

## A Most Sovereign Herb: Pseudo-Antonius Musa on Betony<sup>1</sup>

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Recibido: 14 de Octubre de 2019 / Aceptado: 5 de Diciembre de 2019

**Abstract.** A dedicatory letter allegedly from the pen of the physician Antonius Musa links him with his most famous patient, the emperor Augustus. The tract that follows specifies the use of the plant betony for close to fifty different ailments. It heads the most widely attested collection of remedies drawn from plants and animals current in the Latin middle ages, whose main part (more than 100 sections) is attributed, again without any foundation, to the second-century writer Apuleius. This article explores Greek traces of *De herba Vettonica*, highlights some aspects of its first (partial) vernacular rendering into Old English, and compares similar but not identical material on betony in Pliny the Elder's *Natural history* and unpublished recipe collections from the early middle ages.

**Keywords:** *herba Vettonica*; betony; Antonius Musa; ancient botany; Old English.

### [es] Una hierba muy soberana: Pseudo-Antonio Musa sobre la *herba Vettonica*

**Resumen.** Una carta dedicatoria supuestamente escrita por el médico Antonio Musa lo vincula con su paciente más famoso, el emperador Augusto. El tratado que sigue discute específicamente el uso de la planta llamada *herba Vettonica* para el tratamiento de cerca de cincuenta enfermedades diferentes. Se trata de la colección de remedios medicinales tomados de plantas y animales más ampliamente difundida en la Edad Media latina, cuya parte principal (más de cien secciones) fue atribuida, también en este caso sin fundamento alguno, al escritor Apuleyo, del siglo II p.C. Este artículo explora las huellas griegas que se pueden apreciar en el tratado *De herba Vettonica*, destaca algunos aspectos de su traducción (parcial) al antiguo inglés, y compara las observaciones que sobre la *herba Vettonica* se hacen en este tratado con las similares, pero no idénticas, que se encuentran en la *Historia natural* de Plinio el Viejo y en colecciones de recetas inéditas que se datan en la Edad Media temprana.

**Palabras clave:** *herba Vettonica*; Antonio Musa; botánica antigua; antiguo inglés.

**Sumario.** 1. Introduction. 2. *De herba Vettonica* in Greek? 3. *De herba Vettonica* in Old English. 4. Pliny and *De herba Vettonica*. 5. Betony recipes similar to those in *De herba Vettonica*.

**Cómo citar:** Fischer, K.-D. (2020) A Most Sovereign Herb: Pseudo-Antonius Musa on Betony, en *Cuadernos de Filología Clásica. Estudios griegos e indoeuropeos* 30, 131-148.

<sup>1</sup> I profited from help and advice generously given by Beate Gundert and Paul Potter (London, Ontario), and Linda E. Voigts (Kansas City, Kansas). The article is published as part of the project FFI2013-42904-P (Ministerio Español de Economía y Competitividad) directed by María Teresa Santamaría Hernández (University of Castilla-La Mancha at Albacete). It was written for publication in a festschrift to honour Vivian Nutton and submitted to the two editors (editrices, to be correct) in September 2015, who asked for various changes. I made some more changes according to the wishes of the publisher in August 2018, and submitted this version in September 2018. The next I heard about the project were proofs with a number of changes made without consulting me beforehand; I felt unable to accept these unauthorised changes the editrices insisted upon and withdrew my paper. I hope that Vivian will accept it even in this form as a token of deeply felt appreciation and friendship spanning decades of both our lives.

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## 1. Introduction

A number of years ago, sheer ignorance might have led me to suggest that in antiquity, all short works dedicated to a single drug (often styled, and not without reason, *Wunderdrogentraktate*<sup>3</sup>) were a Roman invention. Then, earlier this year<sup>4</sup>, Vivian Nutton published the first critical edition of a Greek Methodist treatise on the herb centaury<sup>5</sup> in its Latin version by Niccolò da Reggio; its Greek original, however, seems to be lost. This was reason enough to shake my former conviction<sup>6</sup>.

Surely the most important among these tracts is associated with the herbal attributed to Apuleius (Platonius)<sup>7</sup>. It extols the properties of the *herba Vettonica*, betony<sup>8</sup> (*Stachys officinalis* [formerly *Betonica officinalis*] or a cognate species<sup>9</sup>). This is the

<sup>3</sup> German for ‘treatises on miracle drugs’. See Keil 2007b; Brévart 2008.

<sup>4</sup> Writing in the summer of 2015 to meet the deadline.

<sup>5</sup> Nutton 2014. Altogether lost is another treatise, see Pietrobelli 2014. Plin. nat. 25.80: *Celebrauit et Themiso medicus uulgarem herbam plantaginem tamquam inuentor* (discoverer, same meaning for *inuenire*; for *reperire*, cf. Plin. nat. 25.33) *uolumine de ea edito*. (*Celebrauit*: W. H. S. Jones, in the Loeb, translates “has spread the fame”, which I prefer to Tecusan’s translation “brought into public knowledge” [fr. 263 in Tecusan 2004]): “The physician Themison has extolled the fame of plantain, a plant that is quite familiar, by writing a tract about it, as if he had been its discoverer” (my translation). Might parts of this have been used for Ps. Apul. *herb.* 1, which runs to 24 sections? One could perhaps also speculate that other Methodist doctors composed such treatises, companion pieces to *De uirtute centaureae*. – Plin. nat. 22.53 *Anthemis magnis laudibus celebratur ab Asclepiade* (“Chamomile is most highly praised by Asclepiades”; translations of Plin. nat. are those of W. H. S. Jones in the Loeb edition, unless indicated otherwise) need not refer to a specific tract, but such a suggestion seems possible, note *celebratur* in Plin. nat. 25.90 quoted a moment ago, even if *uolumine* (this seems to be Pliny’s usual way of referring to such a tract, cf. Plin. nat. 20.78 (Chrysippus on cabbage) and 22.136 *Tisanae, quae ex hordeo fit, laudes uno uolumine condidit Hippocrates* (“To ptisan, which is prepared from barley, Hippocrates devoted a whole volume”); Plin. nat. 25.13 *de ea edito* is absent here, and *lubaе uolumen quoque extat de ea herba* [sc. Euphorbea] *et clarum praeconium*, Plin. nat. 25.78 (“But the treatise also of Juba on this plant is still extant”). A treatise on hellebore by Agathinus is attested in Cael. Aur. *acut.* 3.16.135 (correct Nutton s.v. Agathinos [Agathinus] in *Der neue Pauly* [Brill’s New Pauly]; in the section of Gal. *comp. med. sec. loc.* 9.5, 13.299 Kühn copied from Andromachus, Nutton may be right in reading Ἀγαθίνου. Orib. *coll. med.* 10.7 [not ‘Syn.’] is a longer Greek excerpt Ἐκ τῶν Ἀγαθίνου (“from the works of Agathinus”). Note that the recipes in Gal. 13.299 and 13.830 Kühn do not contain hellebore and thus are not fragments of the treatise, as the wording may suggest). Archigenes wrote a whole book on castor: Gal. *simpl.* 12.337 Kühn.

<sup>6</sup> The fullest discussion of Greek parallels for the Latin *Epistula de uulture* is in Möhler 1990: 48-74. Cf. also Keil 2007a, with the bibliography cited there. The Elder Pliny (Plin. nat. 28.112-118) mentions a special, presumably Greek, treatise (*peculiari uolumine*) on the chameleon, attributed to Democritus (which is lost), and gives a summary of the contents, limb by limb (*per singula membra*), possibly resembling the *Epistula de uulture*.

<sup>7</sup> Those who are less familiar with these medieval works on herbal medicine will find pertinent information in Collins 2000. There are short notices on medical works in Latin from antiquity and the early middle ages in Sabbah, Corsetti & Fischer 1987. Abbreviations of the titles of works in Latin follow the usage of the *Thesaurus linguae Latinae*.

