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NEW BOOKS, NEW PLANT USES:  
THE CASE OF A TURIN IATROSOFION

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SUMMARY

*‘Iatrosafia’ are collections of medical recipes produced in the Greek world after the fall of Byzantium, which were intended for practical usage. Though widely disseminated, they have rarely been the object of a thorough investigation, whereas their analysis provides interesting insights on Greek medicine in the Middle Ages and in the early-modern Era. The contents of the iatrosafia are often drawn from the previous Greek medical tradition. An interesting case is the iatrosafion in the MS. Taur. B.VII.18 preserved in Turin National University Library (16<sup>th</sup> century), which is especially based on the Pseudo-Galenic work De remediis parabilibus. As usually in the Byzantine medical texts, the therapy in this iatrosafion is made in large part of plant ingredients. Like the other contents of the work, the plants are frequently reproduced from Greek medical sources and sometimes modified. This article surveys the uses of the plants from the Greek medical tradition in the Turin iatrosafion and analyses their transformations.*

*The Definition of Iatrosafion*

The modern Greek term γιάτροσόφι (*giatrosofi*) defines a practical healing method, easily accessible and typical of popular medicine. *Giatrosafia* are commonly considered home-prepared medicines for daily problems<sup>1</sup>.

*Key words:* Iatrosafion - Greek sources - Plant transformations

The term *giatrosofi* derives from ἰατροσόφιον (*iatrosofion*), which was much diffused after the 15<sup>th</sup> century. In several manuscripts *iatrosofion* is the title used for Greek formularies, which rely on the healing properties of vegetal, animal and mineral ingredients<sup>2</sup>. In these collections of remedies the contents are divided in chapters, and the therapy is based on elements of both learned and popular medicine<sup>3</sup>. Theoretical explanations are usually absent, and instructions for the preparation of medicines are expressed in a simple way. Only very rarely the same *iatrosafia* can be found in more than a single manuscript, as their language, compilation techniques, selection, and sequence of the recipes usually differ<sup>4</sup>. They are sometimes made of *excerpta* from the Greek medical tradition, although they often modify their form and structure in addition to simplifying their content<sup>5</sup>.

The *iatrosafia* have rarely been the object of a thorough investigation: only a few studies outline their features. A systematic examination of existing witnesses allows to identify the characteristics of Greek medicine in the Middle Ages and the early-modern era<sup>6</sup>.

#### *The 'iatrosofion' of MS. Taur. B.VII.18*

On the basis of these characteristics the text of ff. 1r–67r of MS. Taur. B.VII.18 can be defined as a *iatrosofion*. The manuscript is datable to the 16<sup>th</sup> century<sup>7</sup>. Its first folios, which probably contained the title of the text and a *pinax* (table of contents), are now lost because of the fire that destroyed the *Biblioteca Nazionale Universitaria* of Turin in 1904 and damaged the book<sup>8</sup>. Preserved text is made of 233 chapters, numbered 35–268.

The recipes detail remedies easy to prepare for daily problems and, even though some do not seem to be thematically grouped, most are ordered *a capite ad calcem* (from head to toe). Remedies are also grouped by symptoms and affected parts of the body. For example, we can find together *formulae* for sore throat (chapter 55)<sup>9</sup>:

*Εἰς πόνον λαιμοῦ*

Μελαντηρίαν κεκομμένην. ποιεῖ δὲ πρὸς ταῦτα καὶ τὸ ὀμφάκιον ἔλαιον κατ' ἰδίαν μετὰ μέλιτος ἀνιέμενον. ποιεῖ δὲ καὶ ἡ γλαύκουρις θλασθεῖσα μετὰ μέλιτος καὶ ὕδατος ἴσου διδουμένου χυλοῦ ἀναγαρογαρίζεσθαι.

*Against sore throat*

Pounded copper black. For these pains also the oil of unripe grapes injected as such with honey works. And also the horned poppy crushed with honey and in equal measure water works, when this juice is given to be gargled.

As for body parts, the chapter 88 and the next ones contain remedies for the teeth:

*Περὶ ὀδόντων*

Ἀλκύνιον ὑποθυμία καὶ εὐθέως ἄπονος ἔσται. ἢ ὑοσκάμου σπέρμα ὑποθυμαθὲν ἄπονον ποιεῖ.

*On the teeth*

Fumigate with dead-man's fingers and he will be immediately painless. Or fumigated henbane makes him painless.

Sometimes the remedies are grouped on the basis of the compound, as in chapter 244 and the next ones:

*Ἄλειφὴ ἄσπρη*

Εἰς τὴν ἄσπρη βάλει στέαρ χοίρειον ἢ χριστέλαιον καὶ σησαμέλαιον καὶ κήριον τράκτον, μαστίχη καὶ ψιμμίθη, ἔχει δὲ ἐνέργιαν εἰς τὸ καταψύχειν καὶ γλυκαίνειν, ἐπαίρειν καὶ τὰς φλεγμονάς.

*White ointment*

Put in the white ointment pig fat or anointing oil, sesame oil, blanched wax, mastic and white lead. It has the property of cooling and sweetening and removing even the inflammations.

Chapters can also deal with topics related to agriculture (chapter 239):

<i>Πρὸς κάμπας καὶ σκόληκας Λαβὼν ἀμπελίου κλῆμα καῦσον καὶ τὴν κόνιν βαλὼν εἰς ὕδωρ ἐπὶ ἡμέρας τρεῖς κατέρρανε τὰ λάχανα.</i>	<i>Against caterpillars and worms Take a vine twig and burn it and put the ash in water for three days and sprinkle the veg- etables with it.</i>
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*A work for practical use*

The structure of the chapters in the Turin manuscript hints at a practical function.

1. Their headings mention:

- an illness (Turin MS. 42, 1 εἰς λέπραν κεφαλῆς - against leprosy of the head);
- a part of the body (Turin MS. 79, 1 περὶ ὀδόντων - about the teeth);
- a kind of compound (Turin MS. 247, 1 ἀλειφή μαύρη - black ointment);
- agricultural topics (Turin MS. 238, 1 πρὸς τὸ συνάξει ἀκρίδας εἰς ἓναν τόπον - for gathering grasshoppers in one place).

2. The description of the remedies is sometimes introduced by verbs like ἐνώσας (mingle) or λάβε (take); occasionally they also specify the quantity of the ingredients in the form of a list.

3. The remedies follow with:

- preparation;
- administration;
- expected efficacy, with notations as ἰᾶται (it heals), ὠφελεῖται (it is helpful), θεραπεύει (it cures), or θαυμάσης (you will wonder).

The use of red ink for the heading and initial letter of the chapters further hints at a practical function, making consultation easy, as do also red chapter numbers in the margins.

*The sources*

95 of the 233 chapters in the Turin text are drawn from the classical Greek and Byzantine medical tradition<sup>10</sup>. The major source is the Pseudo-Galenic work *De remediis parabilibus*. Here is an example<sup>11</sup>:

Turin MS.  
Chapter 90

Pseudo-Galenus, *De remediis  
parabilibus*  
14,429, 5–15 Kühn

*Εἰς ὀδόντας βεβρωκότας*

Πέπερι λευκὸ λείψ ἀνειμένω  
χαλκάνθῳ ἢ κηκιδίῳ ἢ  
μετὰ μέλιτος στυπηρίαν  
σχιστὴν ἐντίθει εἰς τὸ βρῶμα  
καὶ ἄπονον ποιήσει παρὰ  
χρῆμα. ἢ ἥπαρ ταύρου  
ἡσύχως πεφρυγμένον καὶ  
ἐντιθέμενον εἰς τοὺς ὀδόντας  
ἅμα τῇ θίξει ἄπονον ποιεῖ.

[στ´. Πρὸς βεβρωμένους  
ὀδόντας.]

Πρὸς τοὺς δὲ βεβρωμένους  
ὀδόντας ἔμβαλε πέπερι  
λευκὸν λείψ ἀνειμένον  
χαλκάνθῳ ἢ κηκίδα. ἢ μετὰ  
μέλιτος σχιστὴν ἐντίθει εἰς τὸ  
βρῶμα καὶ ἄπονον ποιήσει.  
<...> ἄλλο. ἥπαρ ταύρου  
ἡσύχως πεφρυγμένον καὶ  
ἐντιθέμενον εἰς τὸν ὀδόντα  
ἅμα τῇ θίξει ἄπονον ποιεῖ.

Extracts from the *Epitomae medicae* by Paul of Aegina can be identified<sup>12</sup>:

Turin MS.  
Chapter 186

Paulus Aegineta, *Epitomae medicae* 3, 81, 1, 1–10 Heiberg

*Πρὸς παρωνυχίδας*

Κηκίς μετὰ μέλιτος καταστέλλει ἐπιθεμένη. ἢ λύκιον ἐπιθέμενον κατάπλασσε φακῶ λείῳ ἢ φοίνικας μετ' οἴνου ἢ χλωρὰ ῥόδα ἢ θέρμνον ἄλευρον μετὰ μέλιτος. ἔστι δὲ τοῦτο ἀπόστημα παρὰ τὴν ῥίζαν τοῦ ὄνυχος συνιστάμενον.

<Περὶ τῶν περὶ τοὺς ὄνυχας, καὶ πρῶτον περὶ παρωνυχίας.>

Ἡ παρωνυχία ἀπόστημά ἐστι παρὰ τὴν ῥίζαν τοῦ ὄνυχος συνιστάμενον. μικρὰν μὲν οὖν οὖσαν ἔτι τὴν παρωνυχίαν καὶ ἀρχομένην κηκίς μετὰ μέλιτος καταστέλλει καὶ συστήναι καλύει ἢ ὁ Μούσα τροχίσκος ἢ Ἡρα δι' ὕδατος· γενομένην δὲ ἤδη τὴν παρὰ φύσιν σάρκα σκοπὸς ἐστὶ διὰ τῶν ἀδήκτων ἀναλώσαι καὶ ῥήξαι. <...> ἐκπηθεῖσαν δὲ κεντήσας καὶ τὸ ὑγρὸν ἐκχέας σπογγίον ὕδατι βρέξας ἐπιτίθει ἢ κατάπλασσε φακῶ μεθ' ὕδατος λείῳ ἢ φοίνικι μετ' οἴνου ἢ ῥόδοις χλωροῖς ἢ ξηροῖς ἀποβεβρεγμένοις ὕδατι λείοις ἢ ἀλφίτῳ μεθ' ὕδατος. ποιεῖ δὲ πρὸς παρωνυχίας καὶ θέρμνον ἄλευρον μέλιτι ἢ οἰνομέλιτι πεφυραμένον.

Some chapters are taken from the *Geoponica*<sup>13</sup>:

Turin MS.  
Chapter 123, 2–6

*Geoponica* 12, 38, 1, 1 – 2, 4  
Lelli

*Εἰς πλευρίτην*

<...> Τοῦ ἀγρίου λαπάθου ὁ καρπὸς μετ' οἴνου πινόμενος καρδίαν καὶ δυσεντερίαν ἰάται. περιαιπτόμενος δὲ τῷ ἀριστερῷ βραχίονι γυναικὶ ἄκρως ἰάται. ἡ δὲ ῥίζα ἐψομένη μετ' ὄξους καὶ καταπλασσομένη λέπρας τινὲς φασὶ ἰᾶσθαι καὶ ἀλφούς καὶ λειχήνας.

*Περὶ λαπάθου. Ἀφρικανοῦ.*

Τοῦ ἀγρίου λαπάθου ὁ καρπὸς καρδίαν καὶ δυσεντεριανιάται, μετὰ οἴνου πινόμενος. περιαιπτόμενος δὲ τῷ ἀριστερῷ βραχίονι, γυναικὸς ἀτοκίας ἰάται. ἡ δὲ ῥίζα τοῦ ἀγρίου λαπάθου θεραπεύει ἴκτερον καὶ ὕδρωπα. ἐψομένη δὲ μετὰ ὄξους καὶ καταπλαττομένη λέπραν ἰάται ὡς φασι, καὶ λειχήνας, καὶ ἀλφούς.

