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Dioscorides extended: The Synonyma Plantarum Barbara

(Dioscórides ampliado: Synonyma Plantarum Barbara)

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ABSTRACT: The article provides a survey of the state of knowledge and research on a collection of multilingual glosses of wild plant names in Greek, Latin and other languages and healing traditions of the Roman Empire. The collection was named Synonyma plantarum barbara by Kurt Sprengel in 1829. It is known in two forms, in Greek script as part of the alphabetical recension of the Materia Medica of Dioscorides, and in Latin script as part of the Herbarius ascribed to pseudo-Apuleius. Among the regional languages prominent in this collection are Etruscan, Gaulish, Dacian and 'Egyptian'. There has been much study of the plant names in certain individual languages in the collection, inconclusive discussion of its date, and hardly any consideration of its purpose. Its authorship has been attributed, on weak evidence, to Pamphilos of Alexandria. It is proposed here that the collection should be regarded as anonymous; that its aim was to assist the sourcing of medicinal wild plants by physicians, for example army doctors, in the Roman provinces; that its usefulness would have been greatest in the 2nd century AD, and that it was probably compiled at that period, soon after the Roman conquest of Dacia. The collection as a whole has been neglected by scholars, and would reward further study for what it can tell us of the sociolinguistics, the herbal medicine, and the competing medical traditions of the Roman Empire.

KEYWORDS: Dioscorides, pseudo-Apuleius, plant names, materia medica, *Synonyma plantarum barbara*, languages of the Roman Empire.

Resumo: Neste estudo procede-se ao levantamento do estado da arte e à investigação sobre uma coleção de glosas multilingues (em grego, latim e outros idiomas) de nomes de plantas e sobre tradições de cura no Império Romano. Essa coleção foi chamada por Kurt Sprengel de *Synonyma plantarum barbara*, em 1829. Conhece-se em duas versões escritas: em grego, como parte da recensão da *Materia Medica* de Dioscórides; em latim, integrando o *Herbarius* atribuído ao Pseudo-Apuleio. Os idiomas mais proeminentes na coleção são o etrusco, o gaulês, o dácio e o 'egípcio'. Já muito se estudou os nomes das plantas, bem como a datação da coleção, mas quase nada se disse sobre os propósitos que a motivaram. Também a autoria tem sido atribuída a Pânfilo de Alexandria, embora com base em evidências demasiado frágeis. Eis as propostas do nosso estudo: considerar o autor da coleção anónimo;

julgar como objetivo principal da coleção o apoio que prestava aos médicos em termos de recurso a plantas medicinais selvagens (como era o caso dos médicos que assistiam os exércitos nas províncias romanas); situar como data provável da compilação o séc. II A.D., pouco depois da conquista romana da Dácia, período em que a coleção de glosas terá registado o maior interesse dos leitores. Na verdade, os estudiosos têm negligenciado o interesse deste *corpus*, nomeadamente no que toca à informação que contém em termos de sociolinguística, de fitoterapia e de tradições médicas em competição no Império Romano.

PALAVRAS-CHAVE: Dioscórides, Pseudo-Apuleio, nomes de plantas, materia medica, *Synonyma plantarum barbara*, línguas do Império Romano.

This paper has a straightforward aim: to draw attention to an ancient text or tradition of undeserved obscurity, to show in general terms what is known of its origin and purpose, to offer a bibliography of previous work on it, and in these ways to suggest how rewarding further work would be. There is no more convenient title for this material than *Synonyma plantarum barbara*, a designation adopted by Kurt Sprengel in the early 19th century. It survives in a Latin version as an integral part of the popular herbal known as pseudo-Apuleius and in a Greek version as a running supplement in the alphabetical recension of the *De materia medica*, the classic survey of simple medicines by Dioscorides.

Nearly all the existing work on this material falls into one of two categories. Some have studied it as a textual part of the alphabetical Dioscorides and of pseudo-Apuleius. Others have studied the lexical items included in it as evidence for the languages of the Roman empire. A challenge for the future is to bring these two approaches together, thus shedding new light both on the medical botany and on the sociolinguistics of the Roman world.

1. Dioscorides

Dioscorides, as one of those ancient authors for whom the concepts of food, medicine and health were intimately related, would have been an eager participant at the conference at which an early version of this paper was delivered. All that we know of his life comes from the preface to his major work, *Peri hyles iatrikes*, often known by its Latin title *De materia medica*.

