INTRODUCTION

I. GARGILIVS MARTIALIS: LIFE AND WORK

(a) Life

Of our author Gargilius Martialis (G.), little is known with certainty. Several recent and accessible overviews report the facts and the few deductions that we can make, and so the account here can be summary.¹ G.’s references to the Quintilii brothers (d. c.183) and Galen (d. early third century), and the extensive use made of his own work by Palladius (fl. late fourth or fifth century), outline very roughly the time when he lived and worked.² Servius and Cassiodorus mention him as an agricultural author, both with high esteem, and the latter testifies also to his medical authorship (below, §ii(b)).³ The Historia Augusta twice mentions a Gargilius (Martialis) auctor; if we accept a plausible identification with our G. (the nomen Gargilius is very rare), then we can locate at least part of his life in the early third century, for there is attributed to him (Alex. Seu. 37.9) a


² Quintili mentioned 6x in Pom. (below, §ii), Galen mentioned 17x in Med. (CG s.v.); Palladius refers to G. by name 13x (below, §vi).

³ Serv. ad Verg. G. 4.148 ALIS: Gargilium Martalem significat (Verg. aenarum haec (sc. horticulture) ipse equidem spatis exclusis inquis / fruenter atque aliis post me memoranda relinquo); Cassiod. Inst. 1.28.5 quod si huius studii (sc. horticulture) requirantur auctores, de hortis scriptis pulcherrime Gargilius Martalis, qui et nutrimenta holerum et virtutes eorum diligentiter exposuit, ut ex illius commentarii lectione praestante Domino unusquisque et saturari salutis et sanari; quem ubiis inter alias codices reliqui.
INTRODUCTION

work on the dietary habits of Severus Alexander (d. 235). The ascription of such a biography to G. is maintained implicitly elsewhere in the HA (Prob. 2.7), when he is included among certain earlier historians who wrote 'less elegantly than truthfully'. There is good reason to doubt the veracity of these attributions, but we need not reject the historical evidence for the time when G. lived. Regardless of whether a biography of Severus is really to be ascribed to him, G. must still be accounted a polymath for the erudition of the agricultural and medical writings that have survived; nor was he an entirely bookish one, for although his writings show the fruit of meticulous research, he also appeals at times to his own experience to settle a dispute or vouch for a piece of advice.

We know more about G. if we accept a further reasonable identification with the Q. Gargilius Martialis named on two inscriptions from Auzia, Mauretania, which bear witness to a decorated career as a soldier and provincial official of North Africa and will give a more definite idea of the dates of G.'s life, for one of them testifies to his death on 25 March 260 in

---

4 Alex. Sca. 35.9 habuit cotidie et mul<si> sine pipere sextarios quattuor, cum pipere duo, et, ne longum sit omnia inserere quae Gargilium eius temporis scriptor singillatim persecutus est, etc.

5 Prob. 2.7 Marium Maximum, Suetonium Tranquelillum, Fabius Marcellinum, Gargilium Martialem, Iulium Capitolinum, Aelium Lampridium ceterosque qui haec et talia non tam diserte quam uere memoriae tradiderunt.


7 Note the first-person verbs at Pom. 1.1.7, 2.11.2, and G.'s appeal to experientia at 2.1.5; among G.'s numerous appeals to personal experience in Med. (Maire (2002a) liii–lxi), cf. 2.11 ut experimento meo nossem; 25.3 intellegi datum est . . . scilicet postea experimenta docuerunt; 32.8 nobis experitum est; 53.16 uhemannus hoc esse etiam domesticis in uxor seruata experimenti probatur.

