the extant edition of *Jawāhir al-Ṭīb* (Sbath, “*Traité sur les substances simples aromatiques*” 12), the correct form of the word must be “*Sufāla*.”² The copyist has probably deemed it incorrect and replaced with “*Saqāliba*.”³ This mistake cannot be attributed to al-Khāzin – because he was aware of the correct spelling and has given this word in the text of *Kitāb al-Ṭīb* already (PG f. 3b: 13).

Therefore, C2 is the most probable case. That is to say; the mistake was made by the PG’s copyist who copied *Kitāb al-Ṭīb* from the author’s hand and *Jawāhir al-Ṭīb* as well as the other treatises from other manuscripts in one codex.

Accepting C2, The TM and LR should have been copied from the PG (before the disorderliness of its folios). Then, considering the third argument, there is no intermediary between the TM and PG;

1. A place known as “*Saqālibat al-Hind*” is not mentioned in the Islamic geographical sources.

2. The geographical sources name two places under “*Sufāla*”: *Sufālat al-Zanj* and *Sufālat al-Hind*. In *Awḍāḥ al-Masālik* quoting from Bīrūnī ((Barsawī 388)) and in *Taqwīm al-Buldān* quoting from Idrīsī the *Sufālat al-Hind* is identified as “*Sūfāra*” a port area of the Indian Sea with distance of five day’s journey (*marhala*) to *Sindān* ((Abū al-fidā’ 411)). Other geographical sources have also mentioned it as “*Sūbāra*” (see for example: (*Hudūd Al-‘Ālam Min al-Mashriq Ila al-Maghrib* 66)); Bosworth and Minorsky have considered it to be situated in the Thana district of Bombay: (Minorsky 245)

3. The geographical sources usually give it as صقالبه “*Ṣaqāliba*” and it is applied to the eastern Europeans: (Minorsky 425)

considering the fourth argument, the probable intermediary between the LR and PG cannot be the TM. While the CT should have been copied from the present situation of the PG through at least one intermediary (see Diagram 1).

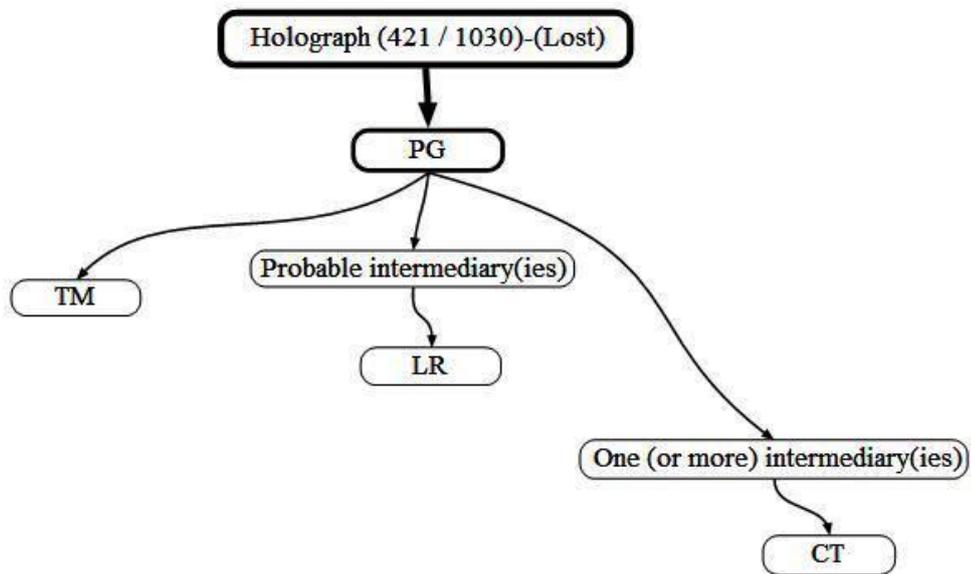


Diagram 1. The relationship between the manuscripts of *Kitāb al-Ṭīb*, based on the most probable case (C2)