He dedicates his book to Areios of Tarsos, remarking that, as Areios already knows, he has led a military life¹. Areios was apparently a teacher of medicine and pharmacology. At Tarsos in Cilicia (southeastern Anatolia) there

¹ On this section see Scarborough and Nutton 1982; Riddle 1985.

was apparently a medical school. Both Areios and Dioscorides, so it appears from the preface, knew a certain Laecanius Bassus, and since Areios is in other documents called Laikanios Areios he would perhaps have been a freedman or client of this Laecanius Bassus, who – now we get to a date at last – is known to have been proconsul of the Roman province of Asia in AD 78/79².

Dioscorides' military life had perhaps consisted in service with an army unit that travelled, or else with a succession of units in different locations, because (to quote the preface now directly) the *De materia medica* was the result of 'knowing many herbs with my own eyes, others from certain and unanimous report, or from information given to me in response to my specific enquiries by the inhabitants of the places where they are found'. It is generally assumed, therefore, that he served as a military physician or apothecary, because it is hard to imagine that as a mere officer or private soldier he would have had the time and opportunity to gain the detailed, wide-ranging knowledge that *De materia medica* displays.

If the biographical clues above are correctly interpreted, Dioscorides perhaps studied and afterwards taught at Tarsos, and he may have been at Tarsos, perhaps in the late 70s or early 80s, when completing his work.

At just the same period a Latin soldier and author, Pliny, completed his great encyclopedia entitled *Naturalis Historia*, dedicating it to the Roman emperor Vespasian. Pliny, a naval commander in his later years, was stationed at Misenum in Campania and died in August 79 in the eruption of nearby mount Vesuvius. Vespasian had died two months earlier, in June 79. It will be seen that the word 'perhaps' has no place in this paragraph.

It is likely enough that Dioscorides' *De materia medica* was completed in or near that eventful year in which Vespasian died, Pliny was killed, and Laecanius Bassus served his proconsulship. Others have placed Dioscorides a little earlier, but, the earlier one places him, the more difficult one finds it to explain why Pliny did not know his work. Pliny, after all, wrote a great deal about the same subjects, searched out and devoured written sources assiduously, and listed them meticulously. Only if the works were almost contemporary does it become easy to explain why Pliny never knew of Dioscorides.

2. The De Materia Medica

De materia medica is a manual of simple medicines arranged by their sources, and is by far the fullest and most informative of such works surviving from antiquity. Its primacy was acknowledged in the ancient world, as is demonstrated by the fact that it survives not only in Greek but also in a late

² See for example Trinkl 2008.

antique Latin translation³ and in early medieval Arabic translations. It was still admired and still influential in the European Renaissance: at that period it was published in successive editions and translations far more frequently than any comparable classical Greek or Latin work⁴.

It is more than a herbal, because of the 840 simples listed about 240 are not of plant origin, but it is as a herbal that Dioscorides discusses it in the quotation above, and, for reasons that will soon be evident, it is as a herbal that *De materia medica* is relevant here. As such it is notably systematic. Under each Greek name Dioscorides provides a description of the plant and its habitat, explains how the active element is extracted and specifies for what purposes it is used. In the case of familiar cultivated plants the description is sometimes skipped with the words 'known to all'. In many cases Greek synonyms for the plant names are added.

In his preface Dioscorides indicates that instead of presenting the materia medica in alphabetical order he will arrange it by main classes (animal, mineral, plant) and then subarrange according to medicinal affinities. The book itself soon became a classic, known to and quoted by practically all later authors on the subject, but this arrangement was too subtle. Dioscorides himself does not explain it well, and later users found it difficult. Hence there is a succession of reworkings of this indispensable text.

The oldest recension, sometimes known as 'Genuina' because it evidently represents Dioscorides' own intentions, consists of five books arranged by classes and affinities. The oldest manuscript, of the 9th century, is the Bibliothèque Nationale Française MS. Gr. 2179. It contains simple, coloured vignette illustrations on almost every page. It is no longer complete: everything preceding book 2 chapter 174 is lost. Alongside it several other, later manuscripts are used in Wellmann's critical edition.

The second recension is sometimes known as 'Dioscorides alphabeticus', for good reason. It contains only plant entries from the original work, and not all of those (a total of just over 400 plants are included). It rearranges them in a rough alphabetical order of Greek names. The Greek synonyms that appear in the 'genuina' recension are retained and in many cases numerous additional synonyms are added. Two famous manuscripts of this alphabetical

³ There were in fact three Latin translations, but only the latest of these, apparently made in the sixth century and known as "Dioscorides Langobardus", survives complete: see Ferraces Rodríguez 1999.