8 CIL viii 20751, CIL viii 9047 = ILS 2767.7, with which see the interpretative notes of Mazzini (1977) 101–2, 115–18 (synopsis at 108). The former (CIL viii 20751) is a funerary inscription commissioned by Q. Gargilius Martialis in honour of his parents, Q. Gargilius Martialis and Iulia Prima; the latter (CIL viii 9047 = ILS 2767.7) a stele erected at public expense to Q. Gargilius Martialis (the younger) after his death, recounting his distinguished military and political career.
I GARGILIVS MARTIALIS: LIFE AND WORK

a Berber uprising. This G.’s tribe was Quirina, and his father of the same name (Q. Gargilius Martialis) was also a veteran. There is no reason to suppose that a successful career in the military and in public life, culminating in the titles of decurio for two colonies and patronus provinciae, would have kept G. from his technical writings. In view of the probability that our author G. is to be identified with this Q. Gargilius Martialis, it is interesting to note that at one place in his horticultural writings (Pom. 4.1.2–3) G. seems to assume an Italian perspective for his instructions, criticizing the Carthaginian author Mago for his ignorance about the chestnut and expecting that Celsus, ‘a man very experienced in the Italian practice’ (4.1.3n. Italicae disciplinae peritissimum), would correct him. But if this shows a preoccupation with Rome and its peninsular environs, it has less definite biographical significance: Italian land was the epicentre, real or imagined, of the written Roman agronomic tradition, and G. would thus have had a good reason to adopt this perspective. Similarly, Columella, although he does not forget his native Spain when he writes,  

9 It will be noted that this date would give him a floruit in agreement with that suggested by the HA.  
10 It is generally, and not unreasonably, supposed that it is the younger and more illustrious Gargilius with whom our G. is to be identified; I follow this assumption here, but it cannot be established with complete certainty that the elder Gargilius was not the author.  
11 Proofs to the contrary are offered, for example, by Velleius Paterculus; by Pliny the Elder, who besides his Historia naturalis produced historiographic writings (lost) and a manual on spear-throwing (De iaculatione equestri liber unus, lost); and especially by Sex. Julius Frontinus, whose voluminous technical output included works on land-surveying (now fragmentary), the military art (lost), stratagems (Strategemata, surviving) and water management (De aquaeductu urbis Roman, surviving).  
12 On the north- and east-Mediterranean provenance of the chestnut (hence G.’s complaint), see 4.1.2–3n.  
13 Baetica is recalled at, e.g., 2.10.35, 3.12.6, 5.1.5, 5.8.5, 7.1.2, 7.2.4. He also mentions often the advice of his uncle M. Columella (e.g. 2.15.4, 5.5.15, 7.2.4, 12.21.4–5, 12.40.2), a farmer of the same province (5.5.15 eruditus ac diligentissimus agricola Baeticae provinciae); but these recollections must be in some part family loyalty.
INTRODUCTION

adds the same caution about reconciling agricultural advice from North Africa with the Italian climate.⁴⁴

(b) Work

There are only two sets of writing transmitted to the present that can with certainty be attributed to G. The first comprises 60 chapters containing advice about the therapeutic use of fruits, vegetables and herbs. Travelling in numerous manuscripts, always anonymously or under the name of Pliny (and attached to the pseudo-Plinian Medicina), it was restored to G. in 1875 by V. Rose, who also furnished it with its present utilitarian title Medicinae ex holeribus et pomis (Med.).¹⁵ The second set of writings, transmitted in a single, early (sixth-century) manuscript N,¹⁶ comprises four substantial but fragmentary chapters on the cultivation of fruit trees: quince (1 section; abbreviated henceforth cydon.), peach (12 sections; persic.), almond (8; amygd.) and chestnut (7; cast.). For these agricultural fragments, which are the subject of this volume, I adopt the traditional and utilitarian title De arboribus pomiferis (Pom.), but they have also been called De hortis.¹⁷ N further contains, immediately following

---

⁴⁴ Correcting the errors of the North African agronomists had a good pedigree among the Roman farmers, going back at least as far as Tremelius Scrofa (first century BCE): Col. 1.1.6 ceterum non dissimulanda erant agrorum cultori praecipita rusticationis quae cum plurima tradiderint Poeni ex Africa scriptores, multa tamen ab his falsa profita coarguunt nostri coloni, sicut Tremelius, qui querens id ipsum tamen excusat, quod Italae et Africæ solum caelumque diversae naturae nequeat eadem foenum habere.