<sup>8</sup> Rufinus (Thorndike 1949: 320) explains: *Vettonica. dictum est sufficienter de ea in littera B, capitulo Betonica, sed aliqui mutant B in V dicentes vettonica* (“Vettonica. Enough has been said about betony in section B, chapter Betonica, but some people change b for v and call it vettonica”). Bibliographical details for the German translations published in three dissertations for obtaining the degree of Dr. med. at Würzburg University, supervised (if this is the right word) by Gundolf Keil, can be found in the bibliography of Keil 2007b. Keil 1997 is not reliable in many of the details he presents. (The article was also printed in full, but with some errors, in Henning 1998: 32-34.) German versions of the *Herbariencorpus* were produced only in the 15th century. Arthur Groos (Cornell University) and Bernhard Schnell (Göttingen, Germany) are currently working on a critical edition of the only illustrated translation into German. To date, Schnell has identified some 80 witnesses (for a new list of the mss., see now Schnell & Groos 2018: 24-39).

<sup>9</sup> Verhoeven 2011. Heinrich Marzell (an eminent botanist) vehemently doubts (Marzell 1927: 1180) whether the bettonica of the ancients is the same as ours: “Ob die vettonica (*betonica*) der Antike wirklich unsere Art ist, bleibt sehr zweifelhaft. Vielleicht ist darunter ein verwandter Lippenblütler (*Stachys alopecurus?*) zu verstehen” (“Much doubt remains whether the vettonica [*betonica*] of the ancients really is the same as our species. It could

work I wish to explore a little further here<sup>10</sup>, discussing some aspects of its transmission in Latin and Old English, to make clear how many problems will have to be addressed before a new edition is undertaken.

Knowledge of simples<sup>11</sup> surely had a long tradition before such expertise and experience found its way into written tracts; these must have been aimed at users lacking a direct link with the *herbarii* ('herbalists') or ῥιζοτόμοι (literally 'root-cutters'), persons (of either sex) who might well in the majority have been illiterate<sup>12</sup>, at least in the sense that they would have lacked the skill to compose a treatise. And for them, there would have been no such need.

As historians we are interested in when such works were first composed and what the written evidence at our disposal can tell us. *De herba Vettonica* has the advantage of being present in a considerable number of manuscripts as well as being short and therefore easy to manage, with just under fifty single paragraphs or chapters, each usually corresponding to one recipe. The question whether it was from the beginning part of the early Pseudo-Apuleian corpus not preserved in manuscript will be left aside here, but those unfamiliar with this herbal should know that *De herba Vettonica* is set apart from the chapters in the herbal of Pseudo-Apuleius by having a considerably greater number of recipes for a single item – in Pseudo-Apuleius, few plants run to more than half a dozen, and there are even chapters with just one single recipe. The other difference is that *De herba Vettonica*, in most cases, specifies the exact amount of the plant to be used and the liquid it is to be taken with. Whether it provided a sort of nucleus for the formation of the *Herbariencorpus* remains a matter for speculation. As we see in the case of the treatise on centaury mentioned earlier, works of this genre were in circulation. No need to trust the introductory letters which want us to believe that Antonius Musa<sup>13</sup>, Augustus' physician, is here sharing

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be that a labiate related to it, i.e. perhaps *Stachys alopecurus*, is meant"). Because in Ackermann's edition of the *Herbariencorpus*, the first chapter of Ps.Apul. *herb.* is *De herba Vett.*, Marzell (1927: 1181) writes that betony plays an important role in Ps.Apul. *herb.* in addition [*sic*] to the tract of Ps.Musa (just before Howald & Sigerist's new edition appeared, where Ps.Musa *herb. Vett.* is separate). Valahfridus Strabo, *cult. hort.* ('Hortulus') 355-358 seems sufficiently near Ps.Musa *herb. Vett.* 1 to assume that it was his source. Cf. further the short but very useful comments of Müller 1982: 43. See now Haars 2018: 381.

<sup>10</sup> The last edition is Howald & Sigerist 1927, conveniently available on the website of the Berlin Academy's *Corpus medicorum Graecorum*. (Correct their claim on p. 3 that the Breslau/Wrocław ms. F. III. 19 = Vr has a lacuna 'a nominibus usque ad finem curae 1'; missing is just the beginning of cure 1 = ll. 35-37; Vr starts on fol. 23r *et efficacius*. Black-and-white images can be found on [www.handschriftencensus.de](http://www.handschriftencensus.de) and the website of Wrocław University Library.) The German translation of this text in Verhoeven 2011 should not be trusted. Ps.Musa *herb. Vett.* was edited recently by Arsenio Ferraces Rodríguez as part of what he calls the *Paris Herbal*, (Ferraces Rodríguez 2012: 218-222; for Ps.Musa *herb. Vett.* 1-24 and 26-47, not 1-47, as Ferraces says). Many parts of it also appear in the St Gall *botanicus* (found in the ms. Sang. 217), cf. Niederer 2005, text and translation at 66-71, commentary at 149-184. Most of the material in this herbal comes from Ps.Musa and Ps.Apul. *herb.*, see Niederer's chapter 2, pp. 23-37. I have not found any traces of *De herba Vettonica* in Vat. Reg. lat. 846, i.e. the medical part of the *Miscellanea Tironiana*; the identification of Ps.Apul. *herb.* in this text was made by Moore 1898: 258. The ms. is mentioned in Howald & Sigerist 1927: XIV (the date there, "saec. XI", must be an error; first half of the 9th century is the traditional date) but seems to have been overlooked by many scholars interested in Ps.Apul. *herb.*, perhaps because Howald & Sigerist say that in their abbreviated form these excerpts are useless *ad textum genuinum restituendum* ("for establishing the original wording").

<sup>11</sup> Scribon. Larg. *praef.* 15: *dantes operam, ut simplicia prima ponamus: interdum enim haec efficaciora sunt quam ex pluribus composita medicamenta* ("We strove to give pride of place to simples, which at times work better than medicines made up from many ingredients").

<sup>12</sup> As Laurence Totelin reminds me (*per litteras*), Crateuas may be seen as the exception; Pliny, however, lists him as a *medicus*.

<sup>13</sup> Musa was the brother of king Juba II, who had written Περὶ εὐφορβίου (Plin. *nat.* 25.77).

his knowledge with M. Agrippa, or that Apuleius (allegedly identical with the author of philosophical works, which explains the epithet “Platonicus”, and of the *Golden Ass*) is writing for the benefit of his dear fellow-citizens, transmitting to them a work put into his own hands by Chiron, the teacher of Achilles, and by Aesculapius, an assertion that raises a few problems, sheer chronology being one of them.

So did the compilers of *De herba Vettonica* and Pseudo-Apuleius walk hill and dale<sup>14</sup> to collect recipes straight from the horse’s mouth, the horse being in this case an old wife? This claim is not even made<sup>15</sup>, and it may well be that the sources for these compilations were, in the majority at least, already in written form. The most complete among them must have been, in the fourth century AD (a possible date for the composition of *De herba Vettonica*), Pliny’s *Natural History*, and it is perhaps no coincidence that a work based on herbal and animal drugs listed in Pliny, the *Medicina Plinii* (Plin. *med.*)<sup>16</sup>, was composed then, by the way without any acknowledgement to Pliny the Elder. Rather, its author poses as Pliny himself, and his preface with its attacks on doctors just intent on material gain is quite similar in tone to that of Pseudo-Apuleius.

It is all the more surprising that the three books of the *Medicina Plinii* contain only one recipe featuring *uettonica*, Plin. *med.* 3.37.7b, *uettonica herba trita morsui imponitur* (“ground betony is put on the bite”). The source must be (as indicated by Önnersfors) a passage in Pliny the Elder’s *Natural History* 25.101: *morsibus inponitur Vettonica praecipue, cui uis tanta perhibetur ut inclusae circulo eius serpentes ipsae sese interimant flagellando*<sup>17</sup> (“and to the bites is applied in particular betony, the power of which is said to be so great that snakes enclosed in a circle of it lash themselves to death”).