⁴ The essential edition is Wellmann 1906-1914. Earlier editions in Greek are listed in the bibliography. Wellmann's is a critical edition of the 'genuina' recension, alongside which many additions to the text found only in later recensions are included in the apparatus criticus. Among these, the *Synonyma* appear in a separate series of critical footnotes. This arrangement is convenient, though it necessarily conceals the alphabetical ordering of the recension in which the *Synonyma* actually appeared.

recension are the Vienna Dioscorides, dated to the year 512, and the Naples Dioscorides of the 7th century. These are closely related to one another in textual transmission and also in their detailed illustrations, which, although arranged differently on the page, clearly belong to a single tradition, one that is unrelated to that of the Paris manuscript already mentioned.

In a later, third recension the text of 'Dioscorides alphabeticus' is extended by adding, in a separate alphabetical order, descriptions of non-plant medicines retrieved from a manuscript of the 'genuina' tradition. The oldest known example is the 10th century Pierpont Morgan manuscript M. 652. This recension retains the additional synonyms for herb names that first appear in 'Dioscorides alphabeticus', but no similar synonyms are added to the new non-plant entries.

This paper focuses on the rich collection of synonyms for plant names in 'Dioscorides alphabeticus'. The collection has been called *Synonyma plantarum barbara*⁵. It deserves fuller description and invites further research.

3. The Synonyma Barbara: Their nature

It is necessary to begin by setting out the salient features of the collection, which will then serve as internal evidence, and indeed the only available evidence, for its purpose.

The same synonyms, with many incidental variations, appear not only in Greek script in the alphabetical Dioscorides but also in Latin script in an independent, more elementary, herbal usually known as 'Pseudo-Apuleius'. The total number of synonyms in pseudo-Apuleius is much smaller than that in the alphabetical Dioscorides because pseudo-Apuleius is a selective list of only about 130 well known medicinal plants, even fewer in some recensions.

The alphabetical Dioscorides contains between 400 and 450 plant descriptions. However, synonyms are not offered for all of these but only for a selection of native Mediterranean plants, excluding, therefore, all exotic spices (although these were important in ancient medicine and feature extensively in the text) and excluding all cultivated plants (although they had spread widely across the Roman Empire and are fully treated in the text).

The *Synonyma* were known to the earliest 15th and 16th century editors of pseudo-Apuleius and Dioscorides. They form part of the main text in full editions of pseudo-Apuleius, naturally enough, and also in the *editio princeps* of the *De materia medica* (the Aldine of 1499). Later editors of Dioscorides' work, from Franciscus Asulanus and Hieronymus Roscius (the Aldine editors

⁵ Sprengel 1829: vol. 1, p. xvi.

⁶ The essential edition, including the synonyms as an integral part of the text, is Howald and Sigerist 1927.

of 1518) to Kurt Sprengel (1829-1830), recognising that the *Synonyma* were not part of the original recension, place them in an appendix.

The majority of synonyms presented in the *Synonyma* are Greek and Latin, but in both versions the collection extends far beyond these to about thirty other named languages and peoples. Such a wide-ranging multilingual glossary is absolutely unique in Greek and Latin literature. Although many other classical texts include a few glosses in some other ancient language, and some Greek lexica offer more than this, no other text now known consists of a systematic list of synonyms in ancient languages beyond Greek, Latin, Hebrew and Syriac.

The list of synonyms for each plant typically begins in the alphabetical Dioscorides with the word *hoide* i.e. 'others [say]', in pseudo-Apuleius with *alii dicunt* 'others say', followed by synonyms in Greek. There then follows, in both sources similarly, a series of names of peoples or languages mixed with names of teachers or healing traditions, each of which is accompanied by one or more further synonyms. The longer lists frequently include such names as *Aegyptii*, *Afri* or *Punici*, *Daci*, *Galli*, *Romani*, *Syri*, *Tusci*, *prophetae*: in addition to this last name four specific names of 'prophets' appear, *Democritus*, *Osthanes*, *Pythagoras*, *Zoroaster*. For easier readability the Latin names of pseudo-Apuleius will be used in this article in preference to the Greek names of the alphabetical Dioscorides.

Because of variations among manuscripts I have not attempted to give exact statistics but the following list, grouped geographically, gives the approximate total number of terms offered under each specific name in the alphabetical Dioscorides [AD] and in pseudo-Apuleius [PA]⁷:

Graeci: PA 113. Boeoti: AD 1. Euboei: PA 1.

Romani: AD about 400, PA 28. Latini: PA 31.

Tusci: AD 16, PA 6. Marsi: AD 1. Campani: PA 1.