¹⁵ Rose (1875), where it is still printed following three books of the Medicina Plinii. For Med., the standard text is now the Budé of Maire, which furthermore offers a detailed introduction, notes and bibliography. There have been identified a dozen surviving manuscripts from the ninth century on (and extracts of Med. made it into the eighth-century codex of abbey medicine called the ‘Lorscher Arzneibuch’, Bamberg med. 1): for the transmission of Med., see Maire (2002a) lxxiii–lxxxviii, Zainaldin (forthcoming 1).

¹⁶ For full discussion of N, see below, §vii.

¹⁷ The title De arboribus pomiferis is Mai’s. Mazzini calls the fragments De hortis, arguing (1988) 17) that it is the only title with ancient precedent; this is true.
I GARGILIUS MARTIALIS: LIFE AND WORK

the horticultural advice for the quince (Pom. 1.1), a truncated section that opens with the words Medicina ex cydoneis and provides another eight sentences detailing therapeutic uses of the quince. Crucially, these sentences are also transmitted by the manuscripts of Med., where they in fact constitute the beginning of G.’s chapter on quince medicine (Med. 43.1–8). This small area of overlap between N and the medical manuscripts (printed in this volume as Appendix i) not only allows G. to be identified as the author of Med., but also provides us with an important clue to the original form of his work.

The most probable conclusion on the evidence of N is that Med. and Pom., despite their largely independent transmissions, represent two parts of what was once a single larger work. This treatise may itself have been called De hortis and, as it seems, would have described plant by plant both the cultivation and medical use of garden produce.18 We may form some idea of the shape of this original De hortis if we imagine a work in which each of the chapters of Med. on various fruits, vegetables and herbs (60 in total) was preceded by a chapter dealing with the horticulture of the relevant plant organized according to the agenda that can be reconstructed from the fragments of Pom. (for which see below, §iii(a)).19 Further confirmation for such a hypothesis is found in the remarks of Cassiodorus, which

18 (see Cassiodorus quoted above, n. 3), but I prefer to reserve that name for the larger, original work (see below, this section). [Mai had previously used the title De hortis in order to describe the combination of De arboribus pomiferas and De pomis seu Medicina ex pomis, the latter a work of dubious authenticity: see below, n. 28.] Scotti calls the fragments De re hortensi. Condorelli has the simple but descriptive fragmenta ad holera arboresque pertinentia.

19 On this original work, the existence of which is not doubted by modern scholars, see Condorelli (1976) xxv–xxvi, Riddle (1984) 412–13, 427–9, Mazzini (1988) 16–17, 135, Condorelli (1995–8) 241–52, Maire (2002a) xxvi, lx–lxiv. Hence it may be inferred that we are missing from Pom. (and the original De hortis) 56 agricultural chapters dealing with the remaining plants found in Med. (for a list of which, see Maire (2002a) c–civ), unless for some reason we suppose that G. did not furnish every plant with notes on its cultivation. G. alludes in Pom. to one such missing chapter, that on the pomegranate: see Table 1 and below, n. 22.
INTRODUCTION

strongly suggest that the agricultural and medical writings were joined,\textsuperscript{20} and in the agreement of \textit{Pom.} and \textit{Med} in the chapter ordering of the plants, as summarized in Table 1.\textsuperscript{21}

As has been persuasively argued, the original \textit{De hortis} would have taken the form of a manual for the \textit{paterfamilias} teaching how both to cultivate and to administer the plants that would nourish and treat members of his household.\textsuperscript{23} Cato’s \textit{De agricultura} is thus perhaps the closest extant precedent that we have,

