A FEW REMARKS ON THE PLACE OF ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ IN THE RHODIAN CALENDAR*

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Abstract: *The aim of this contribution is to discuss the place of the intercalary month, ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, in the Rhodian calendar. Since the appearance of Nathan Badoud's monograph on the chronology of the Rhodian inscriptions in 2015, scholars have accepted his suggestion that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ followed immediately after ΠΑΝΑΜΟΣ. It is, however, argued in the present paper that the evidence provided by the months named on the amphora stamps and the dies identified by Gonca Cankardeş-Şenol (2015a-b, 2016, 2017) - in conjunction with a new interpretation of an inscription from the Mylonas property in Rhodes first published in 2008 – indicates that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ came after ΘΕΣΜΟΦΟΡΙΟΣ and that the latter was the first month in the Rhodian eponymic calendar, as was commonly believed before Badoud published his* magnum opus *in 2015.*

A fortnight before Alexandru Avram's untimely demise, I informed him of my identification of a Rhodian amphora stamp from Carthage naming ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ[1]. I have therefore chosen to deal with the contentious intercalary month in this tribute to his memory[2].

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[1] To be published in LUND forthcoming.

[2] IVERSEN 2021, p. 92: "Of all the months of the Rhodian calendar, or perhaps of all Greek calendars, none has given rise to more peculiar theories than the month of Πάναμος δεύτερος (= B′ for convenience's sake) at Rhodes". See also IVERSEN 2021, p. 92–94.

August Mommsen, Martin P. Nilsson, Christoph Börker and others laid the groundwork for reconstructing the sequence of the thirteen Rhodian months (in alphabetical order: ΑΓΡΙΑΝΙΟΣ, ΑΡΤΑΜΙΤΙΟΣ, ΒΑΔΡΟΜΙΟΣ, ΔΑΛΙΟΣ, ΔΙΟΣΘΥΟΣ, ΘΕΣΜΟΦΟΡΙΟΣ, ΘΕΥΔΑΙΣΙΟΣ, ΚΑΡΝΕΙΟΣ, ΠΑΝΑΜΟΣ, ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, ΠΕΔΑΓΕΙΤΝΥΟΣ, ΣΜΙΝΘΙΟΣ and ΥΑΚΙΝΘΙΟΣ)[3], and the problem has by and large been solved as far as the twelve regular months are concerned by Börker, Catherine Trümpy and Nathan Badoud[4]. In his magisterial study of the chronology of Rhodian inscriptions published in 2015, the latter opted in his for the following sequence: ΚΑΡΝΕΙΟΣ, ΔΙΟΣΘΥΟΣ, ΘΕΥΔΑΙΣΙΟΣ, ΠΕΔΑΓΕΙΤΝΥΟΣ, ΒΑΔΡΟΜΙΟΣ and ΣΜΙΝΘΙΟΣ (the winter months) followed by ΑΡΤΑΜΙΤΙΟΣ, ΑΓΡΙΑΝΙΟΣ, ΥΑΚΙΝΘΙΟΣ, ΠΑΝΑΜΟΣ, ΔΑΛΙΟΣ and ΘΕΣΜΟΦΟΡΙΟΣ (the summer months)[5].

Badoud also shed new light on ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, which - as previously recognized by Gérald Finkielsztejn - is of crucial importance for the reconstruction of the absolute chronology of the eponyms named on Rhodian amphora stamps[6]. Börker had suggested in 1978 that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ was placed between ΠΕΔΑΓΕΙΤΝΥΟΣ and ΔΙΟΣΘΥΟΣ until the second half of the 2nd century BC, when it was moved after ΘΕΣΜΟΦΟΡΙΟΣ as a result of a calendar reform[7]. Badoud rejected the theory of a calendar reform and positioned ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ immediately after ΠΑΝΑΜΟΣ, a proposal that has won general acceptance[8]. It will be argued below that the evidence of the stamps suggests another possibility.