Lucani: AD 2, PA 1. Siculi: AD 2, PA 3.

Aegyptii: AD 149, PA 49. Aethiopes: AD 1.

Afri: AD 73, PA 1. Libyes: PA 2. Punici: PA 15.

Syri: AD 10, PA 4.

Armeni: AD 1. Cappadoces: AD 1, PA 1. Cilices: PA 2. Phryges: PA 1.

Daci: AD 39, PA 25.

Dardani: AD 2, PA 3? Bessi: AD 1, PA 2. Istriani: AD 11.

Galli: AD 28, PA 14.

Hispani: AD 6. Spani: PA 3.

J developed this list, which draws on the indexes of Wellmann 1906-1914 and of Howald and Sigerist 1927, while writing the Vicipaedia article 'Synonyma plantarum barbara' at la.wikipedia.org/wiki/Synonyma_plantarum_barbara.

Andreas the physician: AD 2. The prophets: AD 108, PA 39.

Democritus: AD 3, PA 4. Osthanes: AD 12, PA 8. Pythagoras: AD 8,

PA 5. Zoroaster: AD 7, PA 5.

The names that have a geographical reference denote exclusively regions and languages within the Roman Empire; the names of teachers refer to 'prophets' (as they are sometimes called in other sources) to whom various surviving magical and philosophical texts in Greek are attributed, and to one other author (Andreas) who wrote in Greek verse on the compounding of drugs.

Synonyms listed under the names of teachers are usually Greek, though without any resemblance to the everyday Greek name of the same plant, and often with a connotation of religion or magic. Many synonyms listed under peoples or languages actually belong to the respective languages (a few of them can even be confirmed from other sources), but many others do not: instead they have a Greek appearance, if attributed to peoples of the eastern half of the Roman empire, or a Latin appearance when attributed to the western half. For example, about half of the words listed under *Tusci* and a small proportion of the words listed under *Galli* are Latin in form (the remainder appearing to be linguistically Etruscan and Gaulish, respectively). On the other hand, practically every one of the words listed under *Daci* has a consistent prosodic structure, resembling neither Latin nor Greek, and is interpreted as linguistically Dacian.

4. The Synonyma barbara: their purpose

Some reflections follow naturally.

The predominance of synonyms in Latin and Greek is natural, since these were the two media of empire-wide communication and were steadily supplanting the local languages of the region. Given that any multilingual synonyms were to be offered at all, these are undoubtedly the ones that would be useful to the greatest number of readers. It is the range and quantity of synonyms in various other languages and specified traditions that is unexpected.

Speaking as generally as possible, the nominative plural evidently implies 'these people, the speakers of this language, or people in this tradition, use the following name'. The nominative singular evidently implies 'this teacher and his pupils use the following name'.

We may well ask what positive reason there can have been for incorporating such a collection of non-standard, esoteric and regional plant names into the alphabetical recension of *De materia medica* and into the handbook of pseudo-Apuleius. For there is no evidence that either pseudo-Apuleius or the alphabetical Dioscorides had a separate existence before the *Synonyma*

were included in them. Apparently the *Synonyma* were conceived by the author of one, and by the editor of the other, as a natural component of the handbooks that they were compiling. We recall that the *Synonyma* as we know them exclude non-plant medicines, cultivated plants, and exotic spices: their exclusive focus is on wild medicinal plants native to the Roman empire.

There is, I think, only one convincing explanation, which now follows. Both works were evidently expected to circulate in the Empire but they were destined for different audiences: the alphabetical Dioscorides would be read rather in the East and among those with a scientific education, at ease with technical Greek; pseudo-Apuleius would find uses rather in the West and among healers less highly trained but able to read uncomplicated Latin.

Beyond the Latin and Greek names, such readers, simply as readers, would not need the *Synonyma*. Names that were neither Latin nor Greek would scarcely interest them. As physicians, pharmacists or healers, however, they would certainly want the *Synonyma* if they happened to practise in an unfamiliar location or among people of mixed languages and traditions: there might be no other way to get the medicinal herbs they needed. Herbalists (*rizotomoi*, 'root-cutters', as they are called in Greek) learn their skills, including the names of medicinal plants, from local oral traditions. They may or may not know the names of plants in other languages. Herbalists make a living from the herbs they find, whether supplying them to physicians or to patients, and are all the more reluctant to reveal the places where they find them.

A herbalist is a specialist in wild plants. Cultivated plants are (as Dioscorides put it) 'known to all', easy to locate in the field or at general markets, and are commodities in a different trade. Exotic spices, including exotic animal and mineral products, belong to a different trade again, with traditional product names that do not relate to local languages.