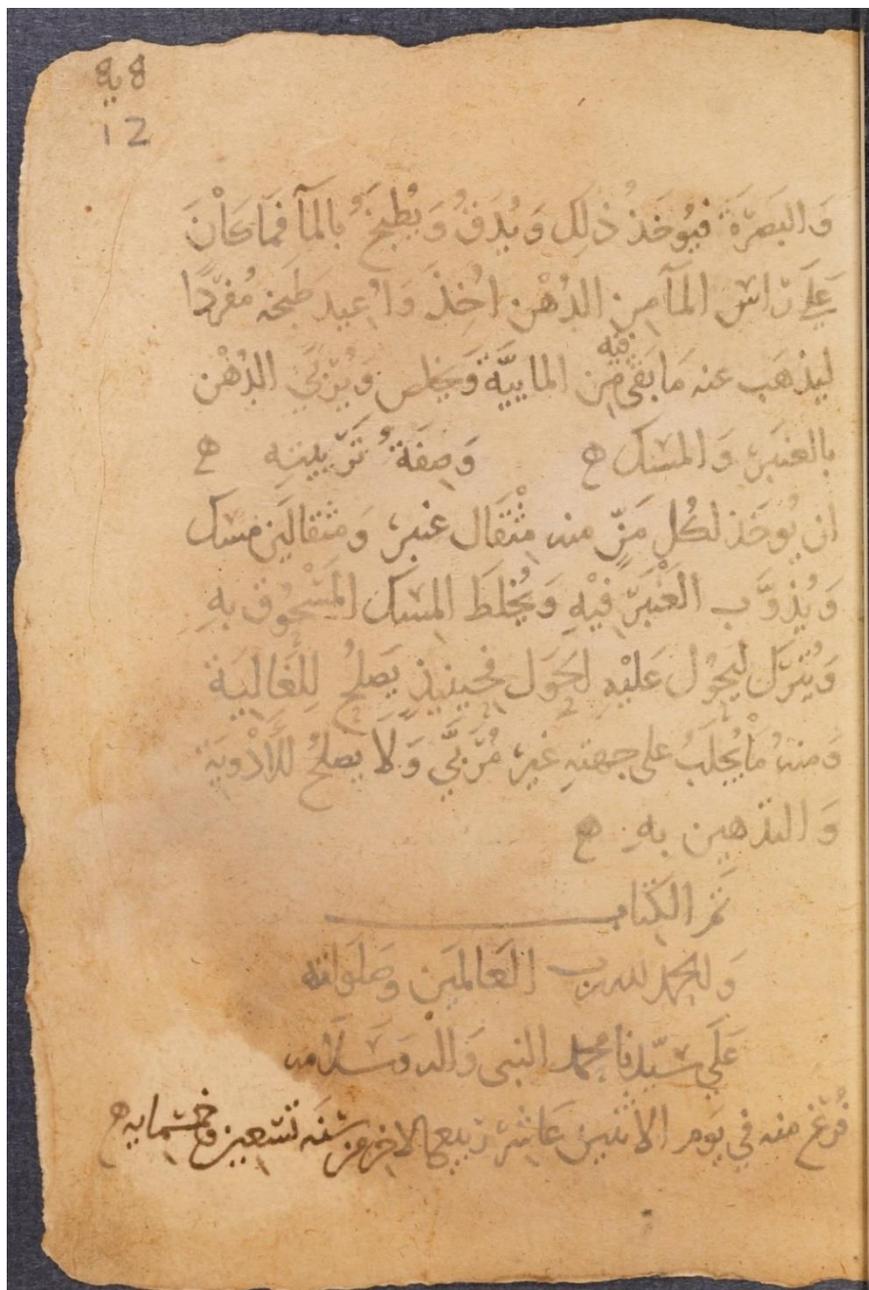


Figure 1. The PG's colophon

نقل من نسخة بخط مصنفها محمد بن الحسين الكازين ٥
وكان في آخرها فرغ من كتابته محمد بن الحسين
ابن ابي عمير الكازين المكنى بابي بكسر
بغزته في يوم الخميس الحادي والعشرين
من جمادى الاولى سنة احدى وعشرين واربعمائة