The monthly production of Rhodian amphorae

From Period II.a onwards (ca. 240 BC) the name of a month was regularly included on the Rhodian amphora stamps[9], no doubt as an indication – in conjunction with the name of the eponym priest – of the manufacture date of the amphora[10]. Based on the premise that the rate of amphora production was slow

[3] MOMMSEN 1889; NILSSON 1909; BÖRKER 1978.

[4] NILSSON 1909, p. 121–137; SAMUEL 1972, p. 107–110; BÖRKER 1978; TRÜMPY 1997, p. 167–179.

[5] BADOUD 2015; IVERSEN 2017, p. 133 and 193–195; IVERSEN 2021, p. 77–83, supports the alternative sequence for the winter months ΘΕΥΔΑΙΣΙΟΣ, ΠΕΔΑΓΕΙΤΝΥΟΣ and ΔΙΟΣΘΥΟΣ which was suggested by BÖRKER 1978. This issue has no bearing on the subject of this paper and will not be pursued here.

[6] THOMSEN & FINKIELSZTEJN 2020, p. 255–256. See further CASTELLI 2017.

[7] BÖRKER 1978, p. 218. It is outside the scope of this contribution to discuss the question of a calendar reform here, but it may be mentioned that a comparison of the distribution of month names on stamps from Periods II to II with those from Periods IV to VII does not seem to support this hypothesis.

[8] BADOUD 2015, p. 18–19. See MUSCOLINO 2017, p. 629–631; REGER 2017, p. 557; IVERSEN 2021, p. 92–94.

[9] The month occurs far more frequently indicated on the stamp naming the Halios priest than on that naming the so-called fabricant; this could indicate that the dies for the latter might be used for more than one month. For the misleading term "fabricant", see LUND 2022 and the references there cited.

[10] MOMMSEN 1889, p. 425–437; NILSSON 1909, p. 126-133; TRÜMPY 1997, p. 168–172; CANKARDEŞ-ŞENOL 2015a, p. 19 argued that the month indicates "when the amphorae

during the rainy winter months and reached a maximum in the summer, Mommsen proposed an approximate order of the Rhodian months, and Nilsson improved his suggestions[11], but his reconstruction was based on a misconception of the seasonal rhythm of pottery production in Antiquity[12]. Börker corrected this and established the order of the twelve regular months, which was later largely confirmed by Trümpy and Badoud[13].

Nilsson, who had 3400 stamps at his disposal (**Fig. 1** left column) in 1909, noted: "il est intéressant de voir comment avec d'insignifiantes variations les mêmes rapports se reproduisent dans les différentes collections [of amphora stamps], même les plus petites"[14]. This was still the case in 1968, when Börker expanded the sample with 3193 new occurrences (**Fig 1** middle column)[15], and continues to hold true today, when 2029 further stamps have been added (**Fig. 1** right column)[16], bringing the total up to 8622.

A graph of the combined numbers (**Fig. 2**) shows a progression in the number of stamps (and hence amphorae produced), from a low point in the three winter months (ΔΙΟΣΘΥΟΣ: 146; ΘΕΥΔΑΙΣΙΟΣ: 79; ΠΕΔΑΓΕΙΤΝΥΟΣ: 148), followed by a gradual build-up in the early spring (ΒΑΔΡΟΜΙΟΣ: 337; ΣΜΙΝΘΙΟΣ: 724), culminating in the summer (ΑΡΤΑΜΙΤΙΟΣ: 1076; ΑΓΡΙΑΝΙΟΣ: 1253; ΥΑΚΙΝΘΙΟΣ: 1184; ΠΑΝΑΜΟΣ: 1393), and followed by a decline in the late autumn and early winter (ΔΑΛΙΟΣ: 1145; ΘΕΣΜΟΦΟΡΙΟΣ: 677; ΚΑΡΝΕΙΟΣ: 326). The intercalary month, ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, occurs 131 times.