Some others are from the *Cyranides*<sup>14</sup>:

Turin MS.  
Chapter 256

*Cyranides* 2, 33, 12–13  
Kaimakis

*Περὶ φίλτρον*

Οἱ ἐντὸς τῶν κεράτων τῶν αἰγῶν σκώληκες εὐρυσκόμενοι φίλτροπόσιμοι εἰσὶν ἀπαράβατοι καὶ οἱ ὄρχεις περιαιπτόμενοι τὸ αὐτὸ ποιούσι.

*Περὶ προβάτου.*

<...> Οἱ δὲ ἐντὸς τῶν κεράτων σκώληκες φίλτροπόσιμόν εἰσι ἀπαράβατον.

The *Libri medici* by Aetius of Amida have also been used<sup>15</sup>:

Turin MS.  
Chapter 166, 7–10

Aëtius Amidenus, *Iatricorum  
liber XVI* 34, 1–3 Zervos

*Εὐσύλληπτον ἀπαράβατον*

<...> Κὰν παντελῶς στείρα  
ὑπάρχει διδόναι δὲ αὐτῇ  
πόμα πίνειν λινοζώστην  
μετὰ καστορίου καὶ  
ἀψινθίου ἐπὶ ἡμέρας τρεῖς ἢ  
τέσσαρας μετὰ τῶν καιρῶν  
τῆς ἐπιφανήσεως τῶν  
καταμηνίων.

*Πόματα, πεσσοί καὶ  
ὑποθυμιάματα συλληπτικά.*

Διδόναι δὲ αὐταῖς πίνειν  
λινοζώστιν μετὰ καστορίου  
καὶ ἀψινθίου ἐπὶ ἡμέρας  
γ'. ἢ δ'. κατὰ τὸν καιρὸν  
τῆς ἐπιφάνσεως τῶν  
καταμηνίων.

Extracts from anonymous texts have been included, for example the salt attributed to the apostle Luke<sup>16</sup>:

Turin MS.  
Chapter 250

*Physici et medici Graeci mi-  
nores* I 297, 3–14 Ideler

*Ἄλατιον σκευασθὲν παρὰ  
τοῦ ἀγίου ἀποστόλου Λουκᾶ  
Ἵπερ ὄρασιν τηρεῖ μέχρη  
γήρους καὶ ὠφελεῖ τοὺς  
ἀναγιγνώσκοντας. φλέγμα ἐν  
τῷ θώρακι οὐκ ἐὰ γενέσθαι,  
οὐ δύπνοϊαν, οὐκ ὀφθαλμίαν,  
οὐκ πάσαν καθαιρεῖ, τοὺς  
χυμοὺς ἀναλύειν, σπασμοὺς*

*Σκευασία ἀλατίου τοῦ ἀγίου  
ἀποστόλου.*

<...> Ὅρασιν τηρεῖ μέχρη γήρους,  
φλέγμα ἐν τῷ θώρακι οὐκ ἐὰ  
γενέσθαι, οὐκ ὀφθαλμίαν, οὐκ  
ἀπόρροϊαν τριχῶν, χολήν τε  
πάσαν καθαιρεῖ, τοὺς χυμοὺς  
ἀναλύει, σπασμοὺς παύει,  
ὀδόντας σαλευομένους



παύει, ποδαλγίαν κωλύει, ὀδόντας ἀλγεῖν οὐκ ἐᾶ καὶ τοὺς σαλευομένους στηρίζει, σκευάζετ<αι> δὲ οὕτως· ὕσσωπον Κρητικὸν οὐγγίας δ', ἄμμεον οὐγγίας η', ζιγγίβερι οὐγγίας β', ἐπίθυμον οὐγγίας [ ], κύμνον οὐγγίας γ', μελάνθη οὐγγίας γ', ἄνισον οὐγγίαν ἔν, ἀλὸς κοινῆς οὐγγίας γ', ἄλας ἀμμωνιακὸν οὐγγίας ζ', μαλαθρόσπερμα οὐγγίαν ἔν· ταῦτα πάντα τρίψας καὶ κοσκινίσας τρώγε σὺν πάσαις ταῖς τροφαῖς ἀντὶ ἄλατος.

στηρίζει. Σκευάζω δὲ οὕτως· ὕσσωπον κρητικὸν οὐγγίας δ', γλίχωνος οὐγγ. β'. κιμίνου οὐγγ. β'. ἐπιθύμου οὐγγ. α' Σ. ζιγγιβέρεως οὐγγ. β'. θύμου οὐγγ. β'. ἄλατος ὄγ. β'. ἀμμωνιακοῦ ὄγ. β'. ἄμμεως ὄγ. κ'. ἄλατος ῥυκτοῦ ὄγ. β'. ἀστραγωγρειγάνου ὄγ. δ'. πεπέρεως κοινοῦ οὐγγίαν α'. πεπέρεως μακροῦ ὄγ. α'. πεπέρεως λευκοῦ ὄγ. α'. Τὰ πάντα θήσας καὶ τρίψας χρῶ ἐξ αὐτῶν καθ' ἐκάστην ἐσθίων, ὁ ἐμβάπτων ἐν αὐτῶ τὰς τροφὰς πάσας.

The text of the sources is often modified. It can be expected that such modifications were already present in earlier manuals of which the Turin manuscript is a copy<sup>17</sup>. In particular:

1. The heading of a chapter can be different from the title in a source, as, for example:
  - Turin MS. 123, 1 εἰς πλευρίτην (against pleurisy) and *Georon.* 12, 38, 1, 1 Lelli περὶ λαπάθου (on Greek dock);
  - Turin MS. 256, 1 περὶ φίλτρον (on a love potion) and *Cyr.* 2, 33, 1 Kaimakis περὶ προβάτου (on the sheep).
2. In a chapter:<sup>18</sup>
  - The text of a source can be shortened:

Turin MS.  
Chapter 90

Ps.-Gal., *De rem. par.*  
14.429, 5–15 Kühn

*Εἰς ὀδόντας βεβρωκότας*

Πέπερι λευκὸ λείῳ ἀνιεμένῳ  
χαλκάνθῳ ἢ κηκιδίῳ ἢ μετὰ  
μέλιτος στυπτηρίαν σχιστὴν  
ἐντίθει εἰς τὸ βρῶμα καὶ  
ἄπονον ποιήσει παρὰ χρῆμα.

ἢ ἥπαρ ταύρου ἡσύχως  
πεφρυγμένον καὶ ἐντιθέμενον  
εἰς τοὺς ὀδόντας ἅμα τῇ θίξει  
ἄπονον ποιεῖ.

[στ'. Πρὸς βεβρωμένους  
ὀδόντας.]

Πρὸς τοὺς δὲ βεβρωμένους  
ὀδόντας ἔμβαλε πέπερι  
λευκὸν λείῳ ἀνιεμένον  
χαλκάνθῳ ἢ κηκίδα. ἢ μετὰ  
μέλιτος σχιστὴν ἐντίθει  
εἰς τὸ βρῶμα καὶ ἄπονον  
ποιήσει. ἄλλο. τὸν τοῦ  
λίμακος λίθον θραύσας  
εἰς σησαμοειδῆ μεγέθη καὶ  
ἐπίθες εἰς τὸ βρῶμα τοῦ  
ὀδόντος καὶ παραχρῆμα  
ἄπονον ποιεῖ, ἐπιπωματίζε  
δὲ κηρῶ. ἄλλο. ἥπαρ ταύρου  
ἡσύχως πεφρυγμένον καὶ  
ἐντιθέμενον εἰς τὸν ὀδόντα  
ἅμα τῇ θίξει ἄπονον ποιεῖ.

- Some information from a source can be omitted, e.g. Turin MS. 89, 1 *περὶ οδόντων* (on the teeth) and Ps.-Gal., *De rem. par.* 14,428, 17 Kühn *πρὸς εὐωδίαν ὀδόντων* (for sweet smell of the teeth);
- The text of a source can be expanded:

Turin MS.  
Chapter 123

*Geop.*, 12, 38, 1, 1 – 2, 4 Lelli

*Εἰς πλευρίτην*

Ἐλαίας φύλλα τρίψας μετ' εὐκράτου καὶ μέλιτος δὸς πείν. τοῦ ἀγρίου λαπάθου ὁ καρπὸς μετ' οἴνου πινόμενος καρδίαν καὶ δυσεντερίαν ἰάται. περιαιπόμενος δὲ τῷ ἀριστερῷ βραχίονι γυναικὶ ἄκρωσ ἰάται. ἢ δὲ ῥίζα ἐψομένη μετ' ὄξους καὶ καταπλασσομένη λέπρας τινὲς φασι ἰᾶσθαι καὶ ἀλφουὺς καὶ λειχήνας.

*Περὶ λαπάθου. Ἀφροικανού.*

Τοῦ ἀγρίου λαπάθου ὁ καρπὸς καρδίαν καὶ δυσεντερίαν ἰάται, μετὰ οἴνου πινόμενος. περιαιπόμενος δὲ τῷ ἀριστερῷ βραχίονι, γυναικὸς ἀτοκίας ἰάται. ἢ δὲ ῥίζα τοῦ ἀγρίου λαπάθου θεραπεύει ἴκτερον καὶ ὕδρωπα. ἐψομένη δὲ μετὰ ὄξους καὶ καταπλαπτομένη λέπραν ἰάται ὡς φασι, καὶ λειχήνας, καὶ ἀλφούς.

- Information can be added to the text of a source, as for example in Turin MS. 84, 1 εἰς ὀδόντας βεβρωμένους καὶ μεμελανομένους (against carious and black teeth) and Ps.-Gal., *De rem. par.* 14,356, 16 Kühn πρὸς ὀδόντας μεμελασμένους (against black teeth).
3. In the headings and in the main text of the chapters information can be substituted, e.g. Turin MS. 108, 1 πρὸς τὸ εὐωδεῖν τὸ πρόσωπον (for making the face perfumed) and Ps.-Gal., *De rem. par.* 14,424, 12 Kühn πρὸς τὸ εὐωδεῖν τὸ στόμα (for making the mouth perfumed).

Usually the modifications bears on<sup>19</sup>:

- The ingredients, e.g. Turin MS. 168, 2 ὄνιον γάλα (donkey milk) and Ps.-Gal., *De rem. par.* 14,478, 16 Kühn ὕειον γάλα (pig milk);

- Their quantity, e.g. Turin MS. 166, 3 μέλιτος ούγγιας γ´ (3 ounces of honey) and *Cyr.* 2, 9, 5 Kaimakis μέλιτος ούγγ. δ´ (4 ounces of honey).

*Plants and tradition in the Turin ‘iatrosofion’*

As usual in Byzantine medical formularies, a large part of the therapy is made of plant ingredients. This is also the case in the Turin text, where 225 plants can be found, including 153 that appear in its sources.<sup>20</sup> Data about plants in the Turin iatrosofion and its sources are often identical. Compared with the Greek medical tradition, information in the Turin MS. is sometimes modified, however. Differences are of four major types:

1. Plants, plant parts, or plant derivatives originally in the sources are omitted in Turin recipes. There are 34 cases of this, e.g. ἴρις (iris - *Iris germanica* L.)<sup>21</sup>:

Turin MS.  
Chapter 86, 4–7

Ps.-Gal., *De rem. par.* XIV  
357, 13–15 Kühn

*Προσφυλακτικὰ ὀδόντων*  
<...> Ἄριστα ποιεῖ πρὸς τε φυλακτικὴν ἀλγημάτων καὶ ῥώσιν τῶν οὐλῶν καὶ ὀδόντων, ἔτι τε εὐπρέπειαν καὶ ὑπογεγραμμένων σμίγματα. ἔρια οἰσοπηρὰ ὀθονίῳ ἐνδήσας, καύσας ἀλῶν δὲ τὸ τρίτον, σμίξας καὶ λειώσας εὖ μάλα σμήχε τοὺς ὀδόντας.