Figure 2. The PG's transmitted colophon from the holograph

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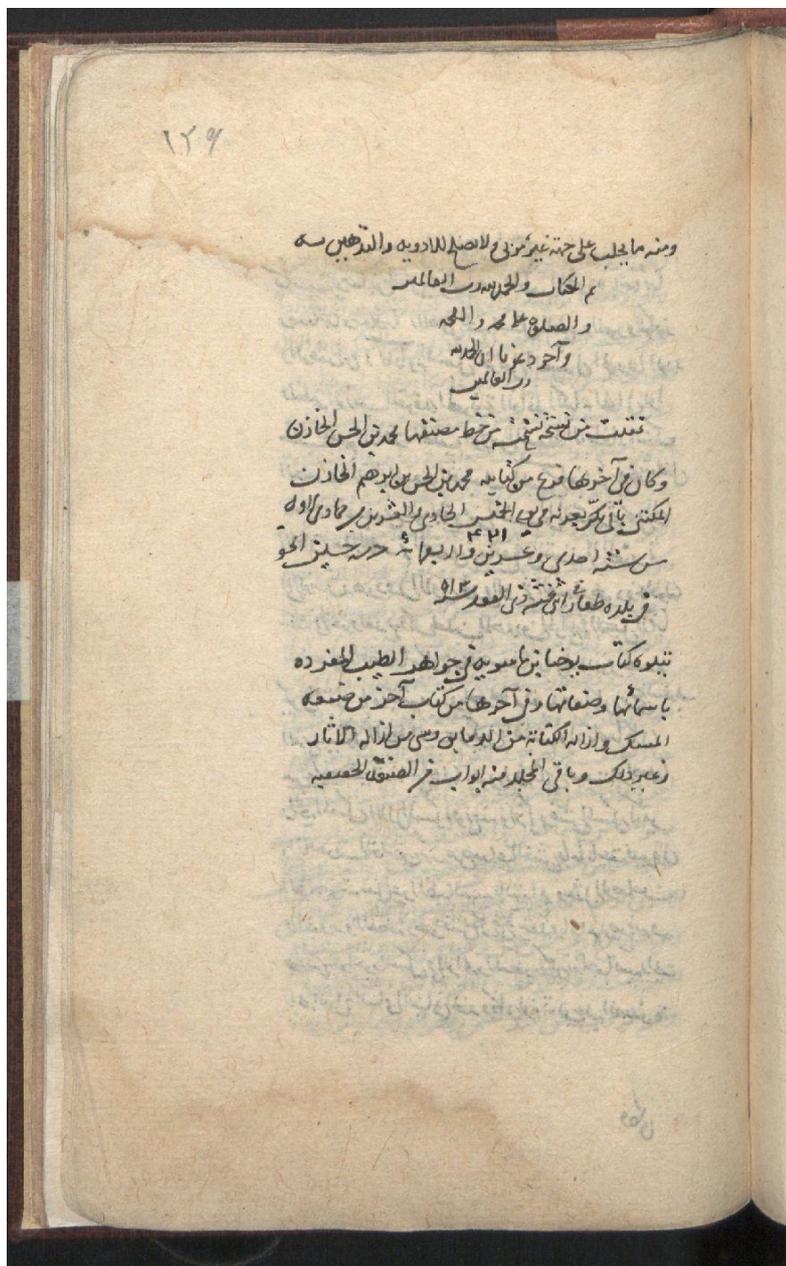