A few lines earlier (Plin. *nat.* 25.99), we had read that snake-bite is cured by *Britannica herba* (*Rumex aquaticus* L. according to Jacques André), a plant that Dioscorides treats in the chapter following his account of the *Vettonica* (κέστρον in Greek, *mat. med.* 4.1; βερτανική *mat. med.* 4.2)<sup>18</sup> – for this reason and because the words are fairly similar, it is hardly surprising that many people confused both plants (the version RV of the Greek Dioscorides says βερτονική: Ῥωμαῖοι βερτόνικα<sup>19</sup>), whose properties were seen as similar<sup>20</sup>. Let us now look at some evidence that could link *De herba Vettonica* with a possible Greek original, much like the case of *De uirtute centaureae*.

<sup>14</sup> Plin. *nat.* 26.11 *sedere namque in scholis auditioni operatos gratius erat quam ire per solitudines et quaerere herbas alias aliis diebus anni* (“For it was more pleasant to sit in a lecture-room engaged in listening, than to go out into the wilds and search for the various plants at their proper season of the year”).

<sup>15</sup> Contrast the *muliercula quaedam ex Africa* (“a certain wife from the province of Africa”) in Scrib. Larg. 122.

<sup>16</sup> Cf. Fischer & Kudlien 1993. Add to the bibliography given there Brodersen 2015 and Hunt 2020.

<sup>17</sup> J. André, commenting on the passage in his Budé edition, also refers to Ser. *med.* 841, although there betony is taken by mouth, as in Ps. *Musa herb. Vett.* 42 (not noted in Howald & Sigerist), and other instances. The story about the snakes is also repeated, from Pliny, by Macer Floridus 483-485.

<sup>18</sup> Riddle 1983 did not comment specifically on betony, but see his ch. 3 “Drug affinities” (pp. 94 ff.), for Dioscorides’ arrangement of chapters. Pelagon. 367 has *Vettonicae* in the Bobbio palimpsest and *brettonicae* in Poliziano’s 15th-century copy.

<sup>19</sup> Cf. also Paul. *Aeg.* 7.3 p. 200, 19-27 Heiberg, partly quoted in Wellmann’s apparatus on Diosc. *mat. med.* 4.1 p. 167. Heiberg’s note “cf. Galen. XII 23” suggests that Galen, *On simples* has a similar text, which is not the case. Aëtius solves the problem in a different way: 1.72 is the Βερτονική (*i.e.* *Britannica*), 1.196 κέστρον (*i.e.* *Vettonica*). Bonet 1991 discusses the various names of betony.

<sup>20</sup> Paul of Aegina commented μηδὲν ὁμοιον ἔχουσα τῇ προειρημένη πλὴν τῆς ἐνεργείας (“not resembling the plant mentioned earlier except for its effect”).

## 2. *De herba Vettonica* in Greek?

Some Dioscorides manuscripts transmit (following Diosc. *mat. med.* 4.2, *i.e.* βρεττανική!) a text that is surprisingly close to Ps.Musa *herb. Vett.*<sup>21</sup>:

ἐν ἄλλῳ καὶ ταῦτα·

βεττονική εἰς χορτοκόπια καὶ ὄρεινους τόπους <καὶ> καθαρὸς καὶ ἡμέρους  
περὶ τὰ γεννήματα· καὶ ψυχὰς ἀνθρώπων καὶ σώματα φυλάττει, νυκτερινὰς τε  
ὁδοιπορίας καὶ τόπους ἐπιβλαβεῖς καὶ ὕπνους χαλεποὺς ἀντενεργεῖ καὶ εἰς πᾶσαν  
ἴασιν ἔστιν εὐλογημένη (“In another (book or manuscript) we also read the fol-  
lowing: Betony grows in meadows and hilly places and in places that are not over-  
grown and cultivated, around agricultural produce. It guards people’s minds and  
bodies and prevents wanderings at night and in dangerous places and counteracts  
bad dreams and is considered beneficial for all medical purposes”).

Ps.Musa *herb. Vett.* l. 181-184: Haec herba uettonica nascitur in pratis et in monti-  
bus<sup>22</sup>, locis mundis et opacis circa frutices; animas hominum et corpora custodit<sup>23</sup>,  
nocturnas ambulationes et loca sancta et busta, etiam uisus timendos et omnes res  
sanctas<sup>24</sup> (“This plant betony grows on meadows and on mountains on clean and  
shady places around bushes; it guards men’s souls and bodies against roaming by  
night, near sacred places and tombs, furthermore against apparitions which inspire  
fear, and everything that is numinous”).

The Greek may well be a version of the Latin above, or of a very similar text, and not the other way round, as we might be inclined to assume at first<sup>25</sup>. The beginning seems to lack a Greek word for ‘growing’ (corresponding to *nascitur*); εἰς for *in* is non-classical, ἡμέρους for *opacis* ‘shady’ strange, and even

<sup>21</sup> This is not the only link between Dioscorides and the *Herbariencorpus*; cf. Diosc. *mat. med.* 3.4.4 (app. crit. on p. 8 Wellmann) and Ps.Apul. *herb.* 19, both on ἀριστολοχέα ‘birthwort’, an interpolation in Diosc., starting, as the Latin text does (Howald & Sigerist always print it at the end of a chapter without giving a reason), with the *nomina herbae* ‘names of the plant’. Ps.Apul. *herb.* 19.2 *ad febres acerrimas* (“for very hot fevers”) is rendered as πρὸς πυρετὸν βαρὺν (“for heavy fever”), a wording I do not recall having come across in any other Greek work.

<sup>22</sup> Galen. *alfab.* 290 (Everett 2012: 370) *nascitur in pratis et montibus* (“grows on meadows and on mountains”). I cannot say if this is a sheer coincidence. Thorndike/Rufinus 1949 quotes (p. 57 s.v. *Betonica*) the last words of Galen. *alfab.* 290, attributing them to “Dyascorides”. Matthaeus Silvaticus, in his *Pandectae*, has the full text of Galen. *alfab.* 290 s.v. *Vettonica*. The other quote in Thorndike 1949/Rufinus, *Item Ysaac de betonica* (p. 342f.) ... *mouet alvum* (“Likewise Isaac Judaeus on betony ... works as a laxative”), is taken from Ps.Musa *herb. Vett.* 1-17, not from Isaac.

<sup>23</sup> Cf. Plin. *nat.* 25.84 *tantumque gloriae habet* (sc. *uettonica*) *ut domus in qua sata sit tuta existimetur a periculis omnibus*.

<sup>24</sup> Cf. Madaus 1938: 2598-2602, at 2600: “Die sehr veränderliche Pflanze [*Stachys officinalis*] wächst auf mäßig trockenen bis nassen Magerwiesen und in lichten Gebüschchen namentlich der montanen Stufe” (“*Stachys officinalis* is a rather changeable plant and grows on poor meadows that are not too dry but may be wet and in shrubbery that is not too dense, especially in higher regions”). A German translation for the Latin can be found in Niederer 2005: 67, rendering Sang. 217, p. 309.