[Ἄριστα ποιεῖ πρὸς τε φυλακτικὴν ἀλγημάτων, καὶ ῥώσιν τῶν οὐλῶν καὶ τῶν ὀδόντων, ἔτι τε εὐπρέπειαν καὶ τὰ ὑποτεταγμένα σμίγματα.]  
<...> Ἄλλο. ἄλας καὶ μέλι λειάνας μέχρι κηρῶδες γενέσθαι καθαρῶ ὀθονίῳ ἐνδήσας καὶ καύσας, εἶτα μίξας ἴριν ὀλίγην, σμήχε τοὺς ὀδόντας.

2. New plants, plant parts, or plant derivatives are added into recipes reproduced from the Greek medical tradition. This appears in 8 cases, e.g. κριθίνον ἄλευρον (barley flour - *Hordeum vulgare L.*)<sup>22</sup>:

Turin MS.  
Chapter 113, 7–8

Ps.-Gal., *De rem. par.* 14, 353,  
11–14 Kühn

*Πρὸς χρονίους λειχήνας*  
<...> Ἡ λαπάθου φλοιὸν  
τῆς ῥίζης λεάνας καὶ  
κριθίνα ἄλευρα μετ' ὄξους  
δρομυτάτου κατάπλασσε.

*[Πρὸς χρονίους λειχήνας.]*  
<...> Ἄλλο. λαπάθου  
φλοιὸν τῆς ῥίζης μετὰ  
ὄξους λειώσας, κατάπλασσε  
προεκνιπρώσας.

This is also the case in the sections of the Turin manuscript that expand on the text of the sources, where 23 plants, plant parts, or plant derivatives can be identified, e.g. ἀνίσου σπέρμα (anise seed - *Pimpinella anisum L.*)<sup>23</sup>:

Turin MS.  
Chapter 149, 5–7

Ps.-Gal., *De rem. par.* 14, 465,  
1–3 Kühn

*Πρὸς στρόφον ἐντέρων καὶ  
κοιλίας*  
<...> Ἡ δάφνη μασσησάμε-  
νος νήσις τὸν χυλὸν κατα-  
πνέτω καὶ τὸ μάσιμα ἐπι-  
τεθέτω ἐπὶ τὸν ὀ<μ>φαλὸν  
καὶ παρὰ χρῆμα παύσεται.  
ἢ ἀνίσου σπέρμα δι' ὕδατος  
δὸς πεῖν.

*Πρὸς στρόφον ἐντέρων καὶ  
κοιλίας*  
<...> Ἄλλο. δάφνην μα-  
σησάμενος νήσις τὸν χυλὸν  
καταπνέτω. καὶ τὸ μάσιμα  
ἐπιτιθέτω ἐπὶ τὸν ὀμφαλὸν  
καὶ παραχρῆμα παύσεται.

3. Plants, or plant parts in the sources are substituted in the Turin text. There are four different types of substitution:

- a. The plant in the Turin manuscript is different from that in the source, e.g. πτέρις (fern - *Polystichum filix mas Roth.*) and κισσός (ivy - *Hedera helix L.*)<sup>24</sup>:

Turin MS.  
Chapter 134, 1–2

Ps.-Gal., *De rem. par.* 14, 463,  
4–5 Kühn

Ἐπίθεμα πρὸς ὑδροπικόν  
Πτέριν κεκαυμένην ἐπιμελῶς  
κατάπλασσε.

[Ἐπίθεμα πρὸς ὑδροπικούς.]  
Κισσὸν κεκαυμένον ἐπιμελῶς  
κατάπλασσε.

- b. A plant in Turin recipes substitutes in 3 cases a non-vegetal ingredient in the source as, for example, μυρίκη (tamarisk - *Tamarix tetrandra Pall.*) and κήρυξ (sea snail)<sup>25</sup>:

Turin MS.  
Chapter 165, 1–3

Ps.-Gal., *De rem. par.* 14, 486,  
16 – 487, 3 Kühn

Πρὸς τὸ ἀνέντατον τινα  
γενέσθαι  
Μυρίκη καύσας σβέσον  
εἰς οὖρος βοδὸς τομίου καὶ  
λάμβανε ἀπὸ τούτου ἢ ἐν  
ποτῶ ἢ ἐν βρωτῶ, τὸ δ'  
ἄλλον εἰς ἀγγεῖον ἀπόθου.

[α'. Πρὸς τὸ ἀνέντατόν τινα  
γενέσθαι.]  
Κήρυκα καύσας σβέσον  
οὖρῳ βοδὸς τομίου καὶ  
λάμβανε ἀπὸ τούτου ἢ ἐν  
ποτῶ ἢ ἐν βρωτῶ. τὸ δὲ ἄλλο  
εἰς ἀγγεῖον ἀπόθου.

- c. The Turin text uses a different part from the same plants in 3 cases, e.g. σαμψύχου φύλλον (marjoram leaf - *Majorana*

*hortensis Moench*) and σαμψύχου πέταλον (marjoram petal)<sup>26</sup>:

Turin MS.  
Chapter 63, 10–11

Ps.-Gal., *De rem. par.* 14, 345,  
7 – 9 Kühn

*Περὶ τῶν ἐν τοῖς ὀφθαλμοῖς  
γενομένων παθῶν*

<...> Κράμβη λεία μετὰ  
ἀλφίτου λείου σὺν ῥόδασι  
καταπλασθὲν ὠκίμου φύλ-  
λα ὁμοίως ἢ σαμψύχου λεία  
κατάπλασσε.

*[Πρὸς θερμὰ ῥεύματα.]*

<...> Κράμβη λεία μετ' ἀλφί-  
του λείου σὺν ὕδατι κα-  
ταπλασθεῖσα· καὶ ὠκίμου  
φύλλα ὁμοίως, ἢ σαμψύχου  
πέταλα λεία κατάπλασσε.

- d. Turin recipes prescribes a different derivative from the same plants, e.g. ὄπιον (poppy juice - *Papaverum somniferum* L.) and μήκων (poppy):

Turin MS.  
Chapter 190, 3–5

Paul. Aeg., *Ep. Med.* 3, 45, 4,  
6–8

*Πρὸς τοὺς δυσουριῶντας  
καὶ στρ<a>γγουριῶντας*

<...> Καταπλάσμασι δὲ  
χρηστέον διὰ πηγάνου καὶ  
ἀνήθου καὶ τήλεως καὶ  
ἀλθαίας ῥίζης, κλύσμασι δὲ  
<διά> ὀπίου καὶ ἐλαίου καὶ  
στέατος χηνός.

*<Περὶ φλεγμονῆς.>*

<...> Καταπλάσμασι  
χρηστέον διὰ πηγάνου καὶ  
ἀνήθου καὶ τήλεως καὶ  
ἀλθαίας ῥίζης κλύσμασί τε  
μαλακοῖς καὶ ἐνέμασι δι'  
ἐλαίου καὶ μήκωνος καὶ  
στέατος χηνός.

4. Applications of the plants may differ in the Turin manuscript and its sources. There are 6 types of such differences.

- a. The same plant can be used in the Turin text and its sources for different medical conditions. Among the 39 cases of this, we can cite ῥόδινος (rose oil - *Rosa centifolia* L.) used against unpleasant smells without wounds in Turin recipes and for whitening teeth and against toothache in their source<sup>27</sup>:

Turin MS.  
Chapter 109, 1–3

Ps.-Gal., *De rem. par.* 14, 426,  
18 – 427, 2 Kühn

Πρὸς δυσφόρους ὀσμάς  
χωρὶς ἐλκῶν γινομένης  
Ἐλάφειον ὀστοῦν καύσας  
καὶ λειώσας χρῶ. τοῦτο καὶ  
τοὺς πόνους τῶν ὀδόντων  
ἰᾶται, μετὰ ῥοδίνου  
χριόμενον κεφαλαλγίαν  
παύει.

[α'. Πρὸς τὸ λευκαίνειν  
ὀδόντας καὶ τὰ πάθη αὐτῶν.]  
<...> Ἐλάφειον ὀστοῦν  
καύσας καὶ λειώσας χρῶ.  
τοῦτο καὶ τοὺς πόνους  
τῶν ὀδόντων ἰᾶται καὶ  
μετὰ ῥοδίνου χριόμενον  
κεφαλαλγίας παύει.

- b. The same plants, plant parts, or plant derivatives are used for different diseases of the same bodily part. This is the case in 44 passages, e.g. βάτου χυλός (raspberry juice - *Rubus idaeus* L.) used against pain and suffering of corners of the eyes in the Turin manuscript, and for eyes suffering from excessive dryness due to sun and dust in the source<sup>28</sup>:



Turin MS.  
Chapter 66, 2–6

Εἰς πόνον καὶ ὀδύνην τῶν ἐν  
ὀφθαλμοῖς κανθῶν

<...> Ὑδωρ πλείον  
προσκληζόμενον θέρους  
ψυχρόν, χειμῶνος θερμόν,  
καὶ πυρία διὰ σπόγγου  
ἀρμόζει καὶ ἐκ φακῶν  
ἀφειψήματος. καὶ αὐτοῖς  
δὲ προσάγειν τοῖς κάνθοις  
βάτου χυλὸν ἢ ῥόδων χυλὸν  
κατ' ἰδίαν ἐκάστῳ σὺν ὕδατι  
ἢ ῥόδα ξηρὰ τριβόμενα σὺν  
οἴνῳ.

Ps.-Gal., *De rem. par.* 14, 348,  
7–11 Kühn

[Πρὸς τοὺς ὀφθαλμοὺς διὰ  
τὸν ἥλιον καὶ κονιορτὸν  
ψωροφθαλμιῶντας.]

Ὑδωρ πλείον  
προσκληζόμενον, θέρους  
ψυχρόν, χειμῶνος θερμόν,  
καὶ πυρία διὰ σπόγγων  
ἀρμόζει ἐκ φακῶν  
ἀφειψήματος. καὶ αὐτοῖς δὲ  
προσάγειν τοῖς κανθοῖς, ἢ  
βάτου, ἢ ῥόδων χυλὸν κατ'  
ἰδίαν ἐκάστου σὺν ὕδατι.

- c. The same plants, plant parts, or plant derivatives can be used for a more specific problem in the Turin text than in its sources. Among the 12 cases of this, we can cite χαλβάνη (all-heal - *Ferula galbaniflua* Boiss. et Buhse) used in case the foetus died in the womb in Turin recipes, whereas it is used only to induce birth in the source<sup>29</sup>:

Turin MS.  
Chapter 168, 3

Εἰ τέθνηκε βρέφος ἐν μήτρῳ  
μένων  
<...> Ἡ χαλβάνη τρίψας ἐν  
ὕδατι δὸς πιεῖν καὶ τέξεται  
παρὰ χροῖμα.

Ps.-Gal., *De rem. par.* 14, 478,  
17–18 Kühn

[ιγ'. Ὠκυτόκιον.]

<...> Ἄλλο. χαλβάνην τρίψας  
ἐν ὕδατι δὸς πιεῖν καὶ τέξεται  
παραχροῖμα.

- d. In 26 *formulae*, plants are used for more general problems in the Turin manuscript than in its sources, e.g. βρυωνίας ῥίζα (bryony root - *Bryonia cretica subsp. dioica* (Jacq.) *Tutin*) used for the nose as well as for polyps<sup>30</sup>:

Turin MS.  
Chapter 62, 1–2

Ps.-Gal., *De rem. par.* 14, 337,  
9–10 Kühn

Ἔτερον περὶ ῥινόσ  
Βρυωνίας ῥίζης κεκαυμένης  
ἐμφύσα.

[Περὶ πολύπων.]  
<...> Βρυωνίας ῥίζης  
κεκαυμένης ἐμφύσα. ἄλλο.  
χαλκάνθου καὶ σανδαράχης  
ἴσα, λεία ἐμφύσα.