Figure 3. TM's colophon

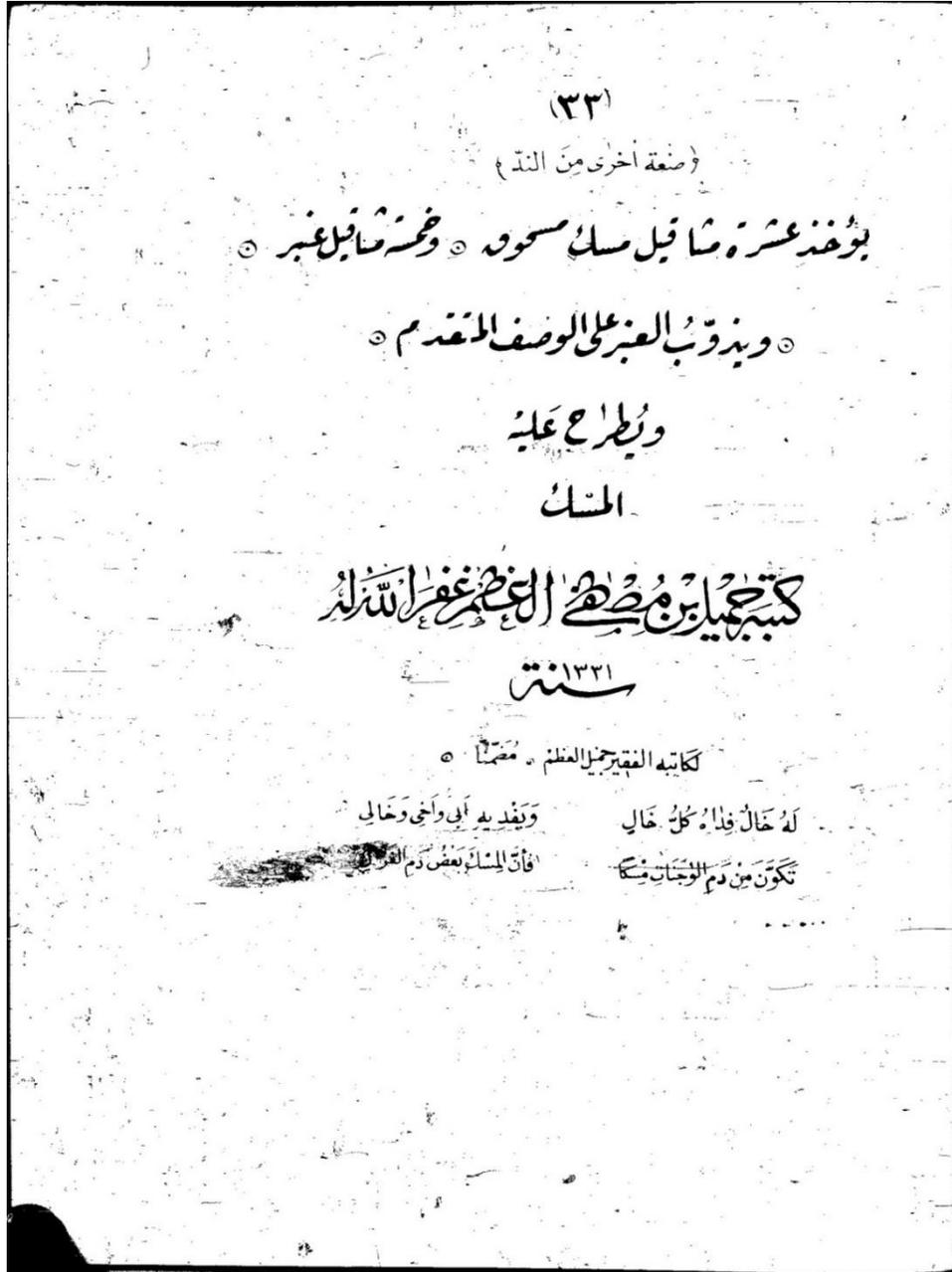


Figure 4. The CT's colophon

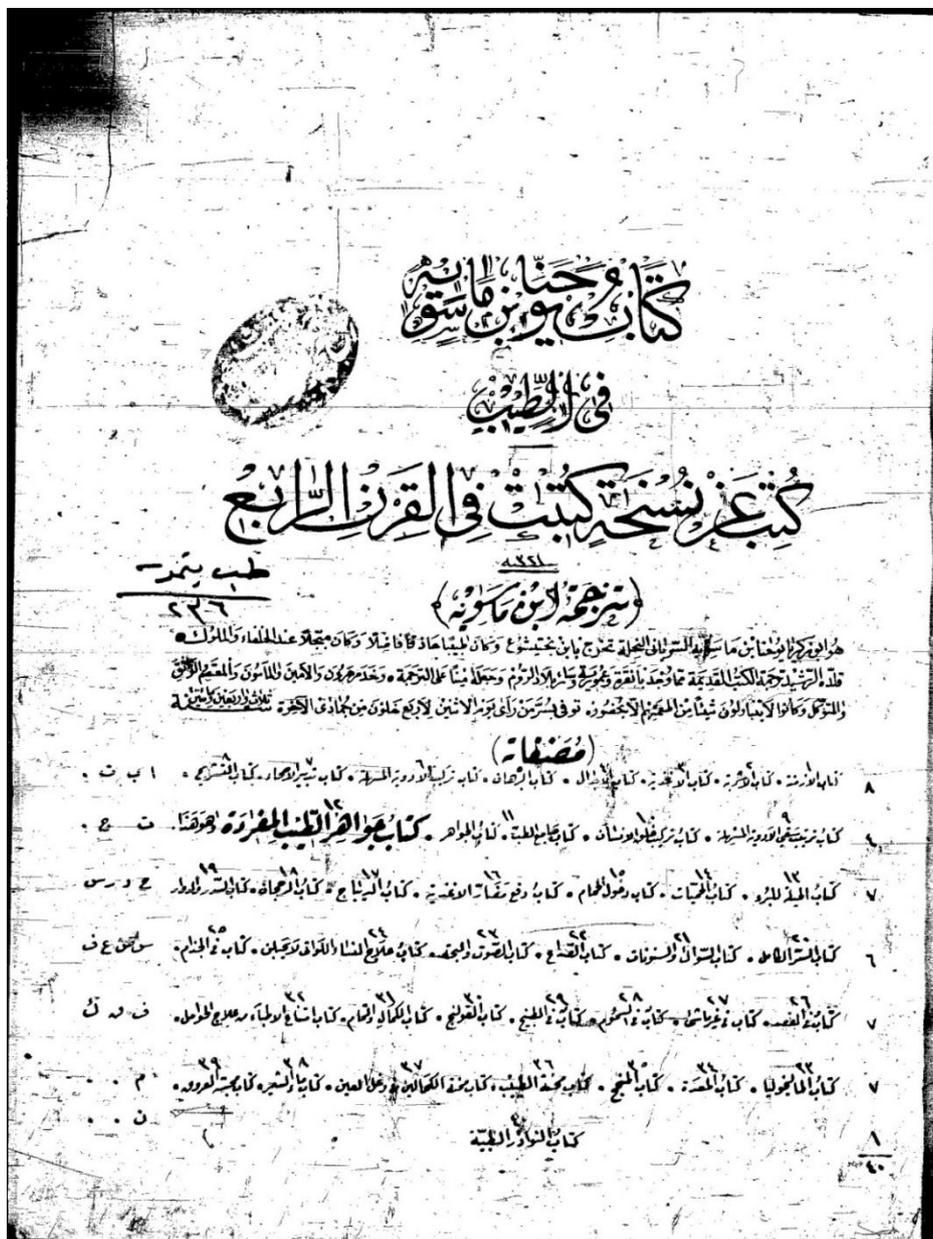


Figure 5. The title page of the CT

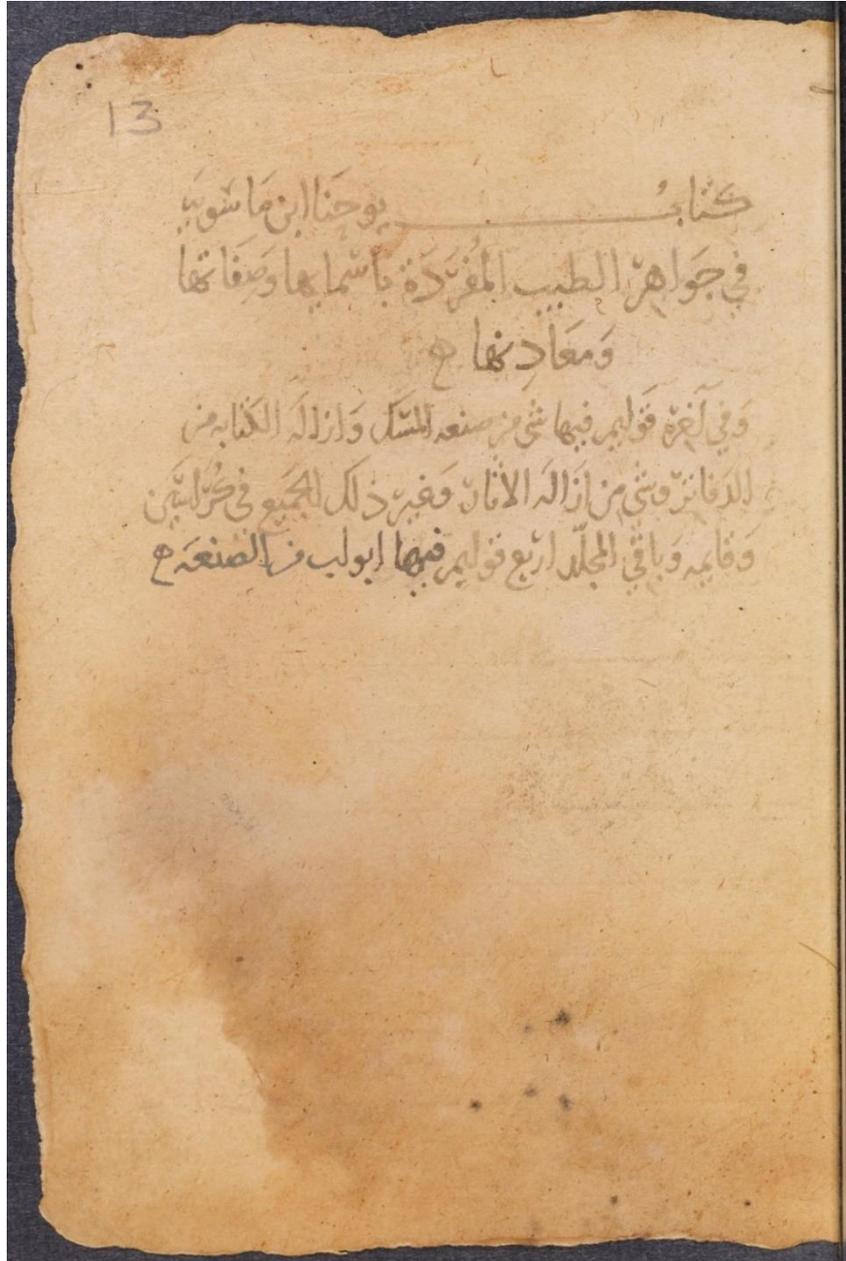


Figure 6. The title page of *Jawāhir al-Ṭīb* in the PG

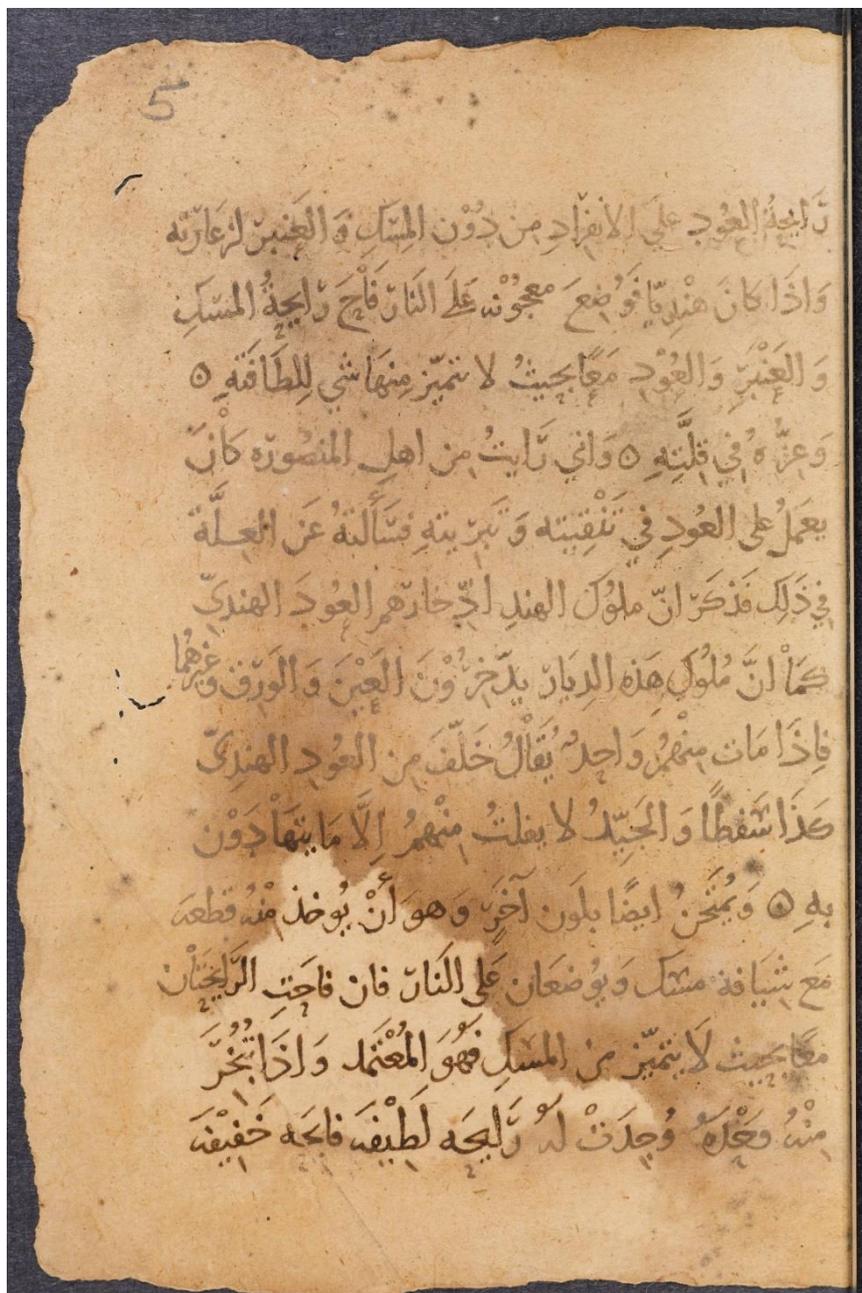