It is interesting to compare this pattern with a graph of the frequency of the names of months occurring on the dies identified by Gonca Cankardeş-Şenol, whose publication of dies associated with Rhodian eponyms is being constantly updated (and expanded with stamps naming the "fabricants") on the website of *Le Centre Alexandrin d'Étude des Amphores*[17]. A graph of the occurrences of months on 7174 dies in this database (**Fig. 3**) is quite similar to the one derived from the actual stamps (**Fig. 2**). It may be noted in passing that the eponym ΠΑΥΣΑΝΙΑΣ III is not only the priest with the highest number of dies as well as the best represented individual on the stamps found throughout the Mediterranean and also one of two priests with the highest number of fabricant associations[18]. This confirms that there is a correlation between the two sets of data.

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were filled with wine, in other words, it was the very month when the wine was poured out of the pithos". However, this is extremely unlikely since it would have been practically impossible to coordinate the making and the filling of the amphora.

[11] MOMMSEN 1889, p. 437; NILSSON 1909, p. 126. Cf. IVERSEN 2021, p. 73.

[12] Cf. also IVERSEN 2021; NILSSON 1909, p. 126. See TRÜMPY 1997, p. 169–170.

[13] BÖRKER 1978, p. 218. For the schemes suggested by these and other authorities, see IVERSEN 2021, p. 77 Table IV.

[14] NILSSON 1909, p. 91, n. 1.

[15] BÖRKER 1978, p. 195.

[16] SZTETYŁŁO 1976; SZTETYŁŁO 1991; BÖRKER & BUROW 1998; JÖHRENS 1999; PALACZYK & SCHÖNENBERGER 2001; CONOVICI & GARLAN 2004; NICOLAOU 2005; JÖHRENS 2009; JÖHRENS 2010; SZTETYŁŁO 2010; JÖHRENS 2013; 2014; LODI 2014; SCHMALTZ 2016; DÜNDAR 2017; JOHNSTON 2020.

[17] CANKARDEŞ-ŞENOL 2015a-b, 2016-2017; http://amphoralex.org/presentation_e. php, visited on the 24th of July 2022.

[18] LUND 2011, p. 285 fig. 13.2; LUND 2022.

Did ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ follow the month ΠΑΝΑΜΟΣ?

Before addressing the central issue of this contribution it is necessary to calibrate the figure for ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ to make it comparable with those of the other months. This may be done by dividing the number with three and multiplying it by eight, since the intercalary month is believed to have occurred three times in an eight-yearly cycle in the Rhodian calendar[19].

Having performed this adjustment, (**Fig. 4**)[20], the figure for ΠΑΝΑΜΟΣ (1107 dies and 1448 stamps) is still considerably higher than those of ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ (264 matrices and 360 stamps). Nilsson explained the discrepancy partly by supposing that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ fell later in the year than ΠΑΝΑΜΟΣ, when the production of amphorae had declined, and partly because "on a souvent oublié de marquer le mois intercalaire, si bien que sur un grand nombre de timbres où ne figure que Πάνμος, δεύτερος a été en réalité oublié"[21]. Börker objected to this argument[22], but Badoud reiterated it, adding that "inscrit au bas de la matrice, l'ordinal ne fût pas imprimé sur l'anse de l'amphore", in particular after the middle of the 2nd century BC, "lorsque la hauteur des matrices se mit à augmenter d'autant que la largeur des anses diminuait"[23]. If this were true, one would expect the intercalary month to occur more frequently on the dies (**Fig. 4**, right column) than among the stamped handles (**Fig. 4**, left column), but the reverse is the case: ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ occurs slightly less often on the dies (3,6%) than on the stamps (3,9%), though the difference is so slight that it would be hazardous to make much of it.

