

I N H A L T S V E R Z E I C H N I S

Eleni A v d o u l o u: Fragment eines Gelddarlehens aus der römischen Zeit (Taf. 1).....	1
Lincoln H. B l u m e l l — Kerry H u l l: A Greek Christian Epitaph of Egypt in the San Antonio Museum of Art (Taf. 2).....	7
Bianca B o r e l l i — W. Graham C l a y t o r: A Dossier of Seed Orders and Farmers' Oaths from Karanis (Taf. 3–6)	11
Nikolaos G o n i s: Four Documents Concerning Military Supplies (Taf. 7–8)	57
Giulio I o v i n e: Latin and Latin-Greek Papyri from Late Antique Egypt (<i>ChLA</i> XLIV 1262, 1285, 1286, <i>ChLA</i> XLIV 1304 <i>verso</i> , 1307, XLV 1336, 1350 <i>recto</i> ; <i>P.Vindob.</i> L 64) (Taf. 9–13).....	67
Giulio I o v i n e: Sette papiri militari latini dalla collezione di Vienna (<i>ChLA</i> XLIV 1297, 1299, 1302, 1308, 1309, XLV 1327, <i>P.Vindob.</i> L 169) (Taf. 14–17)	87
Aikaterini K o r o l i: A Greek Late Antique Heracleopolite Land Register with Numbered Parcels and Payments (Taf. 18–19)	117
Egidia O c c h i p i n t i: A Note on the Quire of P.Bodmer 45–47 and 27 ..	125
Amphilochios P a p a t h o m a s — Marianna T h o m a: A Woman's Application for the Appointment of a Guardian (<i>tutor ad actum</i>) (Taf. 20)	133
Amphilochios P a p a t h o m a s — Marianna T h o m a: Erstedition eines christlich-literarischen Fragments aus der Sammlung der Öster- reichischen Nationalbibliothek (Taf. 21).....	143
Ioan P i s o: Eine merkwürdige Ritzinschrift von Copăceni bei Potaissa (Taf. 22–24).....	151
Ioan P i s o — Vlad-Andrei L ă z ă r e s c u — Sorin C o c i ș: Zur Geschichte des <i>numerus Maurorum Optatianensium</i> (Taf. 25–27).....	155
Davide R e d a e l l i: L'importanza dell'indicazione della centuria nelle iscrizioni dei soldati delle milizie urbane	165
Matthias S t e r n: The City Solution? Theodosiopolis and the System of Joint Administration in the Late Antique Fayyum	189
Federico U g o l i n i — Deborah C v i k e l: Inscriptions from the Timbers of the Late Antique Ma'agan Mikhael B Shipwreck (Taf. 28–31).....	215
Bemerkungen zu Papyri XXXVII (<Korr. Tyche> 1142–1151)	225
Adnotationes epigraphicae XV (<Adn. Tyche> 128)	249
Tafeln 1–31	

NIKOLAOS GONIS

Four Documents Concerning Military Supplies

Plates 7–8

This article presents editions of four small papyri kept in the British Library, London. One (3) was first published in the form of a short description in P.Lond. V. The other three, all unpublished and very fragmentary, were bought from M. Nahman and D. Askren in November 1924, as part of a joint purchase with the University of Michigan.

1. Receipt for the Supply of Hay and Chaff

The right-hand side of a receipt issued by an *apaitetes* to two comarchs for the supply of hay and chaff (χορτάχρονον) to travelling soldiers or rather their animals. This *apaitetes* apparently had a second title, probably that of *diadotes* (see 1–2 n.). He was attached to a *mansio*, a post station for travelling officials and military staff, which was probably located at Hermopolis. The *apaitetes* would normally collect the requisitioned items and the *diadotes* would deliver them to the military; in this case, however, the comarchs themselves seem to have delivered the provisions to the soldiers, possibly on behalf of the *diadotes*, which is exceptional. It also appears that this did not occur at the *mansio* but in the village of Thallou. It may be that this was an unplanned troop movement that had to be managed outside the usual supply route. (I owe the gist of this interpretation to F. Mitthof.)

No date is preserved, but the text cannot be earlier than the Tetrarchic period; the term used for the *species annonariae*, χορτάχρονον, is attested only between 293 and 314 (see 2 n.). A dating in the late third or early fourth century would also be consistent with the handwriting.

P.Lond. inv. 2605b
Hermopolite Nome

6.4 cm (w) × 4.5 cm (h)

Third/fourth century
Plate 7 Fig. 1

The papyrus is broken below, on the left, and at the top right. It is written along the fibres. The back is blank.

1 [] ὁ καὶ Φιδίας ἀπαι[τητῆς -]
 2 [- - -] χορταχύρου μονῆς . . [- -]
 3 [- - -] ὧτι καὶ Δίῳ κομάρχαις
 4 [- - -] ἥς χαίρειν. διαδε-
 5 [δώκατε - - ἐ]ν τῇ Θάλλου τοῖς γενναιοτάτοις
 6 [- - -] ἐρχομένοις ἀπὸ λόγου
 7 [- - -] χορ[ταχύρου

1 l. Φειδίας 4, 6–7 final letters extended

... alias Phidias, *apaitetes* ... of hay and chaff of the *mansio* ... to -os and Dios, comarchs of ..., greeting. You have given at Thallou to the bravest ... who are coming ... from the account of ... hay and chaff ...