Traditional healers may likewise have served as sources of herbs. The 'prophets' as they are collectively called, Zoroaster, Osthanes, and some others, represent magical traditions of plant use and of healing^s. 'Egyptians' and 'Etruscans' and some other apparently geographical and linguistic labels among the *Synonyma* may equally represent magical traditions that had followers beyond their local origins. Thus in dealing specifically with herbalists and healers the readers hypothesized here required precisely the help that the *Synonyma* offer.

Given that the Roman army recruited and operated on an Empire-wide basis, readers who needed the *Synonyma* because they were practising in an unfamiliar location and among people of mixed languages are as likely as

 $^{^8}$ Pradel-Baquerre 2013: 577-580. For Zoroaster and Osthanes, as they were understood in the 1st century AD, see Pliny, *Naturalis historia* book 31.

not to have been military physicians. This, we have seen, is what Dioscorides himself probably was. And so, admitting these several hypotheses, the unknown editor of the alphabetical Dioscorides, in incorporating the *Synonyma* into his work, was making the *De materia medica* even more useful than before to an audience that the original author of that work surely had in mind.

5. The Synonyma barbara: their date and authorship

It is possible, in the abstract, that the *Synonyma* were the work of the same author who compiled 'Dioscorides alphabeticus', or of the same author who compiled pseudo-Apuleius. These two texts are difficult to date⁹, but in any case it is equally possible, in the abstract, that the *Synonyma* existed independently before these texts were compiled. There are two very doubtful indications that the *Synonyma* existed independently in the early centuries AD.

In the late 2nd century Galen, who wrote voluminously on all aspects of medicine, mentions a multilingual glossary of plant names and criticises it both generally for its uselessness and specifically for its inclusion of superstitions and fables, attributing it to an author named Pamphilos¹⁰. Many scholars, beginning perhaps with Petrus Lambecius in 1669¹¹, have understood Galen to be referring to the same collection of plant names known to us as the *Synonyma*. It is not evident whether Galen knew the plant names to which he alludes as a part of a recension of Dioscorides or as existing separately, but clearly he had before him some evidence of their authorship (evidence which is not to be found attached to the *Synonyma* as we know them).

A well known grammarian and lexicographer of the 1st century AD, Pamphilos of Alexandria, is often quoted by later writers. Athenaios, for example, in the *Deipnosophistai* (about AD 220), quotes a work of Pamphilos entitled *Glosses* as evidence on food terms in Greek dialects. Discussing the name of the citron, Athenaios writes: 'Pamphilos, in the *Glosses*, says that the Romans call it *kitron*'. This is tantalising: if they included this term the *Synonyma* would also say 'Romans'. But the synonyma, meticulous in their transliteration of Latin, would say *kitroum*. In any case they do not include this term, because the citron was not a native wild plant but a cultivated tree of foreign origin.

From these two clues some scholars have accepted that the *Synonyma* in a hypothetical early incarnation, before their incorporation into the alphabetical Dioscorides and into pseudo-Apuleius, were compiled by Pamphilos

¹¹ Lambecius 1669: 593.

⁹ On the origins and dating of Dioscorides alphabeticus see Cronier 2009. My thanks to Marie Cronier for her comments on an earlier version of this paper.

¹⁰ Galen, De simplicium medicamentorum temperamentis ac facultatibus, vol. 11, pp. 792-793, Kühn.

of Alexandria¹². Kurt Sprengel in 1829 gave reasons why this was unlikely, observing that neither the characteristics of the glossary described by Galen, nor the known interests of Pamphilos, correspond with the *Synonyma* known to us¹³. Indeed, the many surviving citations of Pamphilos never suggest any interest in the local languages of the Roman Empire, and I would suggest that he quoted this one 'Roman' term not because Latin interested him, but because in this case a Greek term is borrowed from the Latin¹⁴.

The latest editor of Dioscorides in Greek, Max Wellmann, suggested rather that the *Synonyma* come from the work of a different Pamphilos, a botanist, who, according to Wellmann's hypothesis, lived soon after Dioscorides himself at the end of the 1st century AD¹⁵. More recent authors including Howald and Sigerist (in their edition of pseudo-Apuleius)¹⁶, ignoring Wellmann's hypothesis of a botanical Pamphilos, have reverted to the now-traditional attribution to Pamphilos the grammarian, sometimes misleadingly citing Wellmann in support of it and overlooking Sprengel's reasons for doubting it.