To support the hypothesis that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ followed immediately after ΠΑΝΑΜΟΣ, Badoud suggested that in "80% des cas, la matrice de Πάναμος, aurait continué à être utilisée durant le mois intercalaire, tandis que dans … 20% des cas, l'ordinal n'aurait pas été ajouté ou imprimé par les Anciens, vu ou reconnu par les Modernes"[24]. But this argument is flawed, because while it is theoretically possible that 80% of the ΠΑΝΑΜΟΣ dies could have been reused in the month ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ **(Fig. 3**), the evidence provided by the actual stamps (**Figs. 1–2**) rules this out, because the amphorae from which they originate must *either* be attributed to the month ΠΑΝΑΜΟΣ or ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ. They cannot at the same time belong to both. And if we were to shift up to 80% of the stamps from ΠΑΝΑΜΟΣ to the ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ column, the figure for ΠΑΝΑΜΟΣ would become unaccountably low.

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[19] BADOUD 2015, p. 138–140. Cf. however, IVERSEN 2021, p. 49.

[20] Cf. BÖRKER 1978, p. 214 where the ratio is supposed to be seven to 19; THOMSEN & FINKIELSZTEJN 2020, p. 255.

[21] NILSSON 1909, p. 130.

[22] BÖRKER 1978, p. 214, n. 65. IVERSEN 2021, p. 73, n. 191 observes that while "this is a clear discrepancy, *most* of it can *probably* [my italics] be explained, as Badoud notes, by positing that several of the partially preserved Panamos A examples are actually Panamos B examples, plus probably sometimes the workers did not bother to make a new stamp for Panamos B, or they did not wait for the new stamp to be made and kept stamping with the old Panamos A stamp until the new stamp arrived.

[23] BADOUD 2015, p. 31. See also IVERSEN 2021, p. 73, n. 192.

[24] BADOUD 2015, p. 32.

It is, moreover, very difficult to credit that the Rhodian state would have allowed dies carved for ΠΑΝΑΜΟΣ to be reused in ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, since the bureaucratic and laborious procedure of stamping the year and month on each amphora was surely rigorously imposed in each and every month if the stamping served a fiscal purpose, as most scholars now seem to think[25]. The theory that the dies were normally destroyed after use also speaks against reuse[26], which might incidentally explain why no ΠΑΝΑΜΟΣ stamps were - as far as is known - reworked into ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ as could easily have been done simply by adding the letter *beta* after the word ΠΑΝΑΜΟΣ[27].

Evidence from inscriptions

Inscriptions constitute another crucial source of information about the place of ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ in the Rhodian calendar. Until recently, the most important testimony was a fragmentary inscription from the Flavian period, the so-called ἡμερολόγιον, which lists sacrifices by individual citizens by the month and day[28]. The names of five months are preserved in the main body of the inscription, and there is a reference to the month ΑΓΡΙΑΝΙΟΣ on a non-joining fragment. It emerges that the month ΑΡΤΑΜΙΤΙΟΣ succeeded ΣΜΙΝΘΙΟΣ. After a gap of one month came ΠΑΝΑΜΟΣ, which was followed by ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ after a further gap of two months. The inscription situates the latter after ΘΕΣΜΟΦΟΡΙΟΣ, which - as previously mentioned – was where Börker placed it (after the second half of the 2nd century BC)[29]. Even Badoud found that the idea of ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ as "le treizième mois de l'année civile, n'est a priori pas dénuée de vraisemblance : l'ἡμερολόγιον ayant une vocation chronologique, on s'attendrait à ce qu'il respectât strictement l'ordre de succession des moins"[30]. But an inscription found in the city of Rhodes in the Mylonas property and published in 2008 by Gerhard Zimmer and Καλλιόπη Μπαϊράμη made him think otherwise.

The "new" inscription is written on the central block of an honorary exedra for bronze statues. It concerns a citizen, who was crowned twice by the *boule* within the summer term, which normally consisted of six months. Its first part is not preserved, but the convincing restoration by Zimmer and Μπαϊράμη implies that in the particular year in question there were seven summer months, of which

[25] GARLAN 2000, p. 167–171; PALACZYK 2016, p. 127; PALACZYK 2017, p. 236–237; BADOUD 2019a-b; BÖRKER 2019.