Figure 7. Folio 5a of PG

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المزاج الحار
الإستعمال وإن كان للقط كبيراً ولم يقدر على تقيته
فيكثر المشيان وييدي المسك كله على الصلاة ويترك
بناعه من مثل منخل صغير غير صفيق فإنه يعلو ما كان فيه
من الأكرثر ويستعمل ذلك في الغالية ثم يوجد بعد ذلك
عشيرة مناقيل غير لشهب ويغرض على تقدير حب العرس
ويؤخذ طنجير حجري ويصب فيه الماء ويوضع في وسط القبة
صغيرة مدورة ويؤخذ قصعة صينية رقيقة ويوضع على
الأنفية في وسط الماء ويغلي الماء ويجعل العنبر في القصعة
ليذوب بحرارة الماء يخرج القصعة ويغلي فيها المسك المنقوع
ويجرك بالملحمة حريماً جيداً ويجعل فنايل وتقطع بالمقراض
ويوضع على منخل حريري ويخفف في الظل وهذا الند
لا يبقى ببلدنا إلا في الشتاء وترد الماء إذا صار الزمان
صيفاً لأن ذلك يخال عن جهته حرارة الهواء ولا يجوز

Figure 8. The Quire signature of the PG

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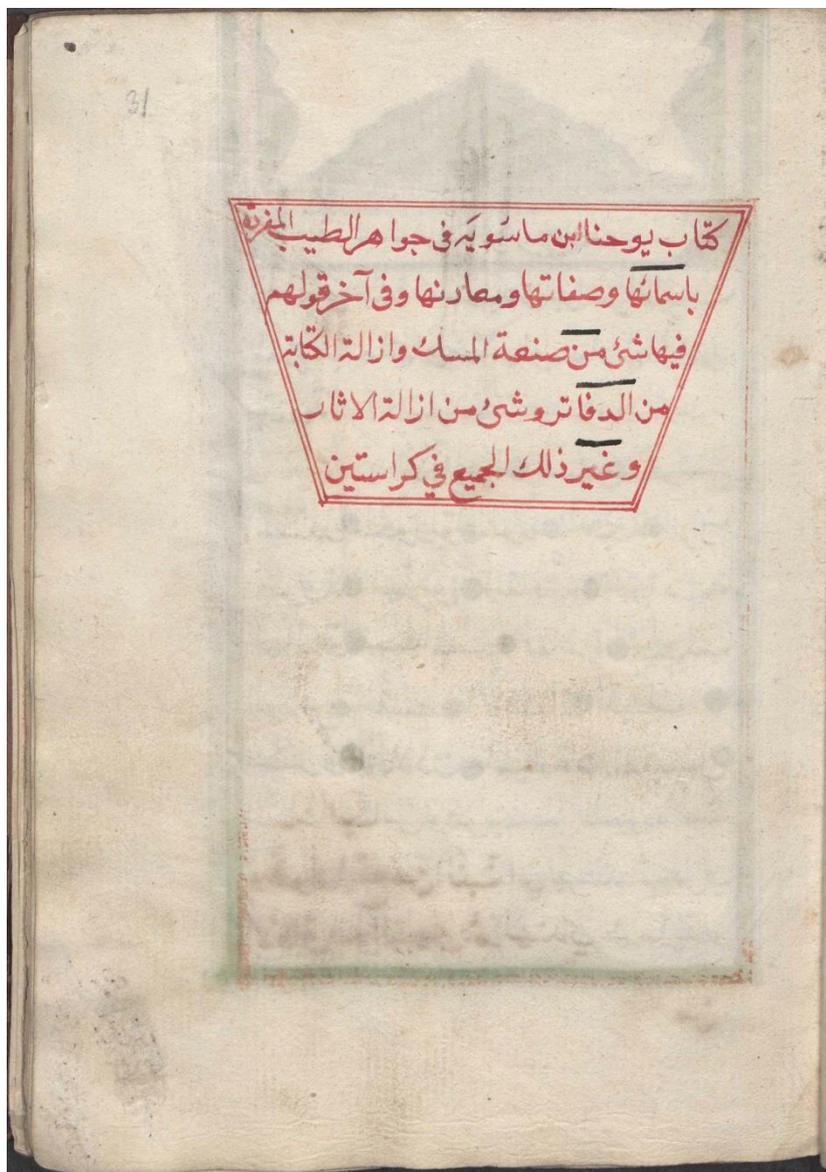