Table 1: The Order of the Chapters

<table>
<thead>
<tr>
<th>Plant</th>
<th>Chapter number in \textit{Pom.}</th>
<th>Chapter number in \textit{Med.}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pomegranate</td>
<td>Uncertain, but before quince\textsuperscript{22}</td>
<td>41</td>
</tr>
<tr>
<td>Quince</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td>Peach</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>Almond</td>
<td>3</td>
<td>53</td>
</tr>
<tr>
<td>Chestnut</td>
<td>4</td>
<td>56</td>
</tr>
</tbody>
</table>

\textsuperscript{20} See above, n. 3. The key details are: \textit{et nutrimenta holerae et virtutes eorum diligentem exposuit, ut ex illius commentarii lectione . . . unusquisque et saturari ualeat et sanari.}

\textsuperscript{21} It must be duly noted that in ordering the chapters of \textit{Pom.} there is a choice in where to place \textit{persie.} (below, §ix), whether after \textit{cydon.} or after \textit{cast.;} but this mild circularity does not vitiate the more general agreement of chapter order. For the chapter order of \textit{Med.}, see Maire (2002\textsuperscript{a}) xcix–civ. The uneven gaps between chapters in \textit{Pom.} and \textit{Med.} can be explained by rearrangement of material in \textit{Med.} at the time of or after its excerpting, if not simply by disturbance in \textit{N} itself.

\textsuperscript{22} The chapter on the pomegranate can be placed before that on the quince because G. refers to the pomegranate in \textit{cydon.} on the grounds that he has already discussed it: cf. 1.1.13n. \textit{Consentienti aliq\ae posse (sc. cydone\ae) et scrubibus et in dolcis sodo modo quo punica supra vel alia m<al> sa\tami.}

\textsuperscript{23} The reconstruction of the intention and audience of the original work rests not only on the \textit{prima facie} argument from the paired chapters of agriculture and medicine, but also from persuasive observations about the non-specialist character of G.’s language and advice, especially of \textit{Med.}: in his reworking of his sources, G. avoids excessively abstruse medical language, strives for literary effect (sometimes to the point of obfuscating his instructions) and prioritizes simple and practical therapies. See Maire (1997), esp. 316–18, (2000), esp. 162–4, (2002\textsuperscript{a}) lx–liv, (2003\textsuperscript{b}), esp. 966–7. Stok (1999) places the original \textit{De hortis} in a ‘vein of encyclopaedism’ (‘un filone enciclopedico’ (229)) represented by Cato and Pliny the Elder (i.e. and not Celsus or Varro).
I GARGILIVS MARTIALIS: LIFE AND WORK

and it is worth noting the suggestive statement found in G.’s report on Cato’s medical advice for the cabbage (Med. 30.3): cet-erum militares uiri gloriosas cicatrices gratuito holere curabant, eodem horto usi ad salutem dum illos passet et sanet. It is hard not to think that G. reflects here on his own work as well as Cato’s.

There are a handful of other works that have been attributed to G. As mentioned above, a biography of Severus Alexander has been hypothesized on the strength of the remarks in the Historia Augusta, but these are hardly to be trusted. The short veterinary work Curae boum was once attributed to G., but is now rightly separated from his name. Several fragments dealing with the medical use of fruits and vegetables have been attached to him, but none securely. Finally, there has been

---

24 Cato is named 3x in G.’s writings, all in Med. 30.1–14, where he contributes many medical uses for the cabbage.


26 For strong grounds to doubt the HA here, see above, n. 6. Önerfors (1993) 272 thinks that G.’s taste for prose rhythm [see below, §v(a)] might suggest a ’schriftstellerische Tätigkeit als Historiker’, because ’die Geschichtsschreibung zählte ja zu den schönsten, der Poesie nahestehenden Gattungen der antiken Literatur’.