[26] See CANKARDEŞ-ŞENOL 2015a, p. 19 and LUND 2019. There is a striking contrast between the lack of finds of Rhodian stamps and the stamps associated with the kiln sites in Tunisia, where African Red Slip Ware was produced; cf. for instance BUSSIÈRE 2008 and MACKESEN 2019, 49 fig. 17.

[27] As far as may be judged from a comparison of the ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ stamps listed by BADOUD (2015, p. 144–152) with the ΠΑΝΑΜΟΣ stamps in the database associated with the same priest: http://amphoralex.org/timbres/eponymes/accueil_epon/requete.php. In a few cases it would require better images to make sure.

[28] IG XII,4; BÖRKER 1978, p. 198; BADOUD 2015, p. 13–15, 361–365, no. 18; IVERSEN 2021, p. 71-73.

[29] BÖRKER 1978, p. 218.

[30] BADOUD 2015, p. 19.

five fell under the eponym Nikasikrates, and two under Aristagoras[31], a clear indication that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ was counted among the summer months[32].

Badoud takes this to imply that the intercalary month followed directly after ΠΑΝΑΜΟΣ, due to his conviction that the eponymic year began in ΔΑΛΙΟΣ[33], for which his main argument is a fragmentary inscription from Kameiros prescribing the order of sacrifices to Halios: "On the first of Dalios, to Halios, an ox, white or red; on the 20th, an ox, white or red, the damiourgos sacrifices. Before the 20th of Panamos, three goats, the hieropoioi sacrifice and [—]" (in Stephanie Paul's translation)[34]. Try as I might, I fail to see how this can be taken as firm evidence that the eponymic year started in ΔΑΛΙΟΣ, in particular because - as Iversen reminded us - "numerous inscriptions throughout the Greek world indicate that the same deity could receive sacrifices in different months throughout the year"[35]. The same scholar stated in 2017 that "the new priest of Helios probably came into office on *or just before* 1 Dalios" [my italics][36].

An alternative solution?

The issue under discussion has all the hallmarks of the never-ending debate concerning the relationship (and priority) of archaeological and textual evidence[37]. Are we to put our trust in the amphora stamps or the inscriptions, as interpreted by Badoud? Or is it possible after all to reconcile the two approaches, cancelling out the dilemma? Well, perhaps.

It will be remembered that the graph indicating the number of months represented on actual amphora stamps and dies (**Fig. 4**) shows that the calibrated figure for ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ is nearly identical with those of ΚΑΡΝΕΙΟΣ and ΒΑΔΡΟΜΙΟΣ. Theoretically, then, we might be looking at four different sequences: 1) ΘΕΣΜΟΦΟΡΙΟΣ - ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ - ΚΑΡΝΕΙΟΣ, 2) ΚΑΡΝΕΙΟΣ - ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ – ΔΙΟΣΘΥΟΣ, 3) ΠΕΔΑΓΕΙΤΝΥΟΣ - ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ – ΒΑΔΡΟΜΙΟΣ or 4) ΒΑΔΡΟΜΙΟΣ - ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ - ΣΜΙΝΘΙΟΣ. However, it is fortunately not necessary to agonize over these possibilities, since we know that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ was counted among the "six" summer months. This is only the case with the first option, which

[31] SEG 58, p. 253–254, no. 815; ZIMMER & ΜΠΑΪΡΑΜΗ 2008, p. 154–163, no. E2611; BADOUD 2015, p. 409–410, no. 37; BOYXEN 2018, p. 50 and 239; IVERSEN 2021, p. 92–94.

[32] BADOUD 2015, p. 409–410, no. 37. ZIMMER & ΜΠΑΪΡΑΜΗ 2008, p. 163, had suggested a date in the second half of the 1st century BC.

[33] BADOUD 2015, p. 16–19. See BOYXEN 2015, p. 429; CASTELLI 2017, p. 9 and REGER 2017, p. 557.