1] ὁ καὶ Φιδίας. The line would have begun with a *gentilicium*, probably Αὐρήλιος. In Egypt, the name Pheidias (TM Nam 3198) is mostly found in Hermopolite documents, mostly close in date to our text: CPR XXXV 7.2 (253–268) Φ[ει]δίας Διοσκου[ρίδου], 87.2 Φιδίου τοῦ καί (270), and BGU XIX 2771.2 (3rd/4th c.) Φιδίου υἱοῦ Θάλλου.

1–2 ἀπαι[τητῆς - - -] χορταχύρου μονῆς . . [. On the involvement of ἀπαιτηταί in the collection of the *annona militaris*, see B. Palme, *Das Amt des ἀπαιτητῆς in Ägypten*, Wien 1989, 78–82, and F. Mitthof, *Annona Militaris*, Firenze 2001, i 119–123. In the Hermopolite nome in this period, such collectors are designated as ἀπαιτηταὶ ἀννώνης; it is possible that this was the case here as well. The lacuna in l. 2 and the mention of the *species annonariae* indicate that our *apaitetes* also held a second office. We should probably restore [καὶ διαδότῃς]; cf. SB XVIII 13309.3 (Herm.; 297)] καὶ διαδοῖται οἴνου μονῆς, and P.Rein. I 56 = W.Chr. 419.9–12 (Herm.?, 4th c.) διαδότας | οἴνου ἢ κρέως ἐπὶ | τόπων ἢ μογ[ῆ]ς | Ἀντινόου (cf. BL XII 165). ἀπαιτηταὶ καὶ διαδοῖται of chaff are attested in P.Panop.Beatty 1.299 (298), among other liturgists with combined titles; see P.Panop.Beatty, p. 124, and Mitthof, *Annona Militaris* i 101f. (on *diadotai*, holding more than one office), and 182–185.

Given that the village of Thallou, mentioned in l. 5, was in the area north of Hermopolis, this *mansio* (μονή) was probably one of the two recorded in the *Itinerarium Antonini*, namely *Ibiu* and *Hermupoli* (157.3–4). The traces are not incompatible with Ἐρ[μοῦ], but some doubt remains. The *mansio* of Hermopolis is probably mentioned in SB XVIII 13309.3; see Mitthof, *Annona Militaris* ii 395 (i 252–254 on *mansiones* in Egypt). *Ibiu* must be Ἰβίων, but its location is unknown; see M. Drew-Bear, *Le nome hermapolite*, Missoula 1979, 123. Cf. below, 3–4 n.

2 χορταχύρου. Cf. 7. This compound is also found in P.Mich. XII 650.27–28 (Ars.?, 293), P.Oxy. LXXXVIII 5672.4 (Oxy.; 310/311), and PSI VII 820.5 (Ars.; 314), all of which relate to the *annona militaris*, and in P.Oxy. XVI 1862.25 (Oxy.; c. 624), in the from χορτοάχυρον, which was intended for horses. The editors of the last text translated ‘chopped grass’, which found its way to LSJ⁹; LSJ Rev. Suppl. substitutes ‘grass straw’, but this is not the meaning of the word. It referred to two distinct species that were collected and delivered together, not a mixture; cf. the earlier χορτάρακος,

found in agricultural contexts, σιτόκριθος and οἰνόκρεον, first attested in the fourth century and in the context of the *annona*, and the later κριθάχυρον, another component of the *annona*.

3–4 κωμάρχαις [- -]ης. The break took away the reference to the village governed by these comarchs. τῇ Θάλλου at 5 suggests that this was Thallou, but in that case it is not obvious what]ης was; the sequence Θάλλου κόμη (or the like) is not found elsewhere. Another possibility is [τῆς αὐτῆς κώμ]ης; this would indicate an earlier reference to this village, perhaps that of the *mansio* in l. 2; if so, this would not be Ἐρ[μοῦ (see note above), and the article before Θάλλου at 5 would be unexplained.

On the involvement of comarchs in the provisioning of the army, see Mitthof, *Annona Militaris* i 147–149. No other transaction of a similar nature is known, although cf. P.Turner 46 (Herm.; early 4th c.), a summons that concerns τοὺς ἀπαιτητάς | τῆς ἀννώνης δ' ἰνδικτί(ονος) μετὰ τῶν φορμαριῶν τοῦ ἀχύρου καὶ Χαιρήμονα γενόμενον κωμάρχον ἔνεκεν τῆς φορμαρίας τῆς κριθῆς (ll. 2–4; but Χαιρήμονα is an impossible reading, and I venture to suggest Χαιρᾶν τὸν γενόμενον).

4–6 διαδε[δωκάτε - - ἐ]γ τῇ Θάλλου. Cf. P.Oxy. I 43r.iv.15 (Oxy.; 295) διαδέδωκάς μοι τοῖς γεννεοτάτοις ἵππεῦσι, in a receipt issued by an *optio* of a cavalry unit to an ἐπιμελητῆς ἀχύρου. The space suggests that something has been lost after the verb, but it is not clear what it is. It is probably not μοι; F. Mitthof points out to me that ‘διαδιδόναι immer die Ausgabe/erogatio der Proviantmittel an die Versorgungsoffiziere bzw. Soldaten bezeichnet, nicht die Weitergabe von Proviant von einer liturgischen Zivil-Behörde an die andere’. στρατιώταις or ἵππεῦσι would have stood at the start of l. 6, followed by ἐρχομένοις (cf. O.Claud. II 354.3 [late 2nd c.]) or a compound (e.g. ἀν-; [ἵππεῦσιν ἀν]ερχομένοις would just about match the length of [καὶ διαδότῃς] in l. 2). It is remarkable that the destination of the troops is not given. ἀπὸ λόγου in l. 6 may refer to the account from which the payment came rather than the reason of their movement.