These recent statements as to the date and authorship of the *Synonyma* lack social and historical context. Our working assumption should surely be that the alphabetical Dioscorides and the manual of pseudo-Apuleius were intended to fulfill useful purposes, and that their compilers intended to fulfil a useful purpose when incorporating the *Synonyma* into them. Accepting this assumption, the linguistic and social history of the Roman empire should serve to show within what date range the *Synonyma* as we have them could have been useful. Now the use of most of the regional languages of the Empire steadily and rapidly declined during the early centuries of our era: from about the fourth century, and in some cases much earlier, evidence for their current use ceases. As far as the evidence goes, of about 60 languages spoken on imperial territory at the end of the 1st century BC, only 12 were still in use around the year 40017.

Considering, then, four individual languages prominent in the *Synonyma*, the most striking evidence is offered by the inclusion in both the Greek and Latin versions of a large number of Dacian plant terms. This series of terms would not be of the slightest use to the readers of either text unless they were to practise medicine in a region where the herbalists supplying them with local medicinal plants would be Dacian speakers. This would have

¹² On Pamphilos the grammarian see Wellmann 1916.

¹³ Sprengel 1829: xvi.

¹⁴ Athenaios, *Deipnosophistai* 84c-85c, cf. Galen, *On the Properties of Simples* 12.77; Dalby 1996: 143-144. On the other hand, Pamphilos's known interest in Babylonian terminology finds no reflection in the *Synonyma*: Sprengel 1829: xvi.

¹⁵ Wellmann 1898: 369-370.

¹⁶ Howald and Sigerist 1927: xx.

¹⁷ Dalby 2002: 46; a rich collection of evidence in Adams 2003.

been unlikely in the extreme before Trajan's conquest of Dacia in the years 101-106. Until that period no districts inhabited by Dacians were part of the Empire. From that period onwards Dacia itself was heavily occupied by Roman troops and rapidly colonized from elsewhere in the Empire. Quite suddenly, it appears, there would have been a need for medical treatment in the Graeco-Roman tradition in a region where the only guides to local wild medicinal plants were Dacian¹⁸. Based on the evidence of Dacian, then, the *Synonyma* would have been at their most useful during the second century, and hardly useful at all after the year 275 when Roman troops abandoned Dacia and retreated to the earlier Danube frontier.

The case of Etruscan is evidently different. The last certain evidence for the active use of Etruscan language is in the early first century AD when the bookish emperor Claudius read Etruscan texts in the course of his antiquarian research¹⁹. By the beginning of the 2nd century, Trajan's principate, Etruscan as a language was probably extinct. But Etruscan magical traditions survived far longer, until the year 365 when the pagan emperor Julian, in the course of his invasion of the Persian empire, required his soothsayers to consult their Etruscan books and ignored the advice they gave, with fatal results²⁰. The words listed under *Tusci* in the *Synonyma* are thus partly in Latin and partly in Etruscan, which corresponds with a hypothesis that in the 2nd century and afterwards the current language among practitioners in the Etruscan healing tradition was Latin but they retained some Etruscan plant names.

Gaulish – the Celtic of Gaul – was a widespread and ruling language up to the time of Caesar's conquest of Gaul in the 50s BC. Its current use, traceable in numerous inscriptions and occasional literary references, declined steadily during the first three centuries AD. The last certain evidence for the use of Gaulish consists of the plant names and healing spells in the 4th century *De medicamentis* of Marcellus of Bordeaux. Accepting that the terms listed under *Galli* in the *Synonyma* are not precisely a linguistic phrase-book of Gaulish but a list of plant names used by practitioners in the Gallic healing tradition, the fact that a large proportion of them are certainly Celtic and a smaller proportion Latin rather confirms the tentative conclusion from the Dacian and Etruscan evidence: the origin of the collection is to be looked

¹⁸ It is sometimes claimed, and it may be true, that the Dacian and Thracian languages were almost identical. This does not affect the argument. The ethnic name used in the *Synonyma is Daci* (Greek *Dakoi*). Whatever affinity may now be recognised between the languages, Greeks and Romans used this name for the inhabitants of Dacia and not of Thrace.

¹⁹ Suetonius, De vita Caesarum 'Divus Claudius' 42.2.

 $^{^{20}}$ It is unknown, needless to say, whether the books were really in Etruscan and whether the soothsayers knew how to read them.

for in the 2^{nd} or 3^{rd} century, and more likely earlier in that period than later, while Gaulish as a language was still in vigorous use.