Figure 9. The title page of Jawāhir al-Ṭīb in the LR

References

- Abū al-fidā', Ismā'īl b. 'Alī. *Taqwīm Al-Buldān*. Maktabat al-thiqāfat al-dīniya, 1427.
- Afshār, Īraj, Mohammadtaqī Dānishpajhūh, et al. *Fihristi Noskhihā-Yi Khattī-Yi Kitābkhāni-Yi Mellī-Yi Malek Vābasti Bi Āstāni Quds: V. 5: Majmū'ihā va Junghā*. Nashri Hunar, 1363.
- Afshār, Īraj, Muhammad-Taqi Dānishpajhūh, et al. *Fihristi Noskhihā-Yi Khattī-Yi Kitābkhāni-Yi Mellī-Yi Malek Vābasti Bi Āstāni Quds, V. 5: Majmū'ihā va Junghā*. Nashri Hunar, 1984.
- Al-Zubaydī, Muhammad b. Muhammad. *Tāj Al-Arūs Min Jawāhir al-Qāmūs*. Edited by Alī Shīrī, Dār al-fikr, 1414.
- Barsawī, Muḥammad b. 'Alī. *Awḍāḥ Al-Masālik Ilā Ma'rifat al-Buldan Wa al-Mamālik*. Dār al-gharb al-Islāmī, 1427.
- Dānishpajhūh, Mohammadtaqī. "Du Risāla Dar Shinākhti 'itr." *Farhangi Īrānzamīn*, no. 15, 1968-1969 1347, pp. 222–76.
- Eminoglu, Mehmet. *Osmanli Vesikalarini Okumaya Giris*. Turkiye Diyanet Vakfi Yayinlari, 2011.
- Gacek, A. *Arabic Manuscripts: A Vademecum for Readers*. Brill, 2009.
- Hitti, P. K., et al. *Descriptive Catalog of the Garrett Collection of Arabic Manuscripts in the Princeton University Library*. Princeton University Press, 1938.
- Ḥudūd Al-'Ālam Min al-Mashriq Ila al-Maghrib*. Ketābkhāni yi Ṭahūrī, 1362.
- Karamati, Younes, and Mohsen Qosi. "On the Authorship and Title of a 10th-Century Arabic Treatise on Perfumes." *Journal of History of Science*, vol. 13, no. 2, 2018, pp. 189–211.
- Minorsky, V. V. *Ḥudūd Al-'Ālam "The Regions of the World" - A Persian Geography 372 A.H. (982 AD)*. Trustees of the "E.J.W. Gibb Memorial," 1937.
- Princeton University Digital Library -- Item Overview*. <http://pucl.princeton.edu/objects/g445cd200>. Accessed 9 Apr. 2020.
- Refaiya (English)*. <https://www.refaiya.uni-leipzig.de/content/index.xml>. Accessed 10 Mar. 2020.
- Refaiya: Vollers 0768*. https://www.refaiya.uni-leipzig.de/receive/RefaiyaBook_islamhs_00006473? Accessed 10 Mar. 2020.
- Samī Ḥaddad, Farīd, and Hans heizeesh Bitterfield. *Fihris Al-Makḥṭūtāt al-Ṭibbiya al-Arabiya Fī Maktabat al-Duktur Samī Ibrāhīm Ḥaddad*. Aleppo University, 1984.
- Sayyid Yūsuf Husayn. *Resāli-Yi Jild-Sāzī (Tayyārī-Yi Jild)*. Edited by Alī Safarī Āq-qal'i and Īraj Afshār, Markaze Pajhūheshī-ye Mīrāse Maktūb, 1390.

39/ A Survey of the Manuscripts...

Sbath, Paul. "Abrégé sur les arômes par Sahlân Ibn Kaissan médecin chrétien melchite égyptien du Calife al-'Aziz mort en 990." *Bulletin de l'Institut d'Égypte*, no. 26, 1944, pp. 183–213.

———. "Traité sur les substances simples aromatiques." *Bulletin de l'Institut d'Égypte*, no. 19, July 1936, pp. 5–27.

Sezgin, Fuat. *Geschichte des arabischen Schrifttums: band v Mathematik bis ca. 430 H.* E.J. Brill, 1974.