5 ἐ]γ τῇ Θάλλου. αἰὺτῇ does not seem to be a possible reading. Thallou (TM Geo 4386), probably modern Talla, was a village in the northern part of the Hermopolite nome, initially part of the Patemites Kato toparchy and later of the 12th pagus. It is associated with requisitions of chaff in P.Aktenbuch 20.3, 28.14 and 17 (Herm.; c. 359).

2. Declaration for the Delivery of Military Clothing

This fragment was mentioned and partly transcribed in P.Harr. III 265.4 n. It preserves a part of a declaration for the delivery of 4,779 ‘pairs’ of men’s tunics to two *anabolicarii* at Alexandria. A breakdown of the collection by indiction year follows, with the 11th indiction connected with over 1,100 pairs. The large number of cloaks delivered may be indicative of a contribution from a wider regional area.¹

¹ The only other substantial number from this period comes from P.Bodl. 16 (342), in which the Arsinoite *curator civitatis* reimburses the manufacturers of 1,500 linen cloaks (the reading of the figure is after F. Mitthof, *Gnomon* 75 [2003] 423 n. 1). See in general K. Drosch-Krüpe, *Purchase Orders of Military Garments from Papyri of Roman Egypt*, in: M. L. Nosch (ed.), *Wearing the Cloak. Dressing the Soldier in Roman Times*, Oxford 2011, 13–18.

The *anabolicarii* dealt with the *anabolicum*, a tax for linen collected in kind or in money, whose primary beneficiary is believed to have been the army.² Two *anabolicarii*, one of them called Nemesion, as in the present document, are mentioned in P.Harr. III 265, probably from Oxyrhynchus, dated 1 March 324. If this is the same Nemesion, then the 11th indiction here may correspond to 322/323, although there is a potential palaeographical objection to this dating (see 6 n.), and the text could be later. Nevertheless, if the two documents are contemporary, the evidence for *anabolicarii* in Egypt is confined to a very narrow time span. That was a period of turmoil in the Empire, and the *anabolicarii* may have been an extraordinary appointment. The cloaks sent to Alexandria would have been destined for Licinius' troops, who were soon to march to the Balkans for the final confrontation with the army of Constantine.

P.Lond. inv. 2639e
Provenance unknown

8.1 cm (w) × 5.9 cm (h)

322/323(?)
Plate 7 Fig. 2

Broken above and below. Written along the fibres. Back blank.

— — — — —
1 [c. 7]πρ[c. 10 ᾱ-]
2 [δε]λφῶν πα[ρ]εδόθ[ησαν ?]
3 ἐν τῇ λαμ(προτάτη) Ἀλεξανδρί[α]
4 Ἀθανασίῳ καὶ Νεμεσίῳ[νι]
5 ἀναβολικαρίοις
6 στιχαρ(ίων) ἀνδρίων ζυγ(αὶ) Δψοθ
7 οὔτως
8 [. . . .] ια ἰνδικ(τίωνος) ζυγ(αὶ) [/]Αρ .[
— — — — —

3 λαμ, 1. Ἀλεξανδρεία 6 στιχαρ/ 1. ἀνδρείων 6, 8 ζυγ 8 ἰνδ^κ

... brothers, 4,779 pairs of men's tunics were handed over, in the most splendid Alexandria, to Athanasios and Nemesion, *anabolicarii*, as follows: ... of the 11th indiction, 1,100+ pairs ...

3 λαμ(προτάτη). The abbreviation is unusual. The semi-circle of μ is repeated before the abbreviation stroke is attached.

4–5 Ἀθανασίῳ καὶ Νεμεσίῳ[νι] ἀναβολικαρίοις. Cf. P.Harr. III 265.4 (Oxy.?: 324) Ζωῖλος καὶ Νεμεσίων ἀναβολικάριοι, the only other reference to *anabolicarii* in the papyri; the term is known otherwise from Ulpian, fr. Vat. 137. In my comment on this

² On this impost, see J. Sheridan, *The Anabolikon*, ZPE 124 (1999) 211–217, and I. Soto Marín, *The Anabolikon Tax and the Study of the Linen Industry in Roman Egypt*, in: J. Valk, I. Soto Marín (eds.), *Ancient Taxation. The Mechanics of Extraction in Comparative Perspective*, New York 2021, 343–367 (esp. 352–360).

passage, I wrote that the presence of these officials in Alexandria implies competence at a provincial level.