<sup>25</sup> Howald & Sigerist, on Ps.Apul. *herb.* 31.1, claim to have spotted another interpolation in Dioscorides (mss. RV) based on the *Herbariencorpus*. Their reference to II 246, 6sq. should read I 246, 6-14 Wellmann and concerns Diosc. *mat. med.* 2.177, but the only parallel I can see in this chapter is Ps.Apul. *herb.* 31.5 and p. 246, 13-14 Wellm. ἀρμόζει καὶ θηριοδῆκτοις σὺν οἴνῳ πινομένη (“it is also good for bites of poisonous animals drunk with wine”), which is not particularly close, replacing the snakes (*Ad morsum serpentis* “for snake-bite”) with poisonous animals in general.

stranger is γεννήματα rendering *frutices* ‘shrubs’; *frutices* meaning *fructus* (the sense needed for γεννήματα) does not seem to be attested<sup>26</sup>, and my guess would be that the Greek translator did not understand what was meant by *frutices* and also lacked the necessary botanical knowledge. The reference must be to the shrubbery (more usually *frutectum*, rarely *fruticetum* in Latin), found especially on mountain slopes (*macchia* in Italian), as is suggested by Varro *rust.* 2.1.16 *in montuosis potius locis [quam del. Keil] fruticibus quam in herbidis campis* (“more appropriate for grazing goats are hilly places, shrubs, rather than grassy fields”), τόπους ἐπιβλαβεῖς (“dangerous places”?) for *loca sancta* seems to be a strange turn; *loca sancta* may refer to “forsaken places”, dangerous because in the vicinity of tombs (*busta*), daemons and spirits dwell and attack passers-by. The Greek has nothing that corresponds to *uisus timendos et omnes res sanctas* (“frightening apparitions and everything that is numinous”) unless one wants to equate bad dreams with *uisus timendos*.

In the Dioscorides manuscripts mentioned, a description of the plant, not matched in Ps.Musa *herb. Vett.*, follows:

ἔχει δὲ τὴν μὲν ρίζαν ὅλην ἐρυθρὰν καὶ εὐώδη, τὰ δὲ φύλλα πράσινα καὶ τὸ μέσον τῶν φύλλων φοινικοῦν καὶ εἰς τὴν ὀρθοκάλαμον τριγώνια καὶ ἐπ’ αὐτῶν ἄνθη πορφυρίζοντα (“It has a root that is red all over and has a pleasant fragrance, it also has green leaves whose middle is purple, and on the upright stalk †triangular and on them purple flowers”).

It seems that ὀρθοκάλαμος ‘with an upright stalk’ occurs only here, and as a feminine, while the dictionaries list it as a masculine (as we would expect); *LSJ* translates ‘upright stalk.’ A very similar word, but an adjective, ὀρθόκαυλος ‘with an upright stalk’, is attested in Theophrastus<sup>27</sup> and Galen<sup>28</sup> (quoting Theophrastus), and I would rather be inclined to read ὀρθόκαυλον here. If it is indeed an adjective, does it go with a noun? Does εἰς τὴν hide a Latin (*h*)*astam* (*asta habens tenue longa unius cubiti et quadra*, “it has a slender stalk, one cubit long and with four sides”), which is the translation used in the Dioscorides Longobardus<sup>29</sup> (p. 9 Stadler) for καυλὸν ἔχουσα λεπτόν, πῆχεως τὸ ὕψος ἢ καὶ μείζων, τετράγωνον (“it has a slender stalk, one cubit long, or even longer, with four sides”), while another Latin version of which we have a fragment right at the end of Ps.Musa *herb. Vett.* (l. 193-195) translates *tyrso* [sic] *tenui, ultra cubitum, quadrangulo*<sup>30</sup> (“with a slender stalk, more than a cubit long, with four sides”)? τριγώνια (‘with three angles’) cannot be right, also because the adjective would have to be τρίγωνος rather than τριγώνιος. It is surprising that Wellmann printed this text without drawing attention to these problems.

<sup>26</sup> Laurence Totelin (*per litteras*) suggests the emendation *fruges* ‘crops’, which I do not find convincing.

<sup>27</sup> Theophrastus, *hist. plant.* 7.8.2 and 8.3.2. Cf. Strömberg 1937: 95 ff. and 100 ff.

<sup>28</sup> Gal. *alim. fac.* 1.28.2 CMG V 4,2 p. 254, 19 Helmreich.

<sup>29</sup> Collins 2000: 148-9, an account that should be corrected with what Ferraces Rodríguez (1999: *passim*) says, claiming that Dioscorides was translated three times in late antiquity. The Dioscorides Longobardus is more or less a complete rendering of the Greek text, with various interpolations from Galen. *alfab.* and the Latin translation of Orib. *eup.* book 2. The other two translations are known only partially, e.g. from Isidore, *Etymologies (orig.)* book 17.

<sup>30</sup> *quadrangulus*, rendering Greek τετράγωνος, recurs in this translation (marked as interpolations in Howald & Sigerist), whereas the Dioscorides Longobardus (as cited above) uses *quadrus, a, um*.

The last section talks about the properties and uses of betony:

a. ἡ δὲ δύναμις αὐτῆς ἐστὶν αὕτη· λειωθεῖσα γὰρ νεαρὰ καὶ ἐπιτεθεῖσα εἰς τεθραυμένην κεφαλὴν κατὰ τῆς πληγῆς ἀνώδυνον ποιεῖ καὶ τὰ τραύματα κολλᾷ καὶ τὰ κεκλασμένα ὅστᾳ ἐκβάλλει καὶ τοῦτο ποιεῖ καθ' ἡμέραν ἀλλασσομένη, ἕως θεραπεύσει (“Its effect is as follows: the fresh plant, ground and put on the wound of the head soothes the pain, closes the wound and extracts the broken pieces of bone; do this every day until the wound has healed”).

b. ἀφεψηθεῖσα δὲ μεθ' ὕδατος κεφαλαλγίαν καταντλουμένη καὶ μετὰ ἀσφάλτου περιχριομένη τοῖς κροτάφοις ἴαται, ὑποθυμιωμένης αὐτοῖς καὶ τῆς ῥίζης (“Boil it in water and bathe the head with it for headache, and smeared on the temples with bitumen it cures the headache, also when the root is used in fumigation”).

Ps.Musa *herb. Vett.* 1 (l. 35-40): Ad capitis fracturam

Herba uettonica contusa et super capitis ictum inposita uulnus mira celeritate glutinatum sanabit; eo quidem efficacius, si tertio quoque die refectam, id est recentiorem, frequentius inposueris, donec sanet. Eius potestas tantam habere fertur utilitatem, ut ossa quoque fracta ui sua extrahat<sup>31</sup> (“For a fracture of the head: Betony crushed and applied to the place where the blow landed on the head will close and heal the wound with amazing speed; it will be all the more efficacious if you apply the poultice on every third day, *i.e.* renewed, quite often until it has healed. It is believed that its efficacy is so great that by its power it will bring even splinters of bone to the surface”).

The first part of the Greek (a.) is sufficiently close to Ps.Musa, although the claim that it dulls the pain (ἀνώδυνον) is not made in other sources I have been able to examine, and τεθραυμένην κεφαλὴν (‘head-wound’) does not necessarily suggest that the patient has suffered a fracture. In Greek, the dressing with betony leaves is changed daily, the Latin says “every other day” (day 1 is today, in ancient sources). Nothing corresponds to (b.).

### 3. *De herba Vettonica* in Old English

After this look at a Greek parallel for some parts of the Latin *De herba Vettonica*, we turn to an even more exotic tongue, Old English (OE). Medical texts were translated into Old English long before we encounter translations into other languages, certainly before the turn of the millennium, at a time for which just a few scraps of medical recipes survive in Old High German. It need not be stressed how important this transmission in Old English is because it allows us to control the Latin originals<sup>32</sup>, the *Herbariencorpus* in this case, since the majority of Latin manuscripts is from a later period.

<sup>31</sup> The OE translation is very different and has the patient drink an amount of ground betony (leaves, presumably) in warm beer (*bige hit þonne on hatum beore*).

<sup>32</sup> Cf. Adams and Deegan 1992.