- e. The same plants, plant parts, or plant derivatives are suitable to treat more diseases in the Turin text than in the sources. There are 11 cases of this, e.g. πέπωνος σάρξ (melon pulp - *Cucumis melo* L.) used for eyes suffering from lachrymation and pain in Turin recipes and for excessive eye ache in their source<sup>31</sup>:

Turin MS.  
Chapter 64, 3–5

Ps.-Gal., *De rem. par.* 14, 346,  
6–8 Kühn

Περὶ ὀφθαλμῶν [Πρὸς τὰς περιωδυνίας.]  
ῥευματιζομένων καὶ ὀδύνην  
αὐτῶν

<...> Εἰ δὲ μείζων εἶη ἢ ὀδύνη, <...> Ἐὰν δὲ μείζων εἶη ἢ  
πρόσμιγε ὑοσκυάμου φύλλα, ὀδύνη, πρόσμιγε ὑοσκυάμου  
πέπωνος ἢ σικύου τὴν σάρκα φύλλα, ἢ πέπωνος, ἢ σικύου  
μετὰ ὠοῦ ὀπτοῦ ἢ λέκινθον τὴν σάρκα μετ' ὠοῦ ὀπτοῦ ἢ  
καὶ ὀλίγου οἴνου κατάπλασσε. λεκίθου, καὶ ὀλίγου οἴνου,  
κατάπλασσε.

- f. The same plants, plant parts, or plant derivatives are recommended for less diseases in the Turin manuscript than in the sources. Among the 37 cases of this, there is ἐλατήριον (squirting cucumber - *Ecballium elaterium* (L.) A. Rich.) used for white lichens, birthmarks and similar problems in Turin recipes, and for lichens, ephelis, birthmarks and similar pains of the face in their source<sup>32</sup>:

Turin MS.  
Chapter 97, 4–6

Ps.-Gal., *De rem. par.* 14, 420,  
15–17 Kühn

Πρὸς ἀλφούς καὶ φακοὺς  
καὶ τὰ τοιαῦτα

[α'. Πρὸς ἀλφούς καὶ ἔφηλιν  
καὶ φακοὺς καὶ τὰ τοιαῦτα  
προσώπου πάθη.]

<...> Ἦ ἐλατήριον  
λειοτριβήσας μετ' ὄξους καὶ  
ποιήσας μέλιτος πάχους,  
μίξας μετὰ κηρωτῆς  
κατάχριε.

<...> Ἄλλο. ἐλατήριον  
λειοτριβήσας μετὰ ὄξους  
καὶ ποιήσας μέλιτος πάχος,  
κατάχριε, μετὰ κηρωτῆς  
μίξας.

### *Conclusions*

The plants in the iatrosophion of MS. Taur. B.VII.18 offer information on Greek medicine in the Middle Ages and the early-modern era. Their uses often derive from classical Greek and Byzantine medical works. Nevertheless, plants, plant parts, or plant derivatives and their uses were frequently modified<sup>33</sup>. Considering the practical nature of the Turin iatrosophion, we can hypothesize that information changed on the base of a specific knowledge of the ingredients and the diseases. Since the sources and the Turin text were written in diverse historical periods and geographic areas, needs and medical knowledge were probably different, and ingredients may not have been anymore available<sup>34</sup>. The Turin iatrosophion and its plants bear

evidence to the transformation of Greek medicine throughout the Byzantine millennium, resulting in a new work, expression of a new medicine.

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1. In VV.AA., *Λεξικό της κοινής νεοελληνικής*. Thessalonike: Aristotle University; 1998. p. 308 *giatrosofi* is defined as practical therapeutic method with empirical value: “θεραπευτική μέθοδος με καθαρά εμπειρικό χαρακτήρα”. The same definition is to find in Demetrakos D, *Μέγα λεξικόν ὅλης τῆς Ἑλληνικῆς γλώσσης*. Athenai: Asemakopoulos; 1953. p. 1615, where *giatrosofi* is presented as book as well as collection of recipes of practical use with elements of popular medicine: “λαϊκὸν βιβλίον ἐμπειρικῆς ἰατρικῆς ἐπιπέχον κυρίως συλλογὴν συνταγῶν ἐμπειρικῶν φαρμάκων, καὶ ἄλλην συναφῆ ὕλην, οἷον ἐξορκισμούς, ἐρμηνεΐας ὀνειρώων”.
2. An evidence that *iatrosofion* indicated originally a book and not only a healing method is in Du Cange C, *Glossarium ad scriptores mediae et infimae graecitatis*. Lyon: Anissonios, Posuel and Rigaud; 1688. p. 506, which describes *iatrosofion* as “Liber de Medicina”. This opinion is expressed also in Kriaras E, *Λεξικό της μεσαιωνικής Ελληνικής δημόδους γραμματείας 1100–1669*. Thessalonike: Hypourgeio Ethnikes Paideias kai Threskeumatou, Kentro Hellenikes Glossas; 1975–2016. p. 286 (Karastases TA, Kazazes IN, *Επιτομή του λεξικού της μεσαιωνικής Ελληνικής δημόδους γραμματείας (1100–1669) του Εμμανουήλ Κριαρά*. Thessalonike: Hypourgeio Ethnikes Paideias kai Threskeumatou, Kentro Hellenikes Glossas; 2001–2003. p. 279), which presents *giatrosofi* (as well as *giatrosofin* or *iatrosofi*) as medical book with collection of recipes: “βιβλίον ἰατρικῆς

που περιέχει συλλογή συνταγών”. In this way also Trapp E, *Lexikon zur byzantinischen Gräzität besonders des 9–12. Jahrhunderts*. Wien: Verlag der österreichischen Akademie der Wissenschaften; 2001–2017. p. 697 for the lemma *iatrosfion*: “Sammlung von Heilmitteln”.

3. An important general contribution on the topic ‘popular medicine’ is still Rothschild KE, *Iatromagie: Begriff, Merkmale, Motive, Systematik*. Wiesbaden: Westdeutscher Verlag; 1978. A focus on the popular medicine in the early Byzantine era is in Vakaloudi A, *Illnesses, curative methods and supernatural forces in the early Byzantine empire*. *Byzantion* 2003;73:172–200. Furthermore, a recent volume on popular medicine in the Roman and Greek world is Harris WV (ed.), *Popular Medicine in Graeco-Roman Antiquity: Explorations*. Leiden-Boston: Brill; 2016.
4. A *iatrosfion* associated with the names of Galen, Hippocrates and Meletius appears in several manuscripts such as MS. Par. Coisl. 335 (ff. 75r–151v, 15<sup>th</sup> century), MS. Ath. EBE 1482 (15<sup>th</sup> century), MS. Vindob. med. gr. 53 (16<sup>th</sup> century) and MS. Ath. EBE 1509 (19<sup>th</sup> century). Information on Meletius’ *iatrosfion*, which is part of this work, is in Alexopoulou MP, *Das Iatrosophion des sog. Meletios*. München: Ludwig-Maximilians-Universität München; 1998.
5. A similar case of collection of medical formulae based on the Greek medical tradition is transmitted on ff. 121r–279v of MS. XIII C 3 from the *Biblioteca Centrale della Regione Siciliana* in Palermo. This work is entitled *iatrosfikon* and its language often presents vernacular elements. However, a lot of its chapters are based on the *Epitome de curatione morborum* by Theophanes Nonnos Chrysobalantes and the text begins with the prooemium and dedication to the emperor Constantine VII Porphyrogenetos. For this *iatrosfion*, cfr. Valentino D, *Das Iatrosophion des Codex Panorm. XIII C 3*. (PhD thesis at Universität Hamburg). Hamburg: Universität Hamburg; 2018.
6. Studies for a research on *iatrosfia* are Krumbacher K, *Geschichte der byzantinischen Literatur von Justinian bis zum Ende des oströmischen Reiches (527–1453)*. München: C.H. Beck; 1897. pp. 619 and 903; Beck HG, *Geschichte der byzantinischen Volksliteratur*. München: C.H. Beck; 1968. p. 205; and Hunger H, *Die hochsprachliche profane Literatur der Byzantiner*. München: C.H. Beck; 1978. pp. 274–275. Most recent contributions focusing more in detail on their characteristics are Ieraci Bio AM, *Testi medici di uso strumentale*. *Jahrbuch der Österreichischen Byzantinistik* 1982;32(3):33–43; Tselikas A, *Τα Ελληνικά γιατροσόφια. Μία πεφρονημένη κατηγορία χειρογράφων*. In: Diamantopoulos T (ed.), *Ιατρικά βυζαντινά χειρόγραφα*.



- Athenai: Domos; 1995. pp. 57–69; Garzya A, Pour l'édition des iatrosophia démotiques. In: Garzya A, Jouanna J (eds.), *Trasmisione e ecdotica dei testi medici greci*. Napoli: D'Auria; 2003. pp. 165–171; Touwaide A, *Byzantine Hospital Manuals (Iatrosophia) as a Source for the Study of Therapeutics*. In: Bowers B, *The Medieval Hospital and Medical Practice*. Brookfield-Aldershot: Ashgate; 2007. pp.147–173; Papadopoulos C, *Post-Byzantine Medical Manuscripts: New Insights into the Greek Medical Tradition, its Intellectual and Practical Interconnections, and our Understanding of Greek Culture*. *Journal of Modern Greek Studies* 2009;27:107–130; and Valentino D, *Das Iatrosophion des Codex Taur. B.VII.18*. Neuried: Ars Una; 2017. pp. 15–18. Rare and without common criteria are the editions of these texts: the most important are Oikonomu Agorastu I, *Kritische Erstaussgabe des Rezeptbuchs des Cod. Par. gr. 2316, f. 348v–374v*. Thessalonike: Giahudi; 1982; Alexopoulou MP, ref. 4; Clark PA, *A Cretan Healer's Handbook in the Byzantine Tradition*. Farnham: Ashgate; 2011; Demetriades AK, Demetriades K, Hadjikyriakou GN, *Iatrosophikón. Folklore remedies from a Cyprus monastery*. Nicosia: Foundation Anastasios G. Leventis; 2015, and Valentino D, ref. 6. The last three are the only offering with the critical text a translation into a modern language (Clark's and Demetriades' editions into English and Valentino's one into German).
7. Pasini I, *Codices Manuscripti Bibliothecae Regii Taurinensis Athenaei*. Torino: Typographia Regia; 1749. p. 472: "Codex CCCXLVII b. 1. 17 Chartaceus, habens folia 132, saeculi XVI. Varia itidem continet ad medicinam, et historiam naturalia pertinentia, frivola pleraque atque superstitionis plena, et barbata scripta. Dicuntur autem folium 4 ex Peripolo, aliisque medicis tam recentibus, quam antiquis excerpta". Further evidence of the dating into 16<sup>th</sup> century comes from the script of manuscript (cfr. Valentino D, ref. 6, pp. 41–42).
  8. In the night between 25<sup>th</sup> and 26<sup>th</sup> January 1904 a fire burnt big part of Turin National Library and damaged seriously its manuscript collection. About 2000 *codices* of 4509 were destroyed and other 1000 damaged. Information on the original manuscript collections of the *Biblioteca Nazionale Universitaria* of Turin is in Giaccaria A, *I fondi medievali della Biblioteca Nazionale Universitaria di Torino*. Alessandria: Edizioni dell'Orso; 1984, and this concerning the Greek one in Elia E, *Libri greci nella Biblioteca Nazionale Universitaria di Torino. I manoscritti di Andreas Darmarios*. Alessandria: Edizioni dell'Orso; 2014. pp. 1–8. For details on the fire of the library and the restoration of the manuscripts, cfr. Bassi S, *Introduzione*. In: Segre Montel