6 στιχαρ(ίον) ἀνδρίων. Cf. below, 3.3. On στιχάρια, see P.Col. IX, pp. 76–77; M. Mossakowska-Gaubert, *Tunics Worn in Egypt in Roman and Byzantine Times: The Greek Vocabulary*, in: S. Gaspa, C. Michel, M.-L. Nosch (eds.), *Textile Terminologies from the Orient to the Mediterranean and Europe, 1000 BC to 1000 AD*, Lincoln 2017, 332–334; cf. M. Mossakowska-Gaubert, *Le vêtement monastique en Égypte (IV^e–VIII^e siècle)*, Paris 2023, 73–78. Men's tunics are also mentioned in P.Princ. II 82.40 (Lycop.; 481), SB XXX 17711.21 (Antaeop.?: 534), and P.Oxy. XVI 2058.20 (Oxy.; 6th c.). The word used in those texts is ἀνδρικόν, which replaced ἀνδρεῖον in late antiquity; cf. Z. M. Packman, *Masculine and Feminine: Use of the Adjectives in the Documentary Papyri*, BASP 25 (1988) 137–148 (esp. 140–142).

στιχαρ(ίον) ... ζυγ(αί). Cf. P.Dubl. 20.10 (Panop.; 329) στιχαρίου δὲ λίνου ζυγῆς μιᾶς. Textiles are often indicated as pairs; see F. Morelli, *Una κλήρωσις in meno e nessun prezzo in P. Wash. Univ. I 58*, ZPE 138 (2002) 158. F. Mitthof suggests to me that the concept of 'pairs of tunics' may reflect the fact that they were made of two rectangular pieces of fabric sewn together; on the two parts of the tunic, cf. Varro, *De ling.* 9.79, and see in general Mossakowska-Gaubert 2017, 321f.

Δψοθ. Here and presumably in l. 8 (the papyrus is damaged at the important point), the figures for the thousands are represented by a low slanting stroke and not by a superimposed left-facing curl. This way of writing the thousands became common from the 350s onwards and would be unusual in the 320s; see H. J. M. Milne and T. C. Skeat, *Scribes and Correctors of the Codex Sinaiticus*, London 1938, 62–63. The earliest securely dated examples in their list are P.Lond. III 1259 (Hermop.?: c. 330) and P.Lips. I 97.i.10 (Hermonth.; 338). I have not made a systematic search, but I note that slanting strokes signal the thousands also in a much earlier document, P.Ryl. IV 616, written in Lower Egypt after 312 but before c. 317–323 (BL XI 190).

3. Account of Payments for the *Vestis Militaris*

The papyrus was described in P.Lond. V, p. 267, as follows:

‘1834. Inv. No. 1769B verso. Verso of 1831, q. v. 4th cent. In a small hasty cursive hand, across the fibres. Probably complete. Short account headed ὑ(πὲρ) τῆς Μεγάλης (a personal name? cf. Μέγας, 1679). The first portion consists of three payments of 200, 170, and 166 myriads of denarii (✱ ρ) respectively, with the total; the second, also of three entries, which is preceded by οὕτως, is headed δεδόκασι ἐντάγιον. 10 lines.’

No information was provided about the entries in the account. Study of the papyrus has shown that they refer to the standard components of the *vestis militaris*, ‘military uniform’, an impost on landholdings,³ and there are some points of interest. I present an edition with translation and notes, followed by discussion.

³ For bibliography on this tax, see F. Mitthof, CPR XXIII 27.5 n.; cf. J.-M. Carrié, *L’armée romaine tardive dans quelques travaux récents*. 3^e partie. *Fournitures militaires, recrutement et archéologie des fortifications*, AntTard 10 (2002) 430–433 (review of P.Col. IX).

The account was written on the back of a ‘letter or (more probably) petition’. Neither text offers any indication of its origin. Most of the fourth-century papyri acquired by the British Museum in 1907 are Hermopolite.

P.Lond. inv. 1769b
Provenance unknown

10.8 cm (w) × 10.5 cm (h)

Fourth century
Plate 8 Fig. 3

- 1 ὕ(πὲρ) τῆς μεγάλης
- 2 ὕ(πὲρ) ἀναλ(ώματος) χλ(αμύδος) α ιεῖ ἱγδικ(τίωνος) (δηναρίων) (μυριάδες) σ
- 3 ἀναλ(ώματος) στιχ(αρίων) β (δηναρίων) (μυριάδες) ρο
- 4 τι(μῆς) χλ(αμύδος) ιβ' (δηναρίων) (μυριάδες) ρξζ
- 5 (γίνονται) (δηναρίων) (μυριάδες) φλς
- 6 οὕτως
- 7 δεδώκασι ἐντάγιον
- 8 χλ(αμύς) α η'
- 9 παλ(λίου) ἡμη
- 10 στιχ(άριον) α κδμη

1–2 υ' 2–3 ανα^λ 2, 8 χλ 2 ιγδικ^ς 2–5 *π 3, 10 στιχ^λ 4 τ^λ χλ·ιω' 5 / 9 παλ

For the great —.

For the expense of 1 military cloak of the 15th indiction, 200 myriads of denarii.

For the expense of 2 tunics, 170 myriads of denarii.

For the price of 1/12 of a military cloak, 166 myriads of denarii.

Total 536 myriads of denarii.

As follows:

They have given a receipt.

1 1/8 military cloak.

1/8 1/48 of a cloak.

1 1/24 1/48 tunic.