When only part of the recipes appear in the OE version<sup>33</sup>, as is the case with *De herba Vettonica* (28 out of 47), we would like to know why this is so: absent are 8 (*Ad uomitus et suspiriosos et toracis dolorem*, “for vomiting, difficult breathing, and chest pain”), 9 (*Ad tiscicos et qui purulentum eiciunt*, “for pulmonary disease and bringing up pus”), 10 (*Ad stomachi dolorem*, “for stomach pain”), 11 (*Ad iocineris dolorem*, “for liver pain”), 12 (*Ad lienosos id est spleneticos*, “for complaints of the spleen, i.e. splenetics”), 13 (*Ad renum dolorem*, “for kidney pain”), 18 (*Ad colum*, “for attacks of colic”), 19 (*Ad tussim*, “for coughing”), 20 (*Ad cotidianas*, “for quotidian fever”), 21 (*Ad tertianas*, “for the kind of malaria called tertian fever”), 22 (*Ad quartanas*, “for the kind of malaria called quartan fever”), 24 (*Ad cauculosos*, “for stones in the bladder”), 25 (*Ad idropicos*, “for dropsy”), 26 (*Ad mulieres, quae a partu laborant*, “for women’s complaints after giving birth”), 27 (*Ad paralisin*, “when a patient is paralyzed”), 28 (*Ad horrores*, “for attacks of shivering in fevers”), 29 (*Ad mulieres locosas*, “for female patients with private parts that are very spacious”), 32 (*Euersis de uehiculo*, “for persons thrown off a carriage”), 33 (*Ictericis*, “for jaundice”), 34a (*Ad carbunculum*, “for heartburn”), 35 (*Qui perfrictionibus laborant*, “for patients suffering from cold”). There are unbroken sequences 8-13, 18-22, 24-29, and 32-35. I can find nothing specific in the content of the passages that were omitted that would indicate a reason for an omission and am rather inclined to think of a mechanical problem, i.e. the loss of pages in the course of transmission.

Now for some other oddities. While the sequence in the OE and Latin is the same, there are problems with two recipes in the OE, Ps.Musa *herb. Vett.* 34 and 35 (numbers 15 and 16 in OE). The editor in the EETS Series, de Vriend, does not comment. Ps.Musa *herb. Vett.* 34 *Ad carbunculum* comprises two different recipes (the second introduced by *Item* [although Howald and Sigerist print *Idem* ‘The same’, as they do in Ps.Musa *herb. Vett.* 42]<sup>34</sup>), for two different kinds of *carbunculus*: but 34a is for heartburn<sup>35</sup> (missing in OE), while 34b (= OE 15) is for a boil (OE *spring*<sup>36</sup>)! The OE recipe is much more specific than the Latin text in Howald & Sigerist and calls for 1 dram of betony and old grease to be put on the boil, while the Latin says *Vettonicam cum axungia tritam plagae inponat* (“he should place betony ground with hog’s fat on the wound”). If the weight of 1 dram and old grease rather than grease are not additions of the OE translator (and I see no compelling reason to assume this), the Latin text at his disposition was fuller as well as different from the codices used by Howald and Sigerist. We can, however, check against a manuscript not identified earlier<sup>37</sup> and

<sup>33</sup> I cite from de Vriend 1984.

<sup>34</sup> Note that *herb. Par.* 1.33 continues ... *bibat eamque herbam* ... “he should drink and this plant ...”.

<sup>35</sup> Niederer (2005: 177, commenting on 1.19) explains *carbunculus* (Ps.Musa *herb. Vett.* is here the source of the St Gall *botanicus*) as ‘fressendes, entzündetes Geschwür’ (“ulceration that is spreading and is inflamed”) (which in my opinion is only correct for the second recipe). She keeps *plantea for plagae* ‘wound’ in Howald & Sigerist, wrongly as I feel. Cf. *Orib. syn.* 4.19.5 Aa CMG VI 3 p. 135 Ræder, p. 22 Molinier; *Anthim. praef.* p. 1, 11 CML VIII 1 Liechtenhan; *carbunculus ... stomachi* (‘carbuncle of the stomach’) *Hipp. obs. cib.* 48 l. 379 Mazz.; *Marcell. med.* 20.43 CML V p. 342, 2 Niedermann-Liechtenhan. Bannier in the *Thesaurus linguae Latinae s.v. carbunculus* 1 B II A 2 paraphrases ‘odor fumosus’ (“smoky odour”), but I think that heartburn is meant.

<sup>36</sup> *Gloss.* 5.349.46 (= *Glossarium Amplonianum primum*) *carbunculus spryng*. For an old definition, see Webster, s.v. boil: “A hard, painful, inflamed tumor [= swelling], which, on suppuration, discharges pus, mixed with blood, and discloses a small fibrous mass of dead tissue, called the *core*”.

<sup>37</sup> Henry E. Sigerist published several texts from this manuscript on various occasions; I cannot say whether he worked from photographs (supplied to him by Karl Sudhoff) not comprising the whole ms. and thus missed *De herba Vettonica* and Ps.Apuleius *herb.*



still quite old<sup>38</sup>, 96 (T. 4. 13) in the Hunterian Collection at Glasgow University (CLA 196, fol. 40r): *item bittonica cum axundia [sic] trita inponitur et sanabitur* (“Like-wise, betony ground with hog’s fat is placed (upon the wound), and it will heal”).

Ps.Musa *herb. Vett.* 36 *Lassis de uia* (“for weary travellers”) must roughly be the same as OE 17; for one line in Latin, there are three and a half in OE. Discrepancies between both versions are *seoð on geswettum wine* (“boil in sweetened wine”, unspecified amount) for *ex oximelli* (a mixture of vinegar and honey<sup>39</sup>) *ciatis III*, the (Old) English patient tired from a long ride or walk should drink his medicine at night and on an empty stomach, *þonne bið he sona unwerig* (“then he will quickly be restored = not tired”). This last part is likewise absent from the Latin. I am surprised that these differences between the OE translation and the Latin prototype apparently have not been remarked on so far.

Not that our OE version is always superior. In Ps.Musa *herb. Vett.* 40<sup>40</sup> *Ad ueretri tumorem uel dolorem* (“for a swollen or painful penis”), the translator either read *uentris*<sup>41</sup> ‘belly’ or confused *uentris* ‘belly’ and *ueretri* ‘penis’ and wrote (in OE 21) *wið innopes sare* (“for pain of the entrails”). He goes on to say *lege þonne abutan þa wambe 7 þyge hy; þonne eac hraðe cymeþ þæt to bote*. (“put it then on the belly and accept it<sup>42</sup>, then the recovery will also be quick”). Did somebody just invent this?

Another case for close comparison is furnished by the preceding recipe, Ps.Musa *herb. Vett.* 39 = OE 20. The Old English patient gets not just hot water to drink with his pill, but *hatum wætere 7 on wine tósomne* (“hot water and wine together”), three cups of it instead of two (although one of the older Latin manuscripts, L, also has three), but the amount of honey – 1 oz. in the Latin text – is not given.

Sang. 751<sup>43</sup> p. 408 continues with additional text after both the OE and the Latin in Howald and Sigerist have ended:

CCCXXII Ad eos qui tenere cibum non possunt et reiciunt: Vittonica dr. IIII· mel-  
lis decolle(!) unc. I· pastillos et hoc facito IIII· ex is pastillos unum gluttiat et aque  
calidae ciatis duobus bibat per dies uel manes<sup>44</sup> IIII· remedium est.

Four pills, four days or mornings – this makes sense, and I should say better sense than three pills and three days, the reading in branch β of the Latin text<sup>45</sup> (see the *app. crit.* in Howald and Sigerist).

<sup>38</sup> Bischoff 1998: Nr. 1396, “Wahrscheinlich Narbonensis, VIII./IX. Jh.”.

<sup>39</sup> So the translator may have read, or understood, *ex (o)enomelli* “with a mixture of wine and honey” (= ἐν οἶνομέλιτι, “in a mixture of wine and honey”).