27 The work, edited by Lommatzsch, comprises 23 sections of veterinary medicine under the heading Curae boum ex corpore Gargili Martialis. They are transmitted in a single manuscript L (Voss. lat. f. 71, anno 1537) following the four books of Vegetius’ Digesta artis mulomedicinae. Authenticity can be precluded on stylistic among other grounds (regarding style, an absence of prose rhythm, monotonous language and lack of G.’s characteristically dense source-citation): see Mazzini (1977) 111–13, (1988) 133–4, Fischer (1997b), Zainaldin (forthcoming 2). Condorelli (1985) 1025 n. 1 allows that there may be a (remote) Gargilian substrate to the work.

28 The most substantial of these is the spurious work confusingly called both De oleribus Martialis (when edited by Rose (1864–70) ii 131–50) and De pomis seu Medicina ex pomis (when edited by Mai (1831) 418–26). Mazzini (1977) 114 identifies the work De oleribus / De pomis as being in truth the nucleus of books 1 and 3 of the pseudo-Hippocratic Dynamidia; the first part of it is a copy of the Latin translation of the Hippocratic περὶ διαίτης, the second a reworking of some chapters of Med. For the sources of the Dynamidia, see further Ferraces Rodríguez (1999) 23–55 and passim.
INTRODUCTION

hope that genuinely Gargilian writings can be recovered from various late Latin pharmacological writings.\textsuperscript{29}

II GARGILIVS IN THE AGRICULTURAL TRADITION

To judge by Pom., if G.’s agricultural writings had survived in full they would have been by far the most detailed extant treatment of the cultivation of fruit trees, and probably many other edible or medically useful plants, from Greco-Roman antiquity. Although in some important respects they would also have been radically different from previous extant writings, they can only be understood in terms of the Greek and Roman agronomic tradition to which they belong. For the remainder of the Introduction, I will restrict my remarks about G.’s agricultural writings to Pom., that is, to the surviving chapters dealing with the arboriculture of quince, peach, almond and chestnut.\textsuperscript{30}

Pom. stands out among the extant agricultural writings from Rome both in form and content. Its chapter-by-chapter treatment of fruits is not found in earlier treatises, and it is the first work that attempts to discuss systematically and completely the cultivation of individual trees from the stage of soil preparation, seed selection and planting through to harvesting and preservation.\textsuperscript{31} Moreover, the wealth of detail found in Pom. is unprecedented, as is the thoroughness with which G. searches Greek and Roman agricultural authorities for alternative

\textsuperscript{29} Ferraces Rodríguez, for example, has argued that the pseudo-Dioscoridean De herbis femininis is based on a Latin translation of Dioscorides’ Materia medica prepared by G.: see Ferraces Rodríguez (1999), esp. 173–224; cf. also Ferraces Rodríguez (1994), (2000). But in reviewing the arguments of Ferraces Rodríguez, Maltby (2008) offers reasonable grounds for doubting the hypothesis.

\textsuperscript{30} This narrow focus is of course dictated by the loss of the other chapters, but the opening fragment also indicates a specific demarcation of the discussion of fruits: cf. 1.1.1 ***rerum de fructibus pauca nobis dicenda sunt (with 1.1n.).

\textsuperscript{31} On the uniqueness of Pom. in this respect, see further below, §iii(a).
II GARGILIVS IN THE AGRICULTURAL TRADITION