1 τῆς μεγάλης. Bell thought that this might be a personal name, but the article suggests otherwise. It could be a nickname, given to someone known as ‘the big one’; cf. P.Oxy. XIV 1775.13f. (Oxy.; 4th c.) λαβῖν | παρὰ τῆς Μεγάλης τὸ στιχάριον; also P.Hamb. III 215. (?; 4th c.) ὑπὲρ λόγου τῆς μεγάλης Κύρας. Another possibility is that it could be a shortened reference to Hermopolis; cf. W.Christ. 187.13–15 (Antin.; 375) τὰ λογισθέντα ὑπὲρ [τ]ῆς με[γά]λης Ἑρμοῦ πόλεως, for a fine credited to the account of Hermopolis. One might also think of the μεγάλη χειρογραφία, the ‘master copy’ of the central tax register, first attested in Hermopolis in the fifth century (a suggestion by B. Palme).

2 ὕ(πὲρ) ἀναλ(ώματος). Also at 2. Cf. P.Oxy. LIV 3758.34f. (325) ἡνέχθη στιχ(άρια) ρν ἐκάστου στιχ(αρίου) (δηναρίων) (μυριάδων) ς' | καὶ ὑπὲρ ἀναλωμάτων (δηνάρια) Ἐ.

χλ(αμύδος). Cf. 8. This was a particular piece of military clothing (*paludamentum*). See P.Col. IX, p. 80; M. Müller in: M. Müller, M.-L. Babib, J. Riecke (eds.), *Das Thema Kleidung bei Isidor von Sevilla und im Summarium Heinrici 1*, Berlin 2013, 258f. (cf. 236–239).

3 στιχ(αρίων). Cf. 10 and above, 2.6 n.

7 δεδώκασι ἐντάγιον. This was probably a receipt issued to the payer for the items listed in ll. 8–10; cf. e.g. the receipts P.Stras. VIII 737–738 (Herm.; c. 380/381). The ἐντάγια issued for payments related to the *vestis militaris* in P.Lips. I 58–60 (371) come to mind, but these belong to a higher level of tax collection.

8–10 The three items listed in this part are also mentioned together in P.Oxy. XVI 1905.3–6 and LXII 4348.8f., which add linen tunics, and in SB XXX 17430 (see below).

9 παλ(λίου). See P.Col. IX, pp. 78–80; Müller, *Das Thema Kleidung* 233–236; Mossakowska-Gaubert, *Le vêtement monastique* 66–68.

The first two entries (ll. 2–4) refer to expenses, presumably related to supplies for the *vestis militaris*, such as transportation costs. The third entry (l. 4) records an adaerated payment for $\frac{1}{12}$ *chlamys*, 166 myriads of denarii, which would give a unit price of 1,992 myriads. This price suggests a date not earlier than the middle of the fourth century.⁴ Indiction 15 (l. 2) would correspond to 356/357, 371/372, etc. Prices for this military cloak are attested in only one other text from after the 320s, P.Ross. Georg. V 61 (Heracl.; late 4th c.).⁵

A second list is headed by a note about the issue of a receipt (l. 7), and is followed by fractional quantities of the three standard components of the *vestis militaris* (ll. 8–10).⁶ Only three other papyri, all of them Oxyrhynchite, record comparable data: SB XVI 12644.5–9 (after 353/354), an account mentioning a number of aruras and fractional garments, which help to determine the rate of assessment;⁷ P.Oxy. XVI 1905.3–6

⁴ I owe this observation to Federico Morelli, who writes (e-mail of 9.xi.2023): “Un prezzo intorno alle 2000 miriadi presuppone un rapporto oro/bronzo che porta a collocare il papiro nella seconda metà del IV secolo. Traducendo in miriadi di denari per *nomisma* i dati riportati da R. S. Bagnall, *Currency and Inflation in Fourth Century Egypt*, BASP Suppl. 5 (1985) 61–62, si osserva che fino alla metà del secolo il valore del *nomisma* rimane sotto le 200 miriadi; dopo la metà del secolo abbiamo 730, 1350, e poi quasi tutti valori sopra le 2000 miriadi. Poiché i prezzi in oro delle *chlamydes* e in generale dei mantelli non superano di regola i 2 *nomismata*, e più spesso si aggirano intorno a 1 *nomisma* (ma ci sono anche mantelli che costano molto meno), un prezzo di c. 2000 miriadi implica un valore del *nomisma* di almeno 1000 miriadi, più probabilmente intorno alle 2000 miriadi: valori attestati solo dopo il 350.”

⁵ See F. Morelli, *I prezzi dei materiali e prodotti artigianali nei documenti tardoantichi e del primo periodo arabo (IV ex. – VIII d.C.)*, Berlin, Boston 2019, 37. For prices from the earlier part of the fourth century, see Bagnall, *Currency* (n. 4) 69.

⁶ For fractions of garments, see J. A. Sheridan, *Columbia Papyri IX. The Vestis Militaris Codex*, Atlanta, GA 1998, 18, 90; in his review of this publication, F. Mitthof, *Tyche* 14 (1999) 359, argues that not all fractional garments necessarily imply an *adaeratio*.