<sup>40</sup> Niedermann and Liechtenhan mention this as a parallel in Marcell. *med.* 33.32 CML V p. 564; I cannot understand why.

<sup>41</sup> Like Sang. 751 p. 408 *Ad uentre tumor. Herba uittonica tere et inpone desuper*, “for a swollen belly. Grind betony and put it on top”. The relationship between what I take to be excerpts from Ps.Musa *herb. Vett.* in Sang. 751, especially on p. 408 and 409, and Ps.Musa remains to be examined. More usual is the confusion of *uentrem* ‘belly’ (pronounced /uenre/) and *uenerem* ‘Venus (the goddess of love, also used for sexual activities in general)’ (/uenære).

<sup>42</sup> *opponito* in the Latin would not mean ‘eat’, but again ‘put on.’

<sup>43</sup> All the Saint Gall manuscripts mentioned in this article are online at e-codices.ch, where you can also find a description of the contents, date (all 9th century), and bibliography; see also the entries in Bischoff 2014.

<sup>44</sup> Normally, *mane* is indeclinable; this form of the plural is not listed in the *Thesaurus*. It also occurs e.g. in Sang. 751 p. 407 *per sex manes* and in the same recipe (Ps.Musa *herb. Vett.* 39) in Sang. 877 p. 47.

<sup>45</sup> For Ps.Musa *herb. Vett.*, Howald & Sigerist 1927 used only two β mss., Vr and Vi. A corruption of *IIII* into *III* is more easily explained palaeographically than the other way round. The excerpts from Ps.Musa *herb. Vett.* in *Recept. Lauresh.* (*Lorscher Arzneibuch*) also show β readings.

An editor of Ps.Musa *herb. Vett.* would of course have to answer the question whether the text in Sang. 751 descends directly from the version he wants to edit, or has been subject to more editing in its own turn.

The same recipe (Ps.Musa *herb. Vett.* 39) also occurs in two collections, *Recept. Sang. II* (Sang. 44, p. 53 Jörimann<sup>46</sup>), and Marcellus. The text in Marcellus, a lay person who compiled a collection of recipes “for his sons” (number unspecified; the Latin does not allow us to be sure whether daughters were included) in the early years of the 5th century, is palpably different and has the following (Marcell. *med.* 20.73 CML V p. 348 Niedermann and Liechtenhan):

Mellis Attici p. I, uettonicae tritae – IIII in unum permisce et pone, ut conferueat. Quod cum refrigerauerit, facies pastillos nucis auellanae magnitudine et post cenam singulos hauries, quo facto prime quoslibet concoques cibos (“Honey from Attica, 1 pound; ground betony, 4 oz., mix together and let it boil together. When it has cooled down, make it into pills the size of a hazelnut and take one at a time after your evening meal<sup>47</sup>; this way, you will wonderfully digest whatever you eat”).

In Marcellus, honey and betony are boiled together (Ps.Musa had said “boiled honey”), and the amounts have increased considerably: 1 pound of honey, four ounces instead of four drams of betony. The size of the pills is mentioned (same as a filbert), and you are to take them *post cenam*<sup>48</sup>, nothing being said about a drink to wash them down with. It is obvious that Marcell. *med.* 20.73 and Ps.Musa *herb. Vett.* 39<sup>49</sup> in Latin, OE and in the recipe collections *Recept. Sang. II* and in Sang. 751 are linked, but through a common ancestor. Only a *pharmacopola*<sup>50</sup> ‘drug-seller’ would have prepared a batch with one pound (12 or perhaps even 16 oz.) of honey<sup>51</sup>, and I suspect that these weights reflect an error in the transmission (honey as the first item in a recipe must also be rather rare).

It is worth having a closer look at the language of this recipe in Marcellus. It contains words that must be classified as rare: *prime* ‘excellently’, *conferueat* ‘boil together’, *hauries* ‘you will swallow’. The *Thesaurus* has, s.v. 1. *conferueo*, only two attestations, Vitruvius and Palladius; since it is only a variant reading in Vitruvius (7.14.1), the verb does not even figure in the *OLD*. *hauries* occurs only once in Marcellus and is not used for swallowing a pill in Celsus, Theodorus Priscianus, or Cassius Felix; in Caelius Aurelianus *chron.* 1.1.29, it probably refers to the liquid, as it does in *chron.* 3.2.24. Similarly rare is *prime*; in Marcell. *med.*, we have it at 9.27, 15.68, 34.21 and in the passage cited above. It also occurs in Ps.Hippocr. *ad Antioch. I vers. α (rerum mathe-*

<sup>46</sup> The more complete version of this collection in Vat. Palat. Lat. 1088 fol. 31r-50r (online) was not known to Jörimann. It was brought to my attention by Dr. J. Staub, of *Mittelateinisches Wörterbuch* in Munich.

<sup>47</sup> Jutta Kollesch and Diethard Nickel, who provided the German translation, say “nach dem Mittagessen” (“after lunch”).

<sup>48</sup> The Testimonialapparat *ad loc.* leaves us in the dark about discrepancies between Marcell. *med.* and Ps.Musa *herb. Vett.*

<sup>49</sup> Last recipe of Ps.Musa *herb. Vett.* in Hunter. 96 fol. 40r.

<sup>50</sup> See Totelin 2016.

<sup>51</sup> Or was the Greek ὀγκή (meaning ‘weight’ but also ‘dram’), and this was misinterpreted as *pondus* rather than as *drachma* / *denarius*? A similar case seems to occur in Plin. *nat.* 26.33 *Vettonicae tusae pondo libra, mellis Attici semuncia ex aqua calida cotidie bibentibus*, “ground betony, one weight/pound/dram, honey from Attica, half an ounce, taken with warm water every day” (my transl.). See above Marcell. *med.* 20.73 for a possible parallel mistake concerning the weight.

*sim quoque prime adeptus es*, “you are very knowledgeable in every field”) and in the Preface (*epistula*) of Scribonius Largus attributed in Marcellus to Cornelius Celsus, 15: *prime dantes operam* (“trying very hard”); but here, *prime* is Heraeus’ conjecture!

How do we explain the odd phrasing? Was stylistically ambitious Latin transformed into a more mundane form, in Ps.Musa and similar compilations of recipes, or was a simple and more straightforward text embellished? The latter seems much more likely. In the present case, I do not think that Marcellus himself was responsible for the lexical facelift; if that were the case, we would expect to find many more of examples in his work. Nobody has compared Marcellus’ sources systematically with his version in *De medicamentis*, admittedly no easy task because of the scarce manuscript evidence for *De medicamentis* – just two manuscripts, even if they are 9th century – and for those of his sources with an independent transmission: a manuscript, or rather: the only manuscript of Scribonius Largus, from the early 16th century, was discovered less than forty years ago, Howald and Sigerist’s edition of the *Herbariencorpus* cannot be relied on for subtle textual differences, and it remains to be seen if Pliny, the *Medicina Plinii* and its later version called *Physica Plinii* really could provide a firm foundation for such studies.

I would like to illustrate such minor editing activity with the example of Plin. *med.* 3.37.6, two recipes for snakebite<sup>52</sup>:

(a) *hyssopi semen bibitur*<sup>53</sup> (“hyssop<sup>54</sup> seed is drunk”).

(b) *eius qui percussus est uertex inciditur eoque additur euphorbium: medetur quacumque parte corporis periculum est* (“The crown of the patient’s head is incised and milkwort [*Euphorbia resinifera* Berg] rubbed in. This will work for whichever part of the body where there is danger”).