- C (ed.), *I manoscritti miniati della Biblioteca Nazionale di Torino*. Torino: Molfese; 1980. I. pp. XVII–XXXIII; Giaccaria A, *Manoscritti danneggiati nell'incendio del 1904: mostra di recuperi e restauri*. Torino: Turingraf; 1986; and Elia E, ref. 8, pp. 5–6.
9. For the Greek text of the recipes cfr. Valentino D, ref. 6. The line numbers refer to this edition. The parts in italic correspond to those written in red ink in the manuscript as well as to the titles of the chapters in the text of the critical editions.
  10. The complete list with the passages from the Greek medical tradition in the Turin *iatrosophion* is in Valentino D, ref. 6, pp. 195–197.
  11. Edition consulted here: Kühn KG (ed.), *Pseudo-Galeni de remediis parabilibus libri III*. In: Kühn KG (ed.), *Claudii Galeni Opera Omnia* vol. 14. Leipzig: Knobloch; 1827. pp. 311–581. The only information available on this work is in Kühn KG (ed.), *Claudii Galeni Opera Omnia* vol. 1. Leipzig: Knobloch; 1821. pp. CLIV–CLV.
  12. Edition used here: Heiberg IL (ed.), *Pauli Aeginetae epitome medicae libri I–IV*. Leipzig-Berlin: Teubner; 1921. For Paul of Aegina's life and his medical encyclopaedia in seven books, cfr. Touwaide A, *Paulus of Aegina*. In: Cancik H, Schneider H (eds.), *Brill's New Pauly*. Leiden-Boston: Brill; 2007. cols. 635–636; and Lherminier G, *Edition critique et traduction annotée du livre V des epitomae medicae de Paul d'Egine* (PhD thesis at École Pratique des Hautes Études). Paris: École Pratique des Hautes Études; 2013.
  13. Edition used here: Lelli E, *L'agricoltura antica: i Geoponica di Cassiano Basso*. Soveria Mannelli: Rubbettino; 2010. Useful remarks on this collection of agricultural indications are in Eckhard C, *Geoponica*. In: Cancik H, Schneider H (eds.), *Brill's New Pauly*. Leiden-Boston: Brill; 2004. cols. 780–783. In 2011 an English (Delby A, *Geoponika farm folk: a modern translation of the Roman and Byzantine farming handbook*. Totnes: Prospect Books; 2011) as well as in 2012 a French translation (Gréol JP, Lefort J, *Géoponiques*. Paris: Editions de Boccard; 2012) of the work were published.
  14. The used edition is Kaimakis D (ed.), *Die Kyraniden*. Meisenheim am Glan: Anton Hain; 1976. A survey on this treatise on healing properties of stones, plants and animals is in Kaimakis D (ed.), ref. 14, pp. 1–8. The *editio princeps* with French translation of the *Cyranides* is Ruelle CE, *Les lapidaires grecs*. In: De Mely F, *Les lapidaires de l'antiquité et du moyen âge*. Paris: E. Leroux; 1898. In Delatte L, *Textes latins et vieux français relatifs aux Cyranides*. Liège: Faculté de Philosophie et Lettres de l'Université de Liège; 1942, is edited the Latin version of the work.

15. Edition used here: Zervos S (ed.), *Aetii Sermo sextidecimus et ultimus erstens aus Handschriften veröffentlicht*. Leipzig: Mangkos; 1901. Detailed references on Aetius of Amida's life and his *Iatricorum libri* are in Calà I, *Per l'edizione del primo dei "Libri Medicinales" di Aezio Amideno* (PhD thesis at Università degli Studi di Bologna). Bologna: Università degli Studi di Bologna; 2012. pp. 10–73 (with rich bibliography on pp. 79–197). See furthermore Touwaide A, *Aetius of Amida*. In: Bagnall R, Brodersen K, Champion C, Erskine A, Huebner S, *Encyclopedia of Ancient History*. Oxford: Wiley; 2012. pp. 146–147; Garzya A, *Aetios von Amida*. In: Leven KH (ed.), *Antike Medizin. Ein Lexikon*. München: C.H. Beck; 2005. cols. 19–20, and Romano R, *Aezio Amideno Libro XVI*. In: Garzya A, *Medici Bizantini*. Torino: U.T.E.T.; 2006. pp. 252–553.
16. Edition used here: Ideler JL (ed.), *Physici et medici Graeci minores*. Berlin: Reimer; 1841.
17. The comparison of sections from the Turin manuscript with the sources of Greek medical tradition has been possible only through their existing critical editions. "Since *iatrosophia* can often reproduce earlier compilations" and use not directly the sources found, the presented data can give only an impression and further investigation is possible only with a systematic work on the tradition of the *iatrosophia* (cfr. Touwaide A, ref. 6, p. 149).
18. In the following Greek texts I have marked bold the extended parts in the Turin text and the sources.
19. In some cases the changes in the sources can depend on mistakes of the scribe or on modifications in the previous stages of transmission of the texts (e.g. Turin MS. 104, 6 ἡδὺ τὸ ζεῖν - sweet living - and Ps.-Gal., *De rem. par.* 14, 423, 1 Kühn ἡδὺ ὄζον - sweet smell).
20. For the identifications of the plants presented in this paragraph and its footnotes I used especially André J, *Les noms de plantes dans la Rome antique*. Paris: Les Belles Lettres; 1985, the latest version of the Liddle-Scott-Jones (Liddell HG, Scott R, Jones HS, Mckenzie R, *A Greek-English Lexicon. With a Revised Supplement*. Oxford: Clarendon Press; 1996) and Lardos A, *The botanical materia medica of the iatrosophikon. A collection of prescriptions from a monastery in Cyprus*. *J Ethnopharmacol* 2006;104:387–406. In the following Greek texts I have marked bold the plants presented as example.
21. See ἄλφιτον (barley flour - *Hordeum vulgare* L.) in Paul. Aeg., *Ep. Med.* 3, 81, 1, 9 Heiberg; ἄσπραγορέϊγανον (organy - *Origanum heracleoticum* L.) in *Phys. et med. Gr. min.* 1, 298, 11 Ideler; βᾶτου φλοῖός (raspberry bark - *Rubus idaeus* L.) in Ps.-Gal., *De rem. par.* 14, 351, 6 Kühn; βολβὸς λευκός

(purse-tassels, *Muscari comosum* Mill.) in Ps.-Gal., *De rem. par.* 14, 351, 9 Kühn; γλίχων (pennyroyal - *Mentha pulegium* L.) in *Phys. et med. Gr. min.* 1, 297, 8 Ideler; γλίχων ὀρινός (horse mint - *Mentha longifolia* (L.) Huds.) in *Phys. et med. Gr. min.* 1, 298, 7 Ideler; ζιγγίβεο (ginger - *Zingiber officinale* Roscoe) in Ps.-Gal., *De rem. par.* 14, 500, 5 Kühn; θύμος (thyme - *Caridothymos capitatus* (L.) Rchb.) in *Phys. et med. Gr. min.* 1, 297, 9 Ideler; ἴρις (iris - *Iris germanica* L.) in Ps.-Gal., *De rem. par.* 14, 357, 14 Kühn; κάππαρις (caper - *Capparis spinosa* L.) in Ps.-Gal., *De rem. par.* 14, 354, 12 Kühn; κεδροεῖα (cedar resine - *Juniperus oxycedrus* L.) in Ps.-Gal., *De rem. par.* 14, 354, 12 Kühn; κυκλάμινος (cyclamen - *Cyclamen graecum* Link) in Ps.-Gal., *De rem. par.* 14, 351, 10 Kühn; κυπάρισσος (cypress - *Cupressus sempervirens* L.) in Ps.-Gal., *De rem. par.* 14, 481, 4 Kühn; λινόσπερμον (flax seed - *Linum usitatissimum* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 4, 14 Heiberg; μήλινον (*scil. ἔλαιον*) (apple oil - *Pyrus malus* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 4, 17 Heiberg; μυρσίνης κλώνιον (myrtle branch - *Myrtus communis* L.) in Ps.-Gal., *De rem. par.* 14, 354, 13 Kühn; οἰνορόδινον (rose wine - *Rosa centifolia* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 4, 16–17 Heiberg; πέπερι λευκό (white pepper - *Piper nigrum* L.) in *Phys. et med. Gr. min.* 1, 297, 11 Ideler; πέπερι μακρόν (long pepper - *Piper officinarum* DC) in *Phys. et med. Gr. min.* 1, 297, 12 Ideler; πολίου βότανον (hulwort plant - *Teucrium polium* L.) in Ps.-Gal., *De rem. par.* 14, 354, 14–15 Kühn; πολίου φλοιός (hulwort bark - *Teucrium polium* L.) in Ps.-Gal., *De rem. par.* 14, 354, 14 Kühn; πράσιον (horehound - *Marrubium vulgare* L.) in Ps.-Gal., *De rem. par.* 14, 354, 15 Kühn; σέλινον (celery - *Apium graveolens* L.) in *Phys. et med. Gr. min.* 1, 298, 6 Ideler; σίλφιον (lasewort - *Ferula tingitana* L.) in *Phys. et med. Gr. min.* 1, 298, 9 Ideler; σκάμμο (scammony - *Convolvulus scammonia* L.) in *Phys. et med. Gr. min.* 1, 298, 4 Ideler; σκόροδο (garlic - *Allium sativum* L.) in Ps.-Gal., *De rem. par.* 14, 354, 13 Kühn; σταφίς (raisin - *Vitis vinifera* L.) in Ps.-Gal., *De rem. par.* 14, 351, 10 Kühn; στρόχνον (hound's berry - *Solanum nigrum* L.) in Ps.-Gal., *De rem. par.* 14, 462, 17 – 463, 1 Kühn; ὕδροροδίον (rose water - *Rosa centifolia* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 4, 17 Heiberg; ὑοσκυάμου ῥίζα (henbane root - *Hyoscyamus albus* L.) in Ps.-Gal., *De rem. par.* 14, 355, 7 Kühn; ὑοσκυάμου σπέρμα (henbane seed - *Hyoscyamus albus* L.) in Ps.-Gal., *De rem. par.* 14, 354, 11 Kühn; ὑοσκυάμου σπέρματος φλοιός (henbane seed bark - *Hyoscyamus albus* L.) in Ps.-Gal., *De rem. par.* 14, 354, 11 Kühn; ὑοσκυάμου φλοιός (henbane bark - *Hyoscyamus albus* L.) in Ps.-Gal., *De rem. par.* 14, 354, 11 Kühn; χαμαιμήλινον (*scil. ἔλαιον*) (chamomile oil - *Matricaria chamomilla* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 4, 18 Heiberg.