Consideration of the terms listed under Aegyptii will perhaps not help to refine the dating. The Egyptian language (in the form known to us as Coptic) continued to flourish throughout the Imperial period, surviving far beyond and into modern times. Under the Roman empire Egypt was a bilingual or indeed multilingual province. Practitioners in Egyptian medical and magical traditions are likely to have been at least bilingual and certainly drew on a Greek as well as an Egyptian inheritance. Naturally the names listed under Aegyptii in the Synonyma are linguistically partly Egyptian and partly Greek, and would have been so at whatever period they were compiled.

6. Conclusion

Much more information will certainly be derived from consideration of the other languages and traditions mentioned in the *Synonyma* and from detailed consideration of individual terms in each language.

Taking as yet only general linguistic evidence into account, we can conclude that: the *Synonyma* are likely to have existed by the late 2nd century, making it possible (but no more) that Galen, when dismissing the work of Pamphilos on botanical synonyms in multiple languages, was referring to some form of this collection; the *Synonyma* cannot have existed, unless in a very different form, in the 1st century, because at that date the inclusion in the collection of Dacian terms – even supposing that some Greek lexicographer of that period had access to the information – would not have served the purpose that the *Synonyma* actually served.

The *Synonyma* cannot therefore be attributed to Pamphilos the 1st century grammarian, an attribution in any case highly unlikely given his known interests. Nor should they be attributed to Dioscorides himself, although he might conceivably have had an interest in adding this material to a revised version of his *De materia medica*, because it is difficult to believe that Dioscorides lived long enough to see the results of the Roman conquest of Dacia. Instead they are to be attributed to an unknown compiler, who may or may not also have worked on the alphabetical Dioscorides in Greek or pseudo-Apuleius in Latin. It is just possible that this compiler was called Pamphilos (a suggestion that gives him a name and brings Galen and Max Wellmann back into agreement). On the other hand it is possible that Galen was mistaken in attributing to Pamphilos the collection of botanical synonyms that he knew, and it is at least equally possible that the collection that Galen knew was entirely distinct from the collection of *Synonyma* known to us. Thus the *Synonyma plantarum barbara* will, perhaps, remain anonymous.

BIBLIOGRAPHY

Editions of Dioscorides, De materia medica

- 1499: the first Aldine edition.
- 1516: the second Aldine edition by Franciscus Asulanus and Hieronymus Roscius.
- 1529: bilingual Greek-Latin edition by Ianus Cornarius, published in Basle.
- 1549: bilingual Greek-Latin edition by Iacobus Goupylus and Ioannes Ruellius, published in Paris.
- 1589: bilingual Greek-Latin edition by Ianus Antonius Saracenus, published in Frankfurt.
- 1829-1830: bilingual Greek-Latin edition by Kurt Sprengel, published in Leipzig.
- 1906-1914: the standard edition by Max Wellmann (Berlin: Weidmann).

Selected editions of pseudo-Apuleius

- 1927: the standard edition by Ernestus Howald and Henricus E. Sigerist. *Antonii Musae*De herba vettonica liber; Pseudoapulei herbarius; Anonymi de taxone liber; Sexti

 Placiti liber medicinae ex animalibus (Leipzig: Teubner).
- 2013: French translation and commentary by Mylène Pradel-Baquerre. *Ps.-Apulée,* 'Herbier': introduction, traduction et commentaire. University of Montpellier dissertation, published at https://tel.archives-ouvertes.fr/tel-00977562/document.

General bibliography

- Adams, J. N. (2003), *Bilingualism and the Latin language*. Cambridge, Cambridge University Press, 191-196.
- Cronier, M. (2009), "L'Herbier alphabétique grec de Dioscoride: quelques remarques sur sa genèse et ses sources textuelles", in A. Ferraces Rodríguez (ed.), Fito-zooterapia antigua y altomedieval: textos y doctrinas, A Coruña, 33-59.
- Dalby, A. (1996), Siren feasts, London, Routledge.
- Dalby, A. (2002), Language in danger, London, Allen Lane.
- Ferraces Rodríguez, A. (1999), Estudios sobre textos latinos de fitoterapia entre la antigüedad tardía y la alta edad media, A Coruña.
- Lambecius, Petrus (1699), Commentariorum de augustissima bibliotheca Caesarea Vindobonensi liber II, Vienna, Cosmorovius.
- Riddle, J. M. (1985), Dioscorides on pharmacy and medicine, Austin, University of Texas Press.
- Saliba, G., Komaroff, L. (2008), "Illustrated books may be hazardous to your health: a new reading of the Arabic reception and rendition of the Materia Medica of Dioscorides", *Ars orientalis* 35: 6-65.
- Scarborough, J., Nutton, V. (1982), "The preface of Dioscorides' Materia Medica: introduction, translation, commentary", *Transactions and studies of the College of Physicians of Philadelphia* 4: 187-227.
- Trinkl, E. (2008), "Die Skulpturenausstattung des C. Laecanius Bassus Nymphaeum in