The source given for (a) is Plin. *nat.* 25.136: *Putant et (sc. hysopum) serpentium ictibus aduersari, tritum cum melle et sale et cumino* (“Pounded with honey, salt, and cumin it is also supposed to counteract the poison of snake bites”). Jacques André in his Budé edition does not comment on the differences, which are far from minor: in Pliny, nothing is said about whether the plant (probably the leaves) or the seeds are used (as specified in (a)), honey, salt, and cumin seed are totally lacking in (a). Can it be called the same recipe?

Now for (b), whose source is Plin. *nat.* 25.78:

*Contra serpentes medetur quacumque parte percussa uertice inciso et medicamento (sc. euphorbio) addito ibi* (“In whatever part of the body the bite may be, an incision is made in the top of the skull and the medicament inserted there”).

Here, we have some moderate rewriting, but no difference in the content<sup>55</sup>.

<sup>52</sup> Repeated in Plin. *phys. Flor.-Prag.* 3.57.12-13 with minute variations.

<sup>53</sup> Interestingly, Cass. 69 p. 258a (the complete text of Plin. *phys. Bamb.* identified by Sergio Sconocchia, but not printed so far), has *ex uino bibitur*, “is drunk with wine”.

<sup>54</sup> André ( 129 discusses possible meanings of *hyssopum*; for Plin. *nat.* 25.136, he opts for *Hyssopus officinalis* L.

<sup>55</sup> André refers to Diosc. *mat. med.* 3.82.3, where the Greek has some more details. The Latin translation of Dioscorides is quite different: *multi etiam perhibent, si carni secte euphorbium mittatur et consuatur, nulla fera ad nocendum hominem permittere* (“Many also claim that euphorbia resin placed on a cut in the flesh and sewn up will not allow any (poisonous) animal to cause harm”). (This passage is not in Dyasc.) In his edition, Stadler (p. 418) claims that the text after p. 99,5 Wellmann (which I just quoted) comes from Galen. *alfab.* (94, p. 216 Everett); this is not correct. Was *cranii* ‘of the skull’ omitted before *carni* ‘flesh’?

#### 4. Pliny and *De herba Vettonica*

Pliny has many recipes containing betony, although not quite as many as *De herba Vettonica*, and we should expect a significant number of more or less identical recipes in both works. One look at the *Testimonialapparatus* in Howald and Sigerist's edition shows that this is not the case. Still more surprising is that the *Medicina Plinii*, which derives almost wholly from Pliny's *Natural History*, has one single instance where *uettonica* appears, for snakebite (Plin. *med.* 3.37.7): *uettonica herba trita morsui imponitur* ("ground betony is put on the bite"). It comes from Pliny, *Natural History* 25.101:

morsibus inponitur Vettonica praecipue<sup>56</sup>, cui uis tanta perhibetur, ut inclusae circulo eius serpentes ipsae sese interimant flagellando. datur ad ictus semen eius denarii pondere cum III cyathis uini<sup>57</sup> uel farina drachmis III sextario aquae – farina et <in>ponitur – ("to the bites is applied in particular betony, the power of which is said to be so great that snakes enclosed in a circle of it lash themselves to death. For the bites is given its seed, the dose being a denarius with three cyathi of wine, or else it is ground and three drachmae of the powder are given in a sextarius of water; the powder is also applied locally").

Before we continue, it would be good to remember the necessary facts about Roman weights and measures<sup>58</sup>. The *sextarius*, roughly corresponding to 1 pint, has 2 *heminae* (also called *cotylae*) or 12 *cyathi*; *drachma* (Z or <) *tres scripulos* (ϛ<sup>59</sup>) *habet*. *drachma pondus est denarii argentei* (X), *obolus*<sup>60</sup> *drachmae pars sexta*. If Pliny uses both *drachma* and *denarius*, it may be because he is quoting from different sources, and the same may apply to the use or absence of concrete weights and measures in his recipes. Ps.Musa *herb. Vett.* has this on snakebite:

Pseudo-Antonius Musa, *De herba Vettonica* 42: Ad serpentium morsus. Vettonicae dragmas III, in uini eminis III dilutum, potui datum, omnium serpentium morsus sanat ("For snake bite. 3 drams of betony, in 3 *heminae* of wine and given orally, cures bites of all kinds of snakes").

Pseudo-Antonius Musa, *De herba Vettonica* 43: Idem ad serpentium morsus. Vettonicae dragmas VI, uini nigri ciatos III, tritum inlinito<sup>61</sup> super uulnus ("Likewise, for snake bite. 6 drams of betony, 3 *cyathi* of dark wine, grind and spread it on the wound").

<sup>56</sup> Diosc. *mat. med.* 4.1.2: καταπλασσομένη δὲ ἢ πόα ὠφελεῖ τοὺς θηριοδῆκτους ("the herb put on top is good for bites of venomous animals").

<sup>57</sup> Diosc. *mat. med.* 4.1.2: θηριοδῆκτοις δὲ ὀλκαὶ τρεῖς μετ' οἴνου κοτυλῶν δυεῖν ("for bites of venomous animals, three drams with one sextarius (roughly 1 pint!) of wine").

<sup>58</sup> Plin. *med. praef.* 9 CML III p. 6 Önnersfors agrees: *Oportet et pondera medicinalia mensurasque nosse* ("It is also necessary to know the medicinal weights and measures"). Cf. Marcell. *med. de mens.* CML V pp. 10-16 Niedermann-Liechtenhan.

<sup>59</sup> I think Önnersfors, who says 'denarius' (p. 15 in his edition of Plin. *phys. Bamb.*), is wrong. Cf. Plin. *phys. Bamb.* 76.4 = Ps.Musa *herb. Vett.* 39, where *bettonice* ϛ XII corresponds exactly to *dragmas IV.* and Plin. *phys. Bamb.* 81.4 = Ps.Musa *herb. Vett.* 37: *bettonice pulueris* ϛ VI = *Vettonicae dragmas II.*

<sup>60</sup> Marcell. *med.* says *obolus minor dragmae pars sexta est* ("the lesser obolus is the sixth part of a dram").

<sup>61</sup> *linies* 'spread on' in *herb. Par.* 42.

Paragraph 42 may correspond more or less to what Pliny says, but paragraph 43 is less straightforward, and indeed, for neither of the recipes do Howald and Sigerist offer parallels or sources. *tritum* ‘ground’ in paragraph 43 suggests that *semen* ‘seed’ has dropped out. With weights and measures, we need not quibble too much, since this was a problem well known in antiquity, and doctors who insisted on precision preferred writing these in words (ὄλογραμμάτως<sup>62</sup> ‘written in full’) rather than using special characters. If a mixture of crushed plant and dark wine were to be spread on the bite, why specify the amounts with such precision<sup>63</sup>? The part touching the bite itself would hardly take 3 *cyathi* of wine! This, however, is how the Old English translator took it:

24. Ef(t w) ið nædran slite genim þære ylcan wyrte a(ne) tr(ym)esan g(e)wæge, gecnid on r(e)ad w(in), gedo þonne ðæt þæs wines syn þre(o) ful fulle, smyre ðonne mid (þ)am wyrtrum ða wunde 7 mid þy wine, þo(nne) byð hio sona hal (“Another recipe for snake bite: Take the same plant, 1 dram, grind it with red wine, then take three cupfuls of this wine and anoint the wound with this plant and the wine, then will it soon be cured”).

Our next example is Pliny’s *Natural History* 25.127, a remedy for poisoning:

Vettonicae semen in mulso aut passo uel farina drachma<sup>64</sup> in uini ueteris cyathis quattuor; uomere cogendi atque iterum bibere (“... the seed of betony taken in honey wine or in raisin wine, or drachma doses of the powder may be taken in four *cyathi* of old wine; but the patients must be made to vomit and take a second draught”).

The text in Ps.Musa (*herb. Vett.* 41) seems to be quite close:

Ad uenenum qui sumpserit. Vettonicae dragmas III ex uino ciatis IV, statim dato, bibat, reiciet uenenum (“For people who have ingested a poison. Give at once three drams of betony with four *cyathi* of wine, let him drink this, he will bring up the poison”).