22. See άνισον (anise - *Pimpinella anisum* L.) in Turin MS. 250, 9; βρυωνίας ρίζα (bryony root - *Bryonia cretica* subsp. *dioica* (Jacq.) Tutin) in Turin MS. 130, 4; κριθινον άλευρον (barley flour - *Hordeum vulgare* L. *Graminae*) in Turin MS. 113, 7; κώστος (costus - *Saussurea costus* (Falc.) Lipsch.) in Turin MS. 212, 2; λύκιον (dryer's buckthorn - *Rhamnus petiolaris* Boiss.) in Turin MS. 186, 2; μαλάθρου σπέρμα (fennel seed - *Foeniculum vulgare* Mill.) in Turin MS. 250, 10; μελάνθη (nigella - *Nigella sativa* L.) in Turin MS. 250, 8; μυρσίνη (myrtle - *Myrtus communis* L.) in Turin MS. 162, 2.
23. See άνίσου σπέρμα (anise seed - *Pimpinella anisum* L.) in Turin MS. 149, 7; βρύον πετρών (oakmoss - *Evernia prunastri* L.) in Turin MS. 113, 9; δαμασκηνέας κομίδι (plum-tree resin gum - *Prunus domestica* L.) in Turin MS. 113, 10–11; έλαίας φύλλον (cultivated olive leaf - *Olea europea* L.) in Turin MS. 123, 2; καππάρεως ρίζα (caper root - *Capparis spinosa* L.) in Turin MS. 130, 3–4; κισσοϋ μέλανος φύλλον (ivy leaf - *Hedera helix* L.) in Turin MS. 91, 3; κομίδι (resin gum (of plum-tree) - *Prunus domestica* L.) in Turin MS. 113, 9; κολιάνδρου χυλός (coriander juice - *Coriandrum sativum* L.) in Turin MS. 68, 7; κράμβης φύλλον (cabbage leaf - *Brassica oleracea* L.) in Turin MS. 130, 9; κριθινον άλευρον (barley flour - *Hordeum vulgare* L. *Graminae*) in Turin MS. 130, 5 and 130, 7; κροκομάλλαγμα (saffron ointment - *Crocus sativus* L.) in Turin MS. 130, 15; κρομούου χυλός (onion juice - *Allium cepa* L.) in Turin MS. 68, 6; κυκλαμίνου χυλός (cyclamen juice - *Cyclamen graecum* Link) in Turin MS. 68, 5–6; λίβανον (frankincense-tree - *Boswellia carterii* Birdw.) in Turin MS. 113, 10 and 130, 11; μαλάθρου χυλός (fennel juice - *Foeniculum vulgare* Mill.) in Turin MS. 69, 2; πέπων (melon - *Cucumis melo* L.) in Turin MS. 104, 2; περδικίας χυλός (pellitory juice - *Parietaria officinalis* L.) in Turin MS. 68, 6; περσικής φύλλον (peach leaf - *Prunus persica* (L.) Batsch) in Turin MS. 130, 14; πηγάνου χυλός (rue juice - *Ruta graveolens* L.) in Turin MS. 69, 2; πιτύος φλοιός (pine bark - *Pinus pinea* L.) in Turin MS. 64, 6; σατώριον (summer savory - *Satureia hortensis* L.) in Turin MS. 150, 8.
24. See καππάρεως ρίζα (caper root - *Capparis spinosa* L.) in Turin MS. 130, 3–4 and άριστολόχια (birthwort - *Aristolochia sempervirens* L.) in Ps.-Gal., *De rem. par.* 14, 376, 3 Kühn; κολιάνδρον (coriander - *Coriandrum sativum* L.) in Turin MS. 242, 2 and σικύου άργίου φύλλον (squirtng cucumber leaf - *Ecballium elaterium* (L.) A. Rich.) in Ps.-Gal., *De rem. par.* 14, 537, 10 Kühn; κόρις φυτόν (St. John's wort - *Hypericum empetrifolium* Willd.) in Turin MS. 165, 4 and κορίαννον (coriander - *Coriandrum sativum* L.) in Ps.-Gal., *De rem. par.* 14, 487, 6 Kühn; κωδιάς σπέρμα (poppy seed

- *Paraverum somniferum* L.) in Turin MS. 190, 15 and μήκωνος λευκής σπέρμα (wartweed seed - *Euphorbia peplus* L.) in Paul. Aeg., *Ep. Med.* 3, 45, 6, 2 Heiberg; πτέρις (fern - *Polystichum filix mas* Roth.) in Turin MS. 134, 2 and κισσός (ivy - *Hedera helix* L.) in Ps.-Gal., *De rem. par.* 14, 463, 4 Kühn; στάχος (woundwort - *Stachys annuus* L.) in Turin MS. 190, 14 and νάρδος (spikenard - *Nardostachys jatamansi* DC) in Paul. Aeg., *Ep. Med.* 3, 45, 5, 33 Heiberg.
25. See κώνειον (hemlock - *Conium maculatum* L.) in Turin MS. 139, 2 and κονία (ash) in Ps.-Gal., *De rem. par.* 14, 470, 11 Kühn; μυρίκη (tamarisk - *Tamarix tetrandra* Pall.) in Turin MS. 165, 2 and κήρυξ (sea snail) in Ps.-Gal., *De rem. par.* 14, 487, 1 Kühn; ῥόδον (rose - *Rosa centifolia* L.) in Turin MS. 63, 10 and ὕδωρ (water) in Ps.-Gal., *De rem. par.* 14, 345, 8 Kühn.
26. See ὀποπάναξ (Hercules' woundwort - *Oropanax hispidus* (Friv.) Griseb.) in Turin MS. 183, 2 and ὀποπάνακος ῥίζα (Hercules' woundwort seed) in Ps.-Gal., *De rem. par.* 14, 482, 5 Kühn; σαμψύχου φύλλον (marjoram leaf - *Majorana hortensis* Moench) in Turin MS. 63, 11 and σαμψύχου πέταλον (marjoram petal) in Ps.-Gal., *De rem. par.* 14, 345, 9 Kühn; σκόρδον (garlic - *Allium sativum* L.) in Turin MS. 81, 6 and σκόρδου σπέρμα (garlic seed) in Ps.-Gal., *De rem. par.* 14, 355, 9 Kühn.
27. See ἀγριοσταφίς (stavesacre - *Delphinium staphisagria* L.) in Turin MS. 120, 2 and Ps.-Gal., *De rem. par.* 14, 500, 4 Kühn; ἀλικακάβου ῥίζα (winter-cherry root - *Physalis alkekengi* L.) in Turin MS. 56, 2 and Ps.-Gal., *De rem. par.* 14, 427, 7 Kühn; ἄνηθον (dill - *Anethum graveolens* L.) in Turin MS. 78, 2 and Ps.-Gal., *De rem. par.* 14, 419, 15 Kühn; ἀνήθου ἔλαιον (dill oil) in Turin MS. 58, 2 and Ps.-Gal., *De rem. par.* 14, 453, 2 Kühn; ἀρτεμισία (mugwort - *Artemisia arborescens* L.) in Turin MS. 181, 2 and Ps.-Gal., *De rem. par.* 14, 481, 17 Kühn; ἀψίνθιον (wormwood - *Artemisia absinthium* L.) in Turin MS. 57, 3 and Ps.-Gal., *De rem. par.* 14, 452, 14 Kühn; γλαύκουρεως χυλός (horned poppy juice - *Glaucium flavum* Crantz) in Turin MS. 55, 3 and Ps.-Gal., *De rem. par.* 14, 425, 15 Kühn; γλήχων (pennyroyal - *Mentha pulegium* L.) in Turin MS. 109, 4 and Ps.-Gal., *De rem. par.* 14, 356, 7 Kühn; ἐλλέβορος (Christmas rose - *Helleborus niger* L.) in Turin MS. 78, 4 and Ps.-Gal., *De rem. par.* 14, 420, 5 Kühn; ἔρπυλος (breckland thyme - *Thymus serpyllum* L.) in Turin MS. 108, 3 and Ps.-Gal., *De rem. par.* 14, 424, 14 Kühn; ἡδύοσμον (spearmint - *Mentha spicata* L.) in Turin MS. 60, 4 and *Geopon.* 12, 27, 2, 2 Lelli; ἡρύγγιον (flat sea holly - *Eryngium planum* L.) in Turin MS. 56, 4 and Ps.-Gal., *De rem. par.* 14, 427, 9 Kühn; ἡρυγγίου ῥίζα (flat sea holly root) in Turin MS. 56, 3–4 and Ps.-Gal.,



*De rem. par.* 14, 427, 9 Kühn; θύμος (thyme - *Caridothymos capitatus* (L.) *Rchb.*) in Turin MS. 57, 4 and Ps.-Gal., *De rem. par.* 14, 452, 16 Kühn; ίρις (iris - *Iris germanica* L.) in Turin MS. 108, 2 and Ps.-Gal., *De rem. par.* 14, 424, 12 Kühn; κάρθαμον (cress - *Lepidium sativum* L.) in Turin MS. 60, 5 and *Geopon.* 12, 27, 1, 1 Lelli as well as in Turin MS. 60, 4 and *Geopon.* 12, 27, 2, 1 Lelli; καρδάμου χυλός (cress juice) in Turin MS. 60, 7 and *Geopon.* 12, 27, 4, 2 Lelli; κνιδίου κόκκος (spurge-flax grain - *Daphne Gnidium* L.) in Turin MS. 91, 8 and Ps.-Gal., *De rem. par.* 14, 431, 9 Kühn; κυπαρίσσου πελέκημα (cypress shaving - *Cupressus sempervirens* L.) in Turin MS. 104, 6 and Ps.-Gal., *De rem. par.* 14, 423, 1 Kühn; λεύκης ῥίζα (white poplar - *Populus alba* L.) in Turin MS. 56, 3 and Ps.-Gal., *De rem. par.* 14, 427, 8 Kühn; μωρίς μέλανα (blackberry - *Rubus fruticosus* L.) in Turin MS. 57, 4 and Ps.-Gal., *De rem. par.* 14, 452, 16 Kühn; ὀμφάκιον ἔλαιον (unripe grape oil - *Vitis vinifera* L.) in Turin MS. 55, 2–3 and Ps.-Gal., *De rem. par.* 14, 425, 14 Kühn; περιστερεῶνος βοτάνης ῥίζα (vervain plant root - *Verbena officinalis* L.) in Turin MS. 56, 3 and Ps.-Gal., *De rem. par.* 14, 427, 9 Kühn; πήγανον (rue - *Ruta graveolens* L.) in Turin MS. 87, 7 and Ps.-Gal., *De rem. par.* 14, 427, 18 Kühn; πολίου ῥίζα (hulwort root - *Teucrium polium* L.) in Turin MS. 56, 4 and Ps.-Gal., *De rem. par.* 14, 427, 10 Kühn; πολυγόνου χυλός (knotweed juice - *Polygonum aviculare* L.) in Turin MS. 57, 2 and Ps.-Gal., *De rem. par.* 14, 452, 13 Kühn as well as in Turin MS. 76, 5 and Ps.-Gal., *De rem. par.* 14, 418, 18 – 419, 1 Kühn; πρίνου πελέκημα (holm-oak shaving - *Quercus ilex* L.) in Turin MS. 104, 6–7 and Ps.-Gal., *De rem. par.* 14, 423, 1 Kühn; πελέας φλοιός (elm bark - *Ulmus glabra* Huds.) in Turin MS. 87, 4 and Ps.-Gal., *De rem. par.* 14, 358, 5 Kühn; πυρέθρου ῥίζα (pellitory root - *Anacyclus pyrethrum* DC) in Turin MS. 87, 9–10 and Ps.-Gal., *De rem. par.* 14, 428, 11 Kühn; πύρινον (*scil.* ἄλευρον) (wheat flour - *Triticum spp.*) in Turin MS. 76, 2 and Ps.-Gal., *De rem. par.* 14, 418, 13 Kühn; ῥόδιος (rose oil - *Rosa centifolia* L.) in Turin MS. 109, 3 and Ps.-Gal., *De rem. par.* 14, 427, 2 Kühn; σαμψύχου φύλλον (marjoram leaf - *Majorana hortensis* Moench) in Turin MS. 57, 2 and Ps.-Gal., *De rem. par.* 14, 452, 17 Kühn; σελινόσπερμα (celery seed - *Apium graveolens* L.) in Turin MS. 149, 4 and Ps.-Gal., *De rem. par.* 14, 364, 15 Kühn; σταφίς ἀγρία (stavesacre - *Delphinium staphisagria* L.) in Turin MS. 78, 4 and Ps.-Gal., *De rem. par.* 14, 420, 7 Kühn; στρόχνου χυλός (hound's berry juice - *Solanum nigrum* L.) in Turin MS. 76, 6 and Ps.-Gal., *De rem. par.* 14, 419, 1 Kühn; ὕοσκνάμου ῥίζα (henbane root - *Hyoscyamus albus* L.) in Turin MS. 87, 6–7 and Ps.-Gal., *De rem. par.* 14, 355, 7 Kühn; ὕσσωπος (savory - *Satureia graeca* L.) in Turin