[34] PAUL 2015, 2§6 notes that BADOUD's hypothesis "would also entail that the city of Cameiros only performed three annual sacrifices to the patron deity of the island, since Panamos would be the last month of the eponymous year".

[35] IVERSEN 2017, p. 197, n. 239. The same scholar (2021, p. 75–76) rejects a similar argument by Badoud concerning the date of the Halieia.

[36] IVERSEN 2017, p. 197, n. 239, and IVERSEN 2021, p. 72, n. 185 where it is somewhat ambiguously stated that: "we now know the priest of Helios took up his post *four* or *five* months into the Summer Semester at the beginning of Dalios" [my italics].

[37] Cf. HALL 2014.

must therefore be correct. It is also the one indicated on the ἡμερολόγιον. Moreover, the notion that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ succeeded ΘΕΣΜΟΦΟΡΙΟΣ also accords with the inscription from the Mylonas property, if it is assumed that the eponymic year began with ΘΕΣΜΟΦΟΡΙΟΣ, as originally suggested by Hiller von Gaertingen and accepted by most scholars before 2015[38], when Badoud put his authority behind the theory that it began with ΔΑΛΙΟΣ[39]. If the eponymic year actually began in ΘΕΣΜΟΦΟΡΙΟΣ, then the five summer months, which - according to the inscription from the Mylonas property - fell under the eponym Nikasikrates were ΑΡΤΑΜΙΤΙΟΣ, ΑΓΡΙΑΝΙΟΣ, ΥΑΚΙΝΘΙΟΣ, ΠΑΝΑΜΟΣ, ΔΑΛΙΟΣ, and the two under Aristagoras: ΘΕΣΜΟΦΟΡΙΟΣ and ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ.

The suggestion that ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ followed ΘΕΣΜΟΦΟΡΙΟΣ may not be acceptable to everyone, but "when you have eliminated all which is impossible, then whatever remains, however improbable, must be the truth"[40]. And in the pursuit of new insights, we should not refrain from putting forward fresh ideas even if they run counter to the current consensus. Which was precisely what Alexandru Avram did in his final lecture at the PATABS IV conference[41].

BIBLIOGRAPHY

BADOUD 2015 – N. Badoud, *Le temps de Rhodes. Une chronologie des inscriptions de la cité fondée sur l'étude de ses institutions*, Vestigia 63, München, 2015.

BADOUD 2019a – N. Badoud, *Ce qu'étaient les timbres amphoriques grecs. Genre et statut dans l'industrie céramique rhodienne*, in: N. Badoud & A. Marangou (éds.), *Analyse et exploitation des timbres amphoriques grecs*, Rennes, 2019, p. 195–210.

BADOUD 2019b – N. Badoud, *Le déchiffrement des timbres amphoriques grecs*, CRAI 2019, p. 375–401.

BICKERMAN 1968 – E.J. Bickerman, *Chronology of the Ancient World,* London, 1968.

BÖRKER 1978 – C. Börker, *Der rhodische Kalender*, ZPE 31 (1978), p. 193–194.

BÖRKER 2019 – C. Börker, *Der ΕΡΓΑΣΤΗΡΙΑΡΧΗΣ und die rhodischen Amphorenstempel*, ZPE 209 (2019), p. 78–90.

BÖRKER & BUROW 1998 – C. Börker, J. Burow, *Die hellenistischen Amphorenstempel aus Pergamon*, PF 11, Berlin – New York, 1998.

BOYXEN 2015 – B. Boyxen, *Review* of BADOUD 2015, Phoenix 69 (2015), 3/4, p. 428–430.

[38] IG XII, 1, 4, p. 9; BICKERMAN 1968, p. 20–21; SAMUEL 1972, p. 109; TRÜMPY 1997, p. 171–172. BÖRKER 1978, p. 215, argued that the term of the Halios priest began in ΠΑΝΑΜΟΣ until sometime in the second half of the 2nd century BC, when it was changed to ΚΑΡΝΕΙΟΣ.