techniques of cultivation. But despite its novelty, *Pom.* remains deeply indebted to earlier agricultural writings and must be studied as belonging to that tradition: thus, Columella and Pliny the Elder had both discussed fruit trees in detail in separate books within their works (*De re rustica* 5, *Historia naturalis* 17), and, whatever its authorship, the *De arboribus* if it circulated independently by G.’s time could have supplied a precedent for a treatment of arbiculture not embedded in a comprehensive or encyclopaedic framework.32 An even more obvious indication of G.’s debt to the earlier agronomists is the remarkable density of named authorities appearing in his work, and the great extent to which, even where he leaves a source unnamed, his account can be traced back to strands of advice found in earlier writings. Before discussing further the structure of *Pom.*, it will therefore be useful to survey in brief G.’s Greek and Roman precedents in arbiculture in order to understand what models for composition he may have had before him and what traditional constraints and opportunities they might have offered (although our knowledge of many sources, and *a fortiori* of G.’s use, is limited). In the following, I will discuss in chronological order (1) those authors G. mentions by name in *Pom.* (e.g. Columella, Celsus and the Quintilii), regardless of whether their works still survive; and (2) those authors whom G. does not mention by name in *Pom.* (e.g. Theophrastus, Cato and Varro), but whose extant writings appear to bear witness to the source of G.’s language or advice, if they are not the source itself.33

32 Thus, what is relevant for our purposes is not the content of *Arb.* (which in many cases duplicates that of Columella’s *De re rustica* 5) but the fact that such a book was valued enough to be transmitted apart from the work that originally contained it. On *Arb.*, see further below, this section.

33 The list makes no claim to exhaust the possible sources of influence on G.: for a sampling of agricultural authors excluded here, consider the lengthy lists at Varro, *Rust.* 1.1.7–110, Col. 1.1.7–14; also the list of the sources of the *Geoponica* compiled by Dalby (2011) 36–49.
INTRODUCTION

One of the earliest authorities on whom G. relies is the Punic agronomist **Mago** (fl. unknown, probably sometime fourth to early second century BCE), whose rustic work in 28 books exerted a profound influence on subsequent Greek and Roman writers on agricultural themes.\(^{34}\) It is probably this work, or rather, the numerous translations and abridgements of it that were made into both Greek and Latin (cf. Varro, *Rust.* 1.1.10), that provided the model for the systematic approach to agriculture adopted by later Roman authors. This is unsurprising in view of the high esteem in which Mago was held: Varro (*ibid.*) gives him the place of honour among agronomists – *hos (sc. scriptores) nobilitate Mago Carthaginiensis praeterit* –, a judgement with which Columella (1.1.13) agrees, calling him *rusticationis parens*. Pliny and Columella tell us that his work was so important that a translation of his 28 books was made into Latin *ex senatus consulto* (Col. *ibid.*, Plin. *HN* 18.22), which has been dated to as early as 140 BCE. Although G. obviously departs from Mago’s comprehensive approach, he uses his arboricultural advice extensively (named 5x: 3.1.2, 3.1.4, 3.3.4, 4.1.2, 4.1.3), whether in an apparently direct form, that is, through a translation or epitome, or indirectly, that is, through quotations or paraphrase in later agronomists.\(^{35}\) But

---

\(^{34}\) Pliny (*HN* 18.22) gives us the only scrap of information we have about Mago’s life when he lists him next to Xenophon as a *dux* who wrote on agricultural topics, but we may suspect the identification to be too pat. Indeed, scholars have doubted whether Mago is anything more than a ‘venerable and distinguished name associated with a large corpus of information from Punic Africa, the accumulation of centuries of development’ (White (1973) 475; cf. Mahaffy (1889) 32) – a Hippocrates of agronomy, as it were. Whether or not this is the case, Mago is consistently represented by the Romans as a historical figure and the progenitor of much agricultural wisdom. For elucidation of the shadowy figure of Mago and of the influence of Punic agriculture on Rome, see Martin (1971) 43–52, White (1973), esp. 470–5, Heurgon (1976), Ameling (1993) 259–60, Greene and Kehoe (1995), Santini (2000), Cataudella (2002) 41–6, Dominguez Petit (2004), Krings (2008) 24–7. Speranza (1974) 75–119 collects the fragments, to which from the *agrimensores* add Lachmann 348.19–350.16.

\(^{35}\) Mago is tied to Celsus at 3.1.2 (Mago and Celsus agree), 3.1.4 (they disagree), 4.1.2–3 (they agree); it is not unreasonably inferred that Celsus was