- MS. 87, 7 and Ps.-Gal., *De rem. par.* 14, 427, 18 Kühn; χαλβάνη (all-heal - *Ferula galbaniflua* Boiss. et Buhse) in Turin MS. 91, 8 and Ps.-Gal., *De rem. par.* 14, 431, 10 Kühn.
28. See ἀλθαίασ ῥίζα (marsh mallow root - *Althaea officinalis* L.) in Turin MS. 190, 4 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 7 Heiberg; ἀμύγδαλον πικρόν (bitter almond - *Prunus dulcis* (Mill.) DA. Webb) in Turin MS. 190, 16 and Paul. Aeg., *Ep. Med.* 3, 45, 6, 5 Heiberg; ἀψίνθιον (wormwood - *Artemisia absinthium* L.) in Turin MS. 94, 4 and Ps.-Gal., *De rem. par.* 14, 405, 7 Kühn; βάτου χυλός (raspberry juice - *Rubus idaeus* L.) in Turin MS. 66, 5 and Ps.-Gal., *De rem. par.* 14, 348, 11 Kühn; βρόθυ (savin - *Juniperus sabina* L.) in Turin MS. 66, 2 and Ps.-Gal., *De rem. par.* 14, 346, 16 Kühn; βρυωνία (bryony - *Bryonia cretica* subsp. *dioica* (Jacq.) Tutin) in Turin MS. 95, 2 and Ps.-Gal., *De rem. par.* 14, 405, 15 Kühn; γλήχων (peppermint - *Mentha pulegium* L.) in Turin MS. 81, 8 and Ps.-Gal., *De rem. par.* 14, 356, 7 Kühn; ἑλέορος λευκός (white hellebore - *Veratrum album* L.) in Turin MS. 95, 2 and Ps.-Gal., *De rem. par.* 14, 405, 16 Kühn; κηκίδος ἔνδοθεν μέλαν (oak-gall black interior - *Quercus alnifolia* Poech) in Turin MS. 81, 8 and Ps.-Gal., *De rem. par.* 14, 356, 7 Kühn; κρόκος (saffron - *Crocus sativus* L.) in Turin MS. 190, 17 and Paul. Aeg., *Ep. Med.* 3, 45, 6, 5 Heiberg as well as in Turin MS. 99, 5 and Ps.-Gal., *De rem. par.* 14, 422, 4 Kühn; κυπάριττος (cypress - *Cupressus sempervirens* L.) in Turin MS. 66, 2 and Ps.-Gal., *De rem. par.* 14, 346, 15 Kühn; κώνειον Καρύστιον (hemlock from Carystum - *Conium maculatum* L.) in Turin MS. 204, 2 and Ps.-Gal., *De rem. par.* 14, 447, 5–6 Kühn; λίβανον (frankincense-tree - *Boswellia carterii* Birdw.) in Turin MS. 61, 4 and Ps.-Gal., *De rem. par.* 14, 336, 15–16 Kühn; λινόσπερμα (flax seed - *Linum usitatissimum* L.) in Turin MS. 190, 12 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 29 Heiberg; μαλάθρον χυλός (fennel juice - *Foeniculum vulgare* Mill.) in Turin MS. 69, 2–3 and Ps.-Gal., *De rem. par.* 14, 349, 17 Kühn; μωρσίνης μελαίνης φύλλον (blackberry leaf - *Rubus fruticosus* L.) in Turin MS. 81, 9–10 and Ps.-Gal., *De rem. par.* 14, 356, 9 Kühn; νάρδος Κελτική (Celtic nard - *Valeriana celtica* L.) in Turin MS. 106, 2–3 and Ps.-Gal., *De rem. par.* 14, 423, 11 Kühn; νάρθηκος σπονδός (giant fennel ash - *Ferula communis* L.) in Turin MS. 190, 10 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 27–28 Heiberg; πέπων (melon - *Cucumis melo* L.) in Turin MS. 190, 6 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 15 Heiberg; πήγανον (rue - *Ruta graveolens* L.) in Turin MS. 190, 3 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 7 Heiberg; πηγάνου ἀγρίου σπέρμα (mountain rue seed - *Ruta chalepensis* L.) in Turin MS. 181, 3 and Ps.-Gal., *De rem. par.* 14, 481, 17 – 482, 1 Kühn; πολυγόνου χυλός (knotweed juice



- *Polygonum aviculare* L.) in Turin MS. 57, 2 and Ps.-Gal., *De rem. par.* 14, 452, 13 Kühn; ῥόδον (rose - *Rosa centifolia* L.) in Turin MS. 66, 5–6 and Ps.-Gal., *De rem. par.* 14, 348, 12 Kühn; ῥόδου χυλός (rose juice) in Turin MS. 66, 5 and Ps.-Gal., *De rem. par.* 14, 348, 12 Kühn; ῥόδιος (rose oil) in Turin MS. 94, 2 and Ps.-Gal., *De rem. par.* 14, 404, 12 Kühn as well as in Turin MS. 95, 3 and Ps.-Gal., *De rem. par.* 14, 405, 16 Kühn as well as in Turin MS. 96, 3 and Ps.-Gal., *De rem. par.* 14, 407, 9 Kühn as well as in Turin MS. 190, 7 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 18 Heiberg; ῥοιάς γλυκέας λεπύρου χυλός (pomegranate peel juice - *Punica granatum* L.) in Turin MS. 59, 8–9 and Ps.-Gal., *De rem. par.* 14, 360, 9 Kühn; σαμψύχου φύλλον (marjoram leaf - *Majorana hortensis* Moench) in Turin MS. 63, 11 and Ps.-Gal., *De rem. par.* 14, 345, 9 Kühn; σελινόσπερμα (celery seed - *Apium graveolens* L.) in Turin MS. 190, 15 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 33 Heiberg; σεύτιλιον (beet - *Beta vulgaris* L.) in Turin MS. 162, 3 and Ps.-Gal., *De rem. par.* 14, 469, 1 Kühn; σικύου σπέρμα (cucumber seed - *Cucumis sativus* L.) in Turin MS. 190, 5 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 15 Heiberg as well as in Turin MS. 190, 9 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 26 Heiberg as well as in Turin MS. 190, 12 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 30 Heiberg as well as in Turin MS. 190, 14 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 32 Heiberg; σκόροδου πυρήν (garlic clove - *Allium sativum* L.) in Turin MS. 81, 9 and Ps.-Gal., *De rem. par.* 14, 355, 9 Kühn; σμύρνη (myrrh - *Commiphora myrrha* Engl.) in Turin MS. 99, 5 and Ps.-Gal., *De rem. par.* 14, 422, 4 Kühn; σταφίς ἀργία (stavesacre - *Delphinium staphisagria* L.) in Turin MS. 81, 7 and Ps.-Gal., *De rem. par.* 14, 356, 6 Kühn; τετραγκάνθη (milk vetch - *Orobus niger* L.) in Turin MS. 190, 12 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 30 Heiberg; τήλεως χυλός (fenugreek juice - *Trigonella foenum-graecum* L.) in Turin MS. 146, 3–4 and Ps.-Gal., *De rem. par.* 14, 422, 4 Kühn; τήλις (fenugreek) in Turin MS. 190, 4 and Paul. Aeg., *Ep. Med.* 3, 45, 4, 7 Heiberg as well as in Turin MS. 190, 9 and Paul. Aeg., *Ep. Med.* 3, 45, 5, 25–26 Heiberg; φακή (lentil - *Lens culinaris* Medik.) in Turin MS. 66, 4 and Ps.-Gal., *De rem. par.* 14, 348, 10 Kühn.
29. See ἄλφιτον (barley flour - *Hordeum vulgare* L.) in Turin MS. 64, 6 and Ps.-Gal., *De rem. par.* 14, 346, 6 Kühn; ἀψίνθιον (wormwood - *Artemisia absinthium* L.) in Turin MS. 166, 9 and Aët., *Iatr. lib.* XVI 34, 2 Zervos; κληματίς (European birthwort - *Aristolochia clematites* L.) in Turin MS. 84, 2 and Ps.-Gal., *De rem. par.* 14, 356, 17 Kühn; κριθή (barley - *Hordeum vulgare* L.) in Turin MS. 87, 2 and Ps.-Gal., *De rem. par.* 14, 357, 16 Kühn; κριθινον ἄλευρον (barley flour) in Turin MS. 64, 3 and Ps.-Gal., *De rem. par.* 14, 346, 5 Kühn; λινοζώστης (mercury - *Mercurialis annua* L.) in Turin MS. 166, 8

- and Aët., *Iatr. lib. XVI* 34, 1 Zervos; πέπονος σάρξ (melon pulp - *Cucumis melo* L.) in Turin MS. 64, 4 and Ps.-Gal., *De rem. par.* 14, 346, 7 Kühn; ῥόδον (rose - *Rosa centifolia* L.) in Turin MS. 64, 2 and Ps.-Gal., *De rem. par.* 14, 346, 3 Kühn; σικύου σάρξ (cucumber pulp - *Cucumis sativus* L.) in Turin MS. 64, 4 and Ps.-Gal., *De rem. par.* 14, 346, 7 Kühn; σμύρνη (myrrh - *Commiphora myrrha* Engl.) in Turin MS. 84, 3 and Ps.-Gal., *De rem. par.* 14, 356, 17 Kühn; ὑοσκάμου φύλλον (henbane leaf - *Hyoscyamus albus* L.) in Turin MS. 64, 4 and Ps.-Gal., *De rem. par.* 14, 346, 6–7 Kühn; χαλβάνη (all-heal - *Ferula galbaniflua* Boiss. et Buhse) in Turin MS. 168, 3 and Ps.-Gal., *De rem. par.* 14, 478, 17 Kühn.
30. See ἄλφιτον (barley flour - *Hordeum vulgare* L.) in Turin MS. 65, 2 and Ps.-Gal., *De rem. par.* 14, 346, 12 Kühn; βάτου ῥίζα (raspberry root - *Rubus idaeus* L.) in Turin MS. 154, 2 and Ps.-Gal., *De rem. par.* 14, 465, 8–9 Kühn; βρυωνίας ῥίζα (bryony root - *Bryonia cretica* subsp. *dioica* (Jacq.) Tutin) in Turin MS. 62, 2 and Ps.-Gal., *De rem. par.* 14, 337, 9–10 Kühn as well as in Turin MS. 74, 15 and Ps.-Gal., *De rem. par.* 14, 352, 4 Kühn; ἴρις (*Iris germanica* L.) in Turin MS. 77, 2 and Ps.-Gal., *De rem. par.* 14, 403, 5 Kühn; κασσία (cassia - *Laurus cassia* L.) in Turin MS. 94, 2 and Ps.-Gal., *De rem. par.* 14, 414, 11 Kühn; κέγχρος (millet - *Panicum miliaceum* L.) in Turin MS. 154, 3 and Ps.-Gal., *De rem. par.* 14, 465, 11 Kühn; κεδρέα (cedar resine - *Juniperus oxycedrus* L.) in Turin MS. 94, 2 and Ps.-Gal., *De rem. par.* 14, 404, 8 Kühn; κνιδίου κόκκος (spurge-flax grain - *Daphne Gnidium* L.) in Turin MS. 91, 8 and Ps.-Gal., *De rem. par.* 14, 431, 9 Kühn; κρόμβη (cabbage - *Brassica oleracea* L.) in Turin MS. 63, 10 and Ps.-Gal., *De rem. par.* 14, 349, 8 Kühn; κριθίνον ἄλευρον (barley flour) in Turin MS. 74, 13 and Ps.-Gal., *De rem. par.* 14, 351, 18 Kühn; κροκύδιον (cotton - *Gossypium herbaceum* L.) in Turin MS. 96, 2 and Ps.-Gal., *De rem. par.* 14, 407, 1 Kühn; κροκύς (cotton) in Turin MS. 96, 3 and Ps.-Gal., *De rem. par.* 14, 407, 2 Kühn; κώνειον (hemlock - *Conium maculatum* L.) in Turin MS. 74, 14 and Ps.-Gal., *De rem. par.* 14, 352, 3 Kühn; λαπάθου ἀγρίου καρπός (sharp dock fruit - *Rumex conglomeratus* Murray) in Turin MS. 123, 2–3 and *Geopon.* 12, 38, 1, 1 Lelli; μελάνθιον (nigella - *Nigella sativa* L.) in Turin MS. 77, 2 and Ps.-Gal., *De rem. par.* 14, 403, 4 Kühn; ὄπιον (poppy juice - *Papaverum somniferum* L.) in Turin MS. 94, 3 and Ps.-Gal., *De rem. par.* 14, 405, 5 Kühn; πλατάνου φύλλον (plane leaf - *Platanus orientalis* L.) in Turin MS. 65, 2 and Ps.-Gal., *De rem. par.* 14, 346, 13–14 Kühn; σαμψύχου φύλλον (marjoram leaf - *Majorana hortensis* Moench) in Turin MS. 63, 11 and Ps.-Gal., *De rem. par.* 14, 345, 9 Kühn; σελινόσπερμα (celery seed