- Ephesos", Forum archaeologiae 48. homepage.univie.ac.at/elisabeth.trinkl/forum/forum0908/48bassus.htm.
- Wellmann, M. (1898), "Die Pflanzennamen des Dioskurides", Hermes 33: 360-422.
- Wellmann, M. (1903), "Dioskurides (12)", in G. Wissowa et al. (eds.), *Paulys Real-Enzyklopädie der classischen Altertumswissenschaft*, vol. 5, Stuttgart, 1131-1142.
- Wellmann, M. (1916), "Pamphilos", Hermes 51: 1-64.

On specific languages and peoples in the Synonyma

Dacian

- Bertoldi, V. (1932-33), "Preellenico" batós, mantía "cespuglio, rovo" e "preromano" *matta, *mantia "cespuglio, rovo", *Glotta* 21: 258-267.
- Bologa, V. L. (1930), I sinonimi "daci" delle piante descritte da Dioscoride possono servire alla ricostruzione della lingua daca?, Rome, Leonardo Da Vinci.
- Coloman, V. (1968), "Nomenclatura dacica a plantelor la Dioscorides si Pseudo-Apuleius", in *Acta Musei Napocensis*, 112-124.
- Detschew, D. (1957), Die thrakischen Sprachreste, Vienna, 541-565.
- Trandafirescu, N. (1994), Fitonimele atribuite dacilor în lucrarile lui Dioscorides și Pseudo-Apuleius. Bucharest, Universitatea din București, Facultatea de Filologie.
- Witczak, K. (2005), "The Dacian name for "nettle", Linguistique balkanique 44: 333-346.
- Zgusta, L. (1958), "Review of Detschew", Archiv orientalni 26: 684-685.

Dardanian

Witczak, K. (1994), "Dardanian plant names", Linguistique balkanique 53: 95-102.

Egyptian

Lüring, H.L. E. (1888), Die über die medicinischen Kenntnisse der alten Ägypter berichtenden Papyri, Leipzig, Breitkopf & Härtel, 143-164.

Etruscan

- Bertoldi, V. (1936), "Nomina tusca in Dioscoride", Studi etruschi 10: 295-320.
- Bonfante, G., Bonfante, L. (2002, 2nd ed.), The Etruscan language, Manchester, 186-191.
- Jannot, J., (2009), "The Lotus, Poppy and other Plants in Etruscan Funerary Contexts", in J. Swaddling, P. Perkins (eds.), *Etruscan by definition: the cultural, regional and personal identity of the Etruscans: papers in honour of Sybille Haynes, MBE*, London, British Museum Publications, 81-86.
- Johnson, K. P. (2006), "An Etruscan Herbal?", Etruscan news 5: 1-8.
- Lorenzetti, L. (2005), "Etrusco" φαβουλώνια "giusquiamo" (Dioscoride 4, 68)", Archivio glottologico italiano 90: 230-235.
- Marino, M., Muratore, D., "φαβουλώνια", in Franco Montanari (ed.), Words in progress: supplementary lexicon of ancient Greek at www.wordsinprogress.bedita.net/lang/ita.

Pallottino, M. (1968, 2nd ed.), Testimonia linguae Etruscae (TLE), Florence, 801-858.

Scarborough, J. (2006), "More on Dioscorides' Etruscan herbs", Etruscan news 6: 1-9.

Torelli, M. (1976), "Glosse etrusche: qualche problema di trasmissione", Mélanges Heurgon, Rome, 1001-1008.

Gaulish

André, J. (1985), "Noms de plantes gauloises ou prétendues gauloises dans les textes grecs et latins", *Études celtiques* 22: 179-198.

Dottin, G. (1920), La langue gauloise, Paris.

Poisson, J. (2004), "Aperçu sur la pharmacopée gauloise", *Revue d'histoire de la pharmacie* 92: 383-390.

Meid, W. (1996), Heilpflanzen und Heilsprüche: Zeugnisse gallischer Sprache bei Marcellus von Bordeaux, Innsbruck.

Roman

André, J. (1955), "Les noms des plantes latins du Pseudo-Dioscoride", *Latomus* 14: 520-524. Wellmann, M. (1898), "Die Pflanzennamen des Dioskurides", *Hermes* 33: 360-422.