[39] BADOUD 2015, p. 21–22.

[40] Sir Arthur Conan Doyle, The Casebook of Sherlock Holmes.

[41] https://www.youtube.com/watch?v=2l1clctGl2M, visited on the 2nd of August 2022.

BOYXEN 2018 – B. Boyxen, *Fremde in der hellenistischen Polis Rhodos zwischen Nähe und Distanz*, Klio – Beiträge zur Alten Geschichte. Beihefte. Neue Folge 29, Berlin – Boston, 2018.

BUSSIÈRE 2008 – J. Bussière, *Nouveaux outils de potiers africains d'époque romaine (IVe - VIe s.)*, Facta: a journal of Roman material culture studies 2 (2008), p. 105.

CANKARDEŞ-ŞENOL 2015a – G. Cankardeş-Şenol, *Lexicon of Eponym Dies on Rhodian Amphora Stamps Vol. 1, Eponyms A*, Ét.Alex. 33, Amphor Alex 3, Alexandria, 2015.

CANKARDEŞ-ŞENOL 2015b – G. Cankardeş-Şenol, *Lexicon of Eponym Dies on Rhodian Amphora Stamps Vol. 2, Eponyms B to K*, Ét.Alex. 35, Amphor Alex 4, Alexandria, 2015.

CANKARDEŞ-ŞENOL 2016 – G. Cankardeş-Şenol, *Lexicon of Eponym Dies on Rhodian Amphora Stamps Vol.* 3, *Eponyms Λ to Σ*, Ét.Alex. 37, Amphor Alex 5, Alexandria, 2016.

CANKARDEŞ-ŞENOL 2017 – G. Cankardeş-Şenol, *Lexicon of Eponym Dies on Rhodian Amphora Stamps Vol. 4, Eponyms T to X*, Ét.Alex. 39, Amphor Alex 6, Alexandria, 2017.

CASTELLI 2017 – T. Castelli, *Chronologie des éponymes rhodiens de la fin du IIe s. et du premier tiers du IIe s. Nouvelles hypothèses*, REA 119 (2017), p. 3–24.

CONOVICI & GARLAN 2004 – N. Conovici, Y. Garlan, *Les timbres amphoriques étrangers trouvés à Sinope (I)*, Anatolia Antiqua 12 (2004), p. 105–122.

DÜNDAR 2017 – E. Dündar, *Patara IV.3: Transport Jars and Stamped Amphoras from Patara, 7th to 1st Centuries BC: The Maritime Trade of a Harbor City in Lycia*, Istanbul, 2017.

GARLAN 2000 – Y. Garlan, *Amphores et timbres amphoriques grecs. Entre érudition et idéologie*, Paris, 2000.

HALL 2014 – J.M. Hall, *Artifact & Artifice. Classical Archaeology and the Ancient Historian*, Chicago - London, 2014.

IVERSEN 2017 – P. Iversen, *The Calendar on the Antikythera Mechanism and the Corinthian Family of Calendars*, Hesperia 86 (2017), p. 120–203.

IVERSEN 2021 – P.A. Iversen, *Lunisolar Calendars, The Antikythera Mechanism, the Halieia of Rhodes and Some Thoughts on the Calendars of Rhodes and Kos*, Eulimene 19–20 (2018–2019) [2021], p. 39–122.

JÖHRENS 1999 – G. Jöhrens, *Amphorenstempel im Nationalmuseum von Athen zu den von H. G. Lolling aufgenommenen "unedierten Henkelinschriften" mit einem Anhang: Die Amphorenstempel in der Sammlung der Abteilung Athen des Deutschen Archäologischen Instituts*, Mainz, 1999.

JÖHRENS 2009 – G. Jöhrens, *Funde aus Milet. XXVII. Amphorenstempel aus den Grabungen in Milet 1899-2007*, AA (2009), 1, p. 207–235.