- *Apium graveolens* L.) in Turin MS. 149, 4 and Ps.-Gal., *De rem. par.* 14, 364, 15 Kühn; σεύτλου ρίζα (beet root - *Beta vulgaris* L.) in Turin MS. 77, 3 and Ps.-Gal., *De rem. par.* 14, 403, 6 Kühn; υοσκυάμου σπέρμα (henbane seed - *Hyoscyamus albus* L.) in Turin MS. 88, 2–3 and Ps.-Gal., *De rem. par.* 14, 354, 11 Kühn; φακός (lentil - *Lens culinaris* Medik.) in Turin MS. 74, 14 and Ps.-Gal., *De rem. par.* 14, 352, 2 Kühn as well as in Turin MS. 154, 2 and Ps.-Gal., *De rem. par.* 14, 465, 8 Kühn; χαλβάνη (all-heal - *Ferula galbaniflua* Boiss. et Buhse) in Turin MS. 91, 8 and Ps.-Gal., *De rem. par.* 14, 431, 10 Kühn; ώκίμου φύλλον (basil leaf - *Ocimum basilicum* L.) in Turin MS. 63, 11 and Ps.-Gal., *De rem. par.* 14, 345, 8 Kühn.
31. See άμ (ajowan - *Carum copticum* L.) in Turin MS. 251, 7 and *Phys. et med. Gr. min.* 1, 298, 1 Ideler; άμμεον (ajowan) in Turin MS. 250, 7 and *Phys. et med. Gr. min.* 1, 297, 4 Ideler; ζιγγίβερ (ginger - *Zingiber officinale* Roscoe) in Turin MS. 251, 6 and *Phys. et med. Gr. min.* 1, 298, 5 Ideler; ζιγγίβερι (ginger) in Turin MS. 250, 7 and *Phys. et med. Gr. min.* 1, 297, 9 Ideler; κύμνον (cumin - *Cuminum cyminum* L.) in Turin MS. 250, 8 and *Phys. et med. Gr. min.* 1, 297, 8 Ideler; κύμνον Αιθιοπακόν (black cumin - *Cuminum aethiopicum* Royle) in Turin MS. 251, 5–6 and *Phys. et med. Gr. min.* 1, 298, 2 Ideler; πέπερι (pepper - *Piper nigrum* L.) in Turin MS. 251, 7 and *Phys. et med. Gr. min.* 1, 297, 11 Ideler; πέπονος σάρξ (melon pulp - *Cucumis melo* L.) in Turin MS. 64, 4 and Ps.-Gal., *De rem. par.* 14, 346, 7 Kühn; πετροσέλινον Μακεδονικόν (Macedonian parsley - *Petroselinum crispum* (Mill.) Fuss) in Turin MS. 251, 8 and *Phys. et med. Gr. min.* 1, 298, 8 Ideler; ύσσωπος Κρητικός (Cretan savory - *Satureia graeca* L.) in Turin MS. 250, 6–7 and *Phys. et med. Gr. min.* 1, 297, 7–8 Ideler as well as in Turin MS. 251, 5 and *Phys. et med. Gr. min.* 1, 298, 1 Ideler; φύλλον (dog's mercury - *Mercurialis perennis* L.) in Turin MS. 251, 9 and *Phys. et med. Gr. min.* 1, 298, 12 Ideler.
32. See άλικακάβου ρίζα (winter-cherry root - *Physalis alkekengi* L.) in Turin MS. 56, 2 and Ps.-Gal., *De rem. par.* 14, 427, 7 Kühn; άριστολοχίας ρίζα (birthwort root - *Aristolochia sempervirens* L.) in Turin MS. 148, 2 and Ps.-Gal., *De rem. par.* 14, 464, 5 Kühn; βρυωνία (bryony - *Bryonia cretica* subsp. *dioica* (Jacq.) Tutin) in Turin MS. 95, 2 and Ps.-Gal., *De rem. par.* 14, 405, 15 Kühn; γλαύκουρως χυλός (horned poppy juice - *Glaucium flavum* Crantz) in Turin MS. 55, 3 and Ps.-Gal., *De rem. par.* 14, 425, 15 Kühn; δάδα λιπαρά (Calabrian pine kindling - *Pinus brutia* Ten.) in Turin MS. 81, 3 and Ps.-Gal., *De rem. par.* 14, 354, 10 Kühn; έλατήριον (squirting cucumber - *Ecballium elaterium* L. A. Rich.) in Turin MS. 97, 4–5 and Ps.-Gal., *De rem. par.* 14, 420, 15–16 Kühn; έλέορος λευκός (white hellebore

- *Veratrum album L.*) in Turin MS. 95, 2 and Ps.-Gal., *De rem. par.* 14, 405, 16 Kühn; ἐλλέβορος (Christmas rose - *Helleborus niger L.*) in Turin MS. 78, 4 and Ps.-Gal., *De rem. par.* 14, 420, 5 Kühn; εὐζώμου σπέρμα (rocket seed - *Eruca sativa Lam.*) in Turin MS. 81, 6 and Ps.-Gal., *De rem. par.* 14, 355, 9 Kühn; εὐζώμου ἀγρίου ῥίζα (wild rocket root - *Eruca Sativa Mill.*) in Turin MS. 97, 3 and Ps.-Gal., *De rem. par.* 14, 420, 14 Kühn; ἠρούγγιον (flat sea holly - *Eryngium planum L.*) in Turin MS. 56, 4 and Ps.-Gal., *De rem. par.* 14, 427, 9 Kühn; ἠρουγγίου ῥίζα (flat sea holly root) in Turin MS. 56, 3–4 and Ps.-Gal., *De rem. par.* 14, 427, 9 Kühn; θέομινον ἄλευρον (white lupine flour - *Lupinus albus L.*) in Turin MS. 186, 3–4 and Paul. Aeg., *Ep. Med.* 3, 81, 1, 10 Heiberg; θυμάλου ῥίζα (wood spurge root - *Euphorbia Sibthorpii Boiss.*) in Turin MS. 81, 4 and Ps.-Gal., *De rem. par.* 14, 355, 6 Kühn; κανκαλῖς (burr parsley - *Caucalis platycarpos L.*) in Turin MS. 150, 4 and *Georon.* 12, 32, 1, 1 Lelli; κηκίς (oak-gall - *Quercus alnifolia Poech*) in Turin MS. 107, 2 and Ps.-Gal., *De rem. par.* 14, 424, 5 Kühn and as well as in Turin MS. 186, 2 and Paul. Aeg., *Ep. Med.* 3, 81, 1, 3 Heiberg; λαπάθου ἀγρίου καρπός (sharp dock fruit - *Rumex conglomeratus Murray*) in Turin MS. 123, 2–3 and *Georon.* 12, 38, 1, 1 Lelli; λαπάθου ἀγρίου ῥίζα (sharp dock root) in Turin MS. 123, 5 and *Georon.* 12, 38, 2, 1–2 Lelli; λεύκης ῥίζα (white poplar - *Populus alba L.*) in Turin MS. 56, 3 and Ps.-Gal., *De rem. par.* 14, 427, 8 Kühn; ὀμφάκιον ἔλαιον (unripe grape oil - *Vitis vinifera L.*) in Turin MS. 55, 2–3 and Ps.-Gal., *De rem. par.* 14, 425, 14 Kühn; περιστερεῶνος βοτάνης ῥίζα (vervain plant root - *Verbena officinalis L.*) in Turin MS. 56, 3 and Ps.-Gal., *De rem. par.* 14, 427, 9 Kühn; πολίου ῥίζα (hulwort root - *Teucrium polium L.*) in Turin MS. 56, 4 and Ps.-Gal., *De rem. par.* 14, 427, 10 Kühn; ῥόδινος (rose oil) in Turin MS. 95, 3 and Ps.-Gal., *De rem. par.* 14, 405, 16 Kühn as well as in Turin MS. 96, 3 and Ps.-Gal., *De rem. par.* 14, 407, 9 Kühn; ῥοιᾶς γλυκέας λεπύρου χυλός (pomegranate peel juice - *Punica granatum L.*) in Turin MS. 59, 8–9 and Ps.-Gal., *De rem. par.* 14, 360, 9 Kühn; σεύτλου χυλός (beet juice - *Beta vulgaris L.*) in Turin MS. 87, 4 and Ps.-Gal., *De rem. par.* 14, 427, 16 Kühn; σικίου ἀγρίου ῥίζης χυλός (squinting cucumber root juice - *Ecballium elaterium (L.) A. Rich.*) in Turin MS. 97, 2 and Ps.-Gal., *De rem. par.* 14, 420, 10–11 Kühn; σκόρδον (garlic - *Allium sativum L.*) in Turin MS. 81, 6 and Ps.-Gal., *De rem. par.* 14, 355, 9 Kühn; σκόρδου ἐντὸς ἀμυγδαλοειδές (garlic clove) in Turin MS. 92, 2 and Ps.-Gal., *De rem. par.* 14, 403, 11–12 Kühn; σταφῖς ἀγρία (stave-sacre - *Delphinium staphisagria L.*) in Turin MS. 78, 4 and Ps.-Gal., *De rem. par.* 14, 420, 7 Kühn; συκαμίνου γάλα (mulberry milk - *Morus nigra L.*) in

- Turin MS. 81, 5 and Ps.-Gal., *De rem. par.* 14, 355, 7–8 Kühn; τερεβινθίνη ὀητίνη (terebinth resin - *Pistacia terebinthus* L.) in Turin MS. 107, 2 and Ps.-Gal., *De rem. par.* 14, 424, 6 Kühn; ὕσσωπος (savory - *Satureia graeca* L.) in Turin MS. 107, 3 and Ps.-Gal., *De rem. par.* 14, 424, 6 Kühn; φαζός (lentil - *Lens culinaris* Medik.) in Turin MS. 186, 3 and Paul. Aeg., *Ep. Med.* 3, 81, 1, 8 Heiberg; φοῖνιξ (date - *Phoenix dactylifera* L.) in Turin MS. 186, 3 and Paul. Aeg., *Ep. Med.* 3, 81, 1, 8 Heiberg; χαμαιλέων μέλας (black pine-thistle - *Cardopatum corymbosum* (L.) Pers.) in Turin MS. 87, 5 and Ps.-Gal., *De rem. par.* 14, 427, 14–15 Kühn.
33. Similar modifications to those in the Turin *iatrosophion* are to find in many other Byzantine medical works, e.g. the remedies collection from the *xenones* (that is, the Byzantine hospitals). For a detailed survey on the topic, cfr. Bennett D, *Medicine and Pharmacy in Byzantine Hospital. A study of the extant formularies*. London-New York: Routledge; 2017. The changes probably reflect the general empirical approach of the Byzantine medicine, in which the classical Greek medical theory is mediated by the direct experience of the Byzantine authors and scribes, in most cases doctors or healers.
34. In this sense, see already Touwaide A, ref. 6, especially p. 160: “Manual for the practice of medicine, *iatrosophia*, although rooted in the classical tradition, were not dominated by the pressure of conservatism to preserve textual integrity an/or theoretical orthodoxy. Medical manuals reflect a free use of the body of classical medical knowledge as a reference to be validated by experience and further developed according to its usefulness in daily therapeutic practice”.

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