⁷ The text refers to 19 $\frac{1}{2}$ aruras, which are subject to levies of $\frac{1}{12}$ *chlamys*, $\frac{1}{8}$ *sticharion* and $\frac{1}{100}$ *pallion*. For the commutations, see Sheridan (n. 7) 99. I have changed the third of

(371/372⁸), a tax schedule showing the number of aruras required to produce a single unit of each piece of military clothing; and SB XXX 17430,⁹ to be discussed below. The table below outlines the data from the first two texts:

text	1 <i>chlamys</i>	1 <i>sticharion</i>	1 <i>pallion</i>
SB XVI 12644	230 aruras	153 aruras	1840 aruras
P.Oxy. XVI 1905	243 aruras	175 aruras	1925 aruras

If the rate behind the figures in the London papyrus (1 $\frac{1}{8}$ *chlamys*, 1 $\frac{1}{24}$ $\frac{1}{48}$ *sticharion*, $\frac{1}{8}$ $\frac{1}{48}$ *pallion*) were similar to those mentioned above, the number of aruras taxed would be in the 200s, equivalent to the cultivated area of an estate or a small settlement. There is one notable difference, however: while the relation between the rates on the land that would yield 1 *chlamys* and 1 *pallion* is comparable to those in the two Oxyrhynchite texts, the rate for 1 *sticharion* is not; could this have been due to a different kind of manufacture or quality? See the following table:

text	<i>chlamys/sticharion</i>	<i>chlamys/pallion</i>	<i>sticharion/pallion</i>
SB XVI 12644	0.6652	8	12.0261
P.Oxy. XVI 1905	0.7201	7.9218	11
P.Lond. V 1834	1.0588	7.7143	7.2857

Two further observations are in order. First, the ratio between *chlamys* and *pallion* appears to be almost standardized at a rate of 8-to-1. Second, the ratio between *chlamys* and *sticharion* has increased to nearly 1-to-1. This is close to SB XXX 17430, assigned to 360–380, in which the number of *chlamydes* and *sticharia* levied is the same. The ratio of these garments to *pallia* is reduced by half when compared to P.Lond. V 1834, with 1 *chlamys/sticharion* usually corresponding to 3–4 *pallia*:¹⁰

Sheridan's figures, substituting 1840 aruras for 1726, on the assumption that $\frac{1}{90}$ is a simplified writing of $\frac{1}{96}$; cf. J. Sheridan Moss, *Two Michigan Papyri*, BASP 46 (2009) 54.

⁸ For the date of this text, see most recently R. S. Bagnall, C. Caputo, *The Great Oasis in the Late Fourth Century*, GRBS 61 (2021) 536. Cf. R. S. Bagnall, *P. Oxy. XVI 1905, SB V 7756 and Fourth-century Taxation*, ZPE 37 (1980) 187 (cf. BL VIII 251).

⁹ P.Mich. inv. 4004, first published in Sheridan Moss (n. 7) 37–54 (Text 1, Account of the *vestis militaris*).

¹⁰ The table only includes those entries with figures for all three garments. There is a more comprehensive table in Sheridan Moss (n. 7) 41, but it is affected by typos and other problems (see the next three footnotes).

column & line number	<i>chlamydes</i>	<i>sticharia</i>	<i>pallia</i>	ratio
ii 3 ¹¹	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{48}$	4
ii 7 ¹²	3	3	$\frac{1}{2} \frac{1}{3} \frac{1}{12}$	3.27
ii 8 ¹³	$2 \frac{3}{4} \frac{1}{12}$	$2 \frac{3}{4}$	$\frac{2}{3} \frac{1}{8}$	3.47
v 4	$\frac{1}{3} \frac{1}{24}$	$\frac{1}{3} \frac{1}{24}$	$\frac{1}{8}$	3
v 5 & 6	$\frac{1}{24}$	$\frac{1}{24}$	$\frac{1}{96} \frac{1}{192}$	2.66
v 7	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{48}$	4
v 8	$\frac{1}{8} \frac{1}{48} \frac{1}{96}$	$\frac{1}{8} \frac{1}{48} \frac{1}{96}$	$\frac{1}{24}$	3.75
v 9	$\frac{1}{48}$	$\frac{1}{48}$	$\frac{1}{96}$	2
v 10	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{24}$	3

If a pattern were to be sought, P.Lond. V 1834 and SB XXX 17430 would suggest a higher demand for *pallia* in comparison to SB XVI 12644 and P.Oxy. XVI 1905.¹⁴ However, these four documents do not offer a coherent picture of the assessment of the *vestis militaris* when considered together, despite their proximity in terms of date and, mostly, location (the London papyrus may come from a different region and, indeed, province). Changes in the army's requirements for uniforms over the years may account for this variability,¹⁵ but the different ratios outlined in the table above relate to a single assessment and may not reflect directives from the central government.¹⁶ Some of the detail in the collection of this levy, mainly what concerned individual liability, must have depended on decisions made by local authorities.

¹¹ $\pi\alpha\lambda(\lambda\acute{\iota}\omicron\upsilon\varsigma) \mu\eta$; probably no other fraction was written, in view of v.7.