There are two points to consider here: *statim dato*<sup>65</sup> “give it at once”, and the promise that this will make the patient spew out the poison (*þonne aspiwæð he þæt attor*<sup>66</sup>), whereas Pliny says that the patients should be forced to vomit before drinking the mixture again<sup>67</sup>. Pliny also wants old wine; did *ueteris* then drop out before *cyathis* in Pseudo-Antonius Musa, *De herba Vettonica*?

<sup>62</sup> Also at Ps.Gal. *pond. mens.* 19.749 Kühn. Another expression for weights and measures spelt out fully is ὄλογράφος ‘written in full’. Ps.Musa *herb. Vett.* 19 has 2 oz. (*bot. Sang.* 15 even 3 oz.!) of betony; I consider drams more likely, unless the dose is for the whole nine days.

<sup>63</sup> The St Gall *botanicus* prefers the oral route (p. 70): 24 *Ad serpentum morsum. Herba uitonica dragmas VI* (III ante corr.), *uino nigro ciatus III bibas, miraueris* (“For snake bite. Betony, 6 drams, dark wine, 3 *cyathi*, drink this and you will be amazed”).

<sup>64</sup> This is the text printed by André; I wonder if *farina drachma* can stand, and would opt for *farinae drachma*.

<sup>65</sup> There is the remote possibility that *dato* should be read as an ablative instead of an imperative: “as soon as it (the poison) has been given”, the meaning of the passage would not be affected.

<sup>66</sup> The boiling (*wylle tosomme*, “boil together”) is only in the OE.

<sup>67</sup> *Recept. Sang. II* p. 53 has *tra<h>itur uenenum*, “the poison is drawn out”.

## 5. Betony recipes similar to those in *De herba Vettonica*

We started with the question how recipes for tracts like *De herba Vettonica* or the individual chapters in Pseudo-Apuleius, *herbarius* were collected. When one looks at the 47 sections of *De herba Vettonica* plus the three additional recipes in the Appendix (p. 287 Howald & Sigerist), one might be under the impression that they represent most of the material on betony current and known in antiquity. A look especially at some collections of recipes in manuscripts (not yet published), however, shows that this is not the case. It is certainly much easier to check *De herba Vettonica* against Pliny's *Natural history*. As we noted above, the overlap of the two works is only partial: Pliny has a number of recipes not in *De herba Vettonica*, and vice versa. This can easily be verified (and the same applies to Marcellus, *De medicamentis*), leading me to present now some of this unpublished material<sup>68</sup>. We start with Sang. 751 (p. 380), a recipe for earache:

CXII Item: uettonicę sucus cum lanae subela<sup>69</sup> in aure stilla et si uermis fuerit cadit (“112 Likewise: Let juice of betony with wool fat drip into the ear and if there is a worm, it will fall out”).

Pliny (Plin. *nat.* 26.113-114) gives recipes for betony to be used on epileptics<sup>70</sup>, different from what we read in Vat. Reg. lat. 1004 fol. 75<sup>r</sup>. It comes from Book 2 of Pseudo-Petroncellus (also referred to as *Tereoperica*)<sup>71</sup>: *Item. betonice puluis cum melle datur. sanat.*

Also unpublished is the second half of Plin. *phys. Bamb.*, in Cass. 69. This recipe for kidney pain is found on p. 142a<sup>72</sup>:

Item: bettonica ε XII. ex aqua calida cyatum(!) IIII si febrit si autem non febrit uino cyatum III (“Likewise: Betony, 12 scruples with four *cyathi* of warm water, provided the patient has fever, otherwise, 4 *cyathi* of wine”).

On p. 166a, we read a recipe *Ad dolorem et tumorem testium*:

Item: bettonicę folia siccata in umbra in puluerem redacta ε II. in aqua tepide cyatum II. potui data [ad] dolorem sanabunt (“Likewise: Betony leaves dried in the shade and pulverised, two scruples, in two *cyathi* of luke-warm water, given to drink will heal the pain”).

All these recipes would have been perfectly at home in either Pliny or *De herba Vettonica*, and they must come from recipe collections featuring simples unknown

<sup>68</sup> Plin. *phys. Bamb.* 42.3; 62.4; 65.5; 65.18; 82.42; 86.6.

<sup>69</sup> I have no idea how this should be corrected or interpreted. I translate *cum lana succida*.

<sup>70</sup> Diosc. *mat. med.* 4.1.3 θεραπεύει δὲ καὶ ἐπιληπτικούς καὶ μαινομένους μεθ’ ὕδατος πινομένη, “drunk with water, it also cures patients suffering from epilepsy and mania”.

<sup>71</sup> De Renzi 1856 published only a few chapters from this second book, pp. 287-90. López Figueroa 2011 (online) publishes only book one and does not discuss whether there was an (original) book 2. What de Renzi 1856 counts as book 3 is Ps.Democritus, *Liber medicinalis*, see Fischer 1994. In general, see also Fischer 2013 for the way these compilations were made and structured. For book 2, unpublished, we can only advance the dates of the manuscripts as a *terminus ante quem*, e.g. London, British Library, Sloane 2839, probably written in England, late 11th or early 12th century.

<sup>72</sup> See Sconocchia 1988; a later version is Plin. *phys. Flor.-Prag.* 2.37.29.

to us<sup>73</sup>. The genre itself is attested, for instance, in Pseudo-Dioscorides, *De herbis femininis* (edited by Kästner<sup>74</sup>), in the St Gall *botanicus* (edited by E. Landgraf and recently by M. Niederer), and in the *herbarius Parisinus* (edited by A. Ferraces Rodríguez 2012). While *De herbis femininis* has Dioscorides as its base, Pseudo-Apu-leius (including *De herba Vettonica*) provides the foundation and framework for the St Gall *botanicus* and the Paris herbal, and additions from other sources, known and unknown, are grouped around them. Also highly significant as potential sources of more plant recipes are the pseudo-Hippocratic *Dynamidia* and the *Curae herbarum*<sup>75</sup>, both last examined in detail by Ferraces Rodríguez 1999<sup>76</sup>.

All of the examples discussed above show that a new edition of *De herba Vettonica* will not just have to take into account more than the only seven manuscripts used by Howald and Sigerist (and three of these, L, Vr, and C, lack various parts of the text!) but cast its net much wider and address other questions of a more general character as well. Accordingly, future editors of any of these texts might well sigh, with “Nanki-Poo, Here’s a pretty mess!”. This notwithstanding, entertainment will certainly be guaranteed.

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<sup>73</sup> The same applies to Cassius Felix 43.5. The following recipe (43.6) featuring *ebulum* ‘dane-wort’ reminds me of Ps.Apul. *herb.* 92.5 and Marcell. *med.* 23.35 and belongs, like 43.5, to “low” rather than “high” medicine, the *curae rusticorum* “peasants’ medicines”.

<sup>74</sup> Kästner 1896-1897 (with the remarks of Stadler 1898), and partial editions cited in Sabbah, Corsetti & Fischer 1987. It was also translated into OE, text in de Vriend 1984. The study by Hofstetter 1983 on *De herbis femininis* and the *Curae herbarum* deserves to be known more widely. (Unfortunately, Hofstetter was not able to use de Vriend’s edition, published in 1984, nor did de Vriend cite Hofstetter.) See also Bracciotti 2000-2001.

<sup>75</sup> For both, cf. Sabbah, Corsetti, & Fischer 1987 and Fischer 2000. The text of the *Curae herbarum* as found in the Lucca ms. 296, fol. 27v-46v, was published in Touwaide, Ferraces Rodríguez & Cañas Reillo 2007: 203-225. Ferraces Rodríguez is preparing a critical edition to be published soon.

<sup>76</sup> In numerous later studies, he added many relevant details.

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