¹² The editor read $\chi\lambda(\alpha\mu\acute{\omicron}\delta\omicron\varsigma) \gamma \sigma\tau\iota\chi(\alpha\rho\acute{\iota}\omicron\upsilon\varsigma) \gamma \pi\alpha\lambda(\lambda\acute{\iota}\omicron\upsilon\varsigma) \varsigma \text{ιβ}$, but $\frac{1}{2}$ *chlamys/sticharion* and $\frac{1}{2}\frac{1}{12}+$ *pallion* make an implausible ratio. The published photograph shows that the correct reading is $\chi\lambda(\alpha\mu\acute{\omicron}\delta\omicron\varsigma) \gamma \sigma\tau\iota\chi(\acute{\alpha}\rho\iota\alpha) \gamma \pi\alpha\lambda(\lambda\acute{\iota}\omicron\upsilon\varsigma) \varsigma \gamma \text{ιβ}$ (the fractions for $\frac{1}{2}$ and $\frac{1}{3}$ are combined; the comment on the reading of γ in Sheridan Moss [n. 7] 41 rests on a misunderstanding).

¹³ In the original reading, $2 \frac{3}{4}$ *chlamydes* and $2 \frac{3}{4}$ *sticharia* contrast with $\frac{1}{48} \frac{1}{96}$ of a *pallion*, $\pi\alpha\lambda(\lambda\acute{\iota}\omicron\upsilon\varsigma) \mu\eta \overline{\phi}\overline{\varsigma}$, but the fractions should be read as $\beta\overline{\eta}$, $\frac{2}{3} \frac{1}{8}$.

¹⁴ The statement that '[t]he papyri indicate that the rate of assessment of the *vestis militaris* was standardized around the middle of the century' (Sheridan [n. 6] 99) is based solely on SB XVI 12644 and P.Oxy. XVI 1905, and uses a dating of the latter text to 356/357.

¹⁵ Papyri from the earlier part of the fourth century record rates similar to SB XXX 17430, and suggest a relative uniformity: P.Cair.Isid. 54 (Ars.; 314) mentions 22 *sticharia* and 8 *pallia* (a ratio of 2.75:1); P.Oxy. XLIV 3194 (323) 6 *sticharia* and 2 *pallia* (3:1); P.Ant. I 39 (323 or 324) 1 *chlamys* and 1 *sticharion*; SB XVI 12646 (Oxy.; 326) $\frac{1}{4} \frac{1}{24} \frac{1}{48}$ *sticharion* and $\frac{1}{12} \frac{1}{48}$ *pallion* (3:1). A case apart is P.Oxy. XII 1448 (c. 318; 'after 324' according to Sheridan [n. 6] 141, on the grounds that it refers to fractional garments), which shows such varied proportions that no rate can be inferred, although this may be due to the fact that it records arrears.

¹⁶ CTh 4.6.3 (377) refers to one set of clothing (*vestis*) to be collected from a given number of taxable land units (*iuga*), but without specifying the number and the kind of clothes in each set.

4. Account related to the *Vestis Militaris*

This small fragment records quantities of military garments; perhaps it was part of an account related to the *vestis militaris*. The hand may be assigned broadly to the fourth century. The ratio between *sticharion* and *pallion* is 4.21-to-1, comparable to the higher end of the ratios recorded in SB XXX 17430.

P.Lond. inv. 2610e

10.7 cm (w) × 5.2 cm (h)

Fourth century

Provenance unknown

Plate 8 Fig. 4

Broken above and on the right. Written along the fibres. Back blank.

— — — — —
 1 *traces of one line*
 2 υ̅ ι̅νδικ(τίωνος) στιχ(άρια) γ γ' παλλίου β̅η [

2 υ̅ γ' ι̅νδ̅ι̅ς̅ στιχ̅

10th indiction; 3 ⅓ tunics, ⅔ ⅛ of a cloak ...

2 υ̅ ι̅νδικ(τίωνος). Indiction 10 corresponds to 321/322, 336/337, 351/352, 366/367, etc.

Department of Greek and Latin
 University College London
 London WC1E 6BT, United Kingdom
 n.gonis@ucl.ac.uk

Nikolaos Gonis

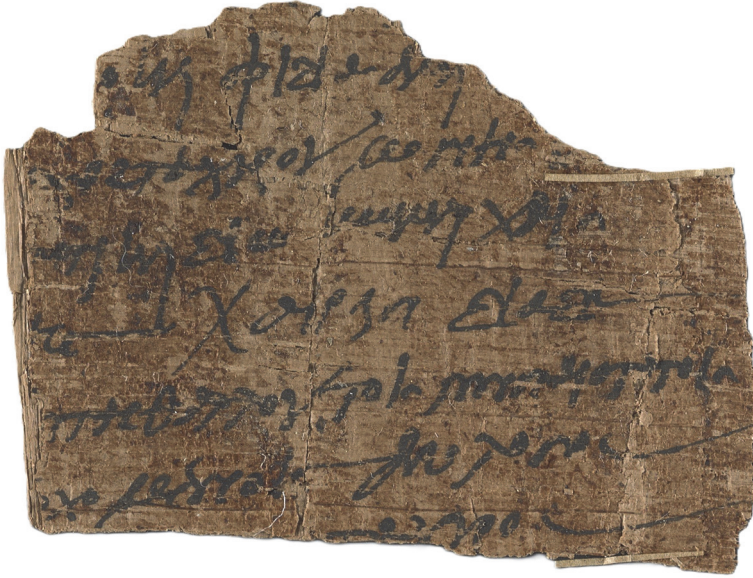


Fig. 1: P.Lond. inv. 2605b © The British Library Board
Receipt for the Supply of Hay and Chaff

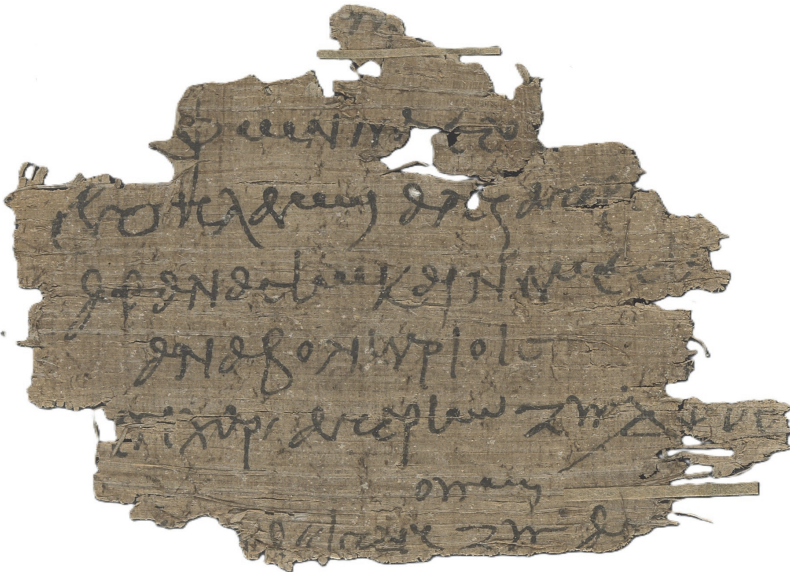


Fig. 2: P.Lond. inv. 2639e © The British Library Board
Declaration for the Delivery of Military Clothing

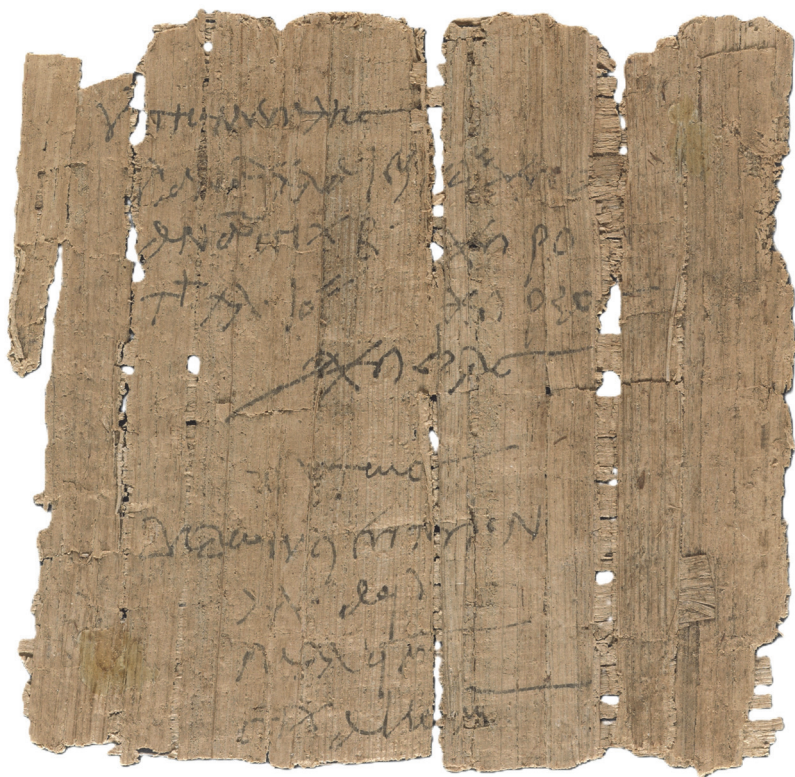


Fig. 3: P.Lond. inv. 1769b © The British Library Board
Account of Payments for the *Vestis Militaris*

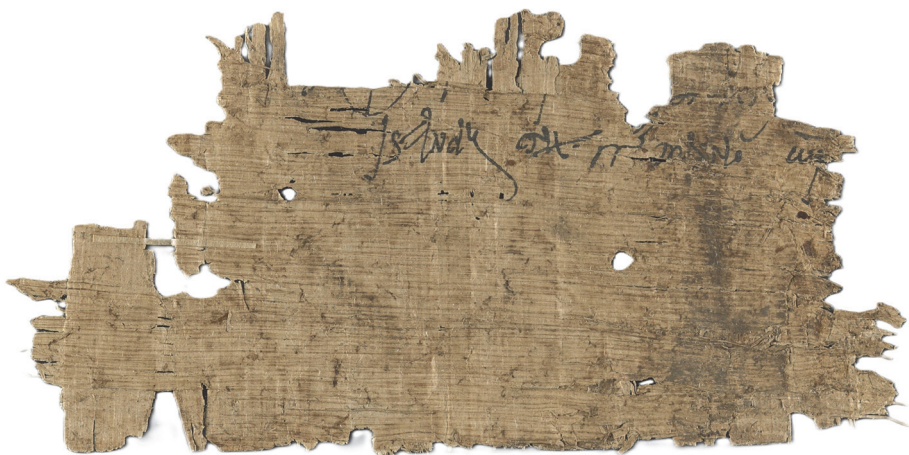


Fig. 4: P.Lond. inv. 2610e © The British Library Board
Account Related to the *Vestis Militaris*