JÖHRENS 2010 – G. Jöhrens, *Amphorenstempel hellenistischer Zeit aus Tanais*, Eurasia Antiqua 7 (2001), p. 367–479.

JÖHRENS 2013 – G. Jöhrens, *Amphorenstempel aus Gadara*, in: A. Hoffmann & C. Bührig (eds.), Forschungen in Gadara/Umm Qays von 1987 bis 2000, Rahden, 2013, p. 53–101.

JÖHRENS 2014 – G. Jöhrens, *Funde aus Milet, 29. Amphorenstempel aus den Grabungen in Milet 1899 - 2007, 2. Teil*, AA (2014), 2, p. 177–219.

JOHNSTON 2020 – A. Johnston, *Henry Hunter Calvert's Collection of Amphora Stamps and that of Sidney Smith Saunders*, Oxford, 2020.

LODI 2014 – G. Lodi, *Bolli anforici da Iasos (scavi 1961-2010). Uno studio sull'instrumentum inscriptum,* Rome, 2014.

LUND 2011 – J. Lund, *Rhodian Transport Amphorae as a Source for Economic Ebbs and Flows in the Eastern Mediterranean in the Second Century BC*, in: Z.H. Archibald, J.K. Davies and V. Gabrielsen (eds.), *The Economies of Hellenistic Societies, Third to First Centuries BC*. Oxford, 2011, p. 280–295.

LUND 2019 – J. Lund, Review of CANKARDEŞ-ŞENOL 2015a-b, 2016 and 2017, AJA 213.3 (October 2019), https://www.ajaonline.org/book-review/3967, visited on the 31st of July 2022.

LUND 2022 – J. Lund, *A comparative study of the Rhodian and Knidian fabricants in the 2nd century BC*, in: *"From the Caucasus to the Danube": The Northern Black Sea Region in Antiquity*. Collection of scientific papers dedicated to the 70th anniversary of Professor S.Yu. Monakhov, Saratov, 2022, p. 316–325.

LUND forthcoming – J. Lund, *Two Stamped Rhodian Amphora Handles*, in: C. Flügel, H. Dolenz, K. Schmidt & C. Baur (eds.), *Karthago V. Die deutschen Ausgrabungen in Karthago. Das Quartier Didon an der Rue Ibn Chabâat. Frühpunische Besiedlung und öffentliche Großbauten mittel- bis spätpunischer Zeit*.

MACKENSEN 2019 – M. Mackensen, *Relief- und Stempelverzierte nordafrikanische Sigillata des späten 2. bis 6. Jahrhunderts. Römisches Tafelgeschirr der Sammlung K. Wilhelm*, Münchener Beiträge zur provinzialrömischen Archäologie 8, Wiesbaden, 2019.

MOMMSEN 1889 – A. Mommsen, *Jahresbericht über die griechischen Sakralaltertümer. 5 Artikel: Rhodos*, Jahresbericht über die Fortschritte der klassischen Altertumswissenschaft begründet von Conrad Bursian Sechzigster Band. Siebzehnter Jahrgang. Dritte Abtheilung (1889), p. 409–437.

MUSCOLINO 2017 – F. Muscolino, Review of BADOUD 2015, ArchClass 68 (2017), p. 627–642.

NICOLAOU 2005 – *Paphos V: The Stamped Amphora Handles from the House of Dionysos*, Nicosia, 2005.

NILSSON 1909 – M.P. Nilsson, *Timbres amphoriques de Lindos. Publiés avec une étude sur les timbres amphoriques rhodiens*, Exploration archéologique de Rhodes 5, Copenhagen, 1909.

PALACZYK 2016 – M. Palaczyk, *Major innovations in the Rhodian wine-trade after 200 B.C.? Rhodian stamps from Monte Iato in west Sicilian context. Traditions and innovations. Tracking the development of pottery from the late classical to the early imperial periods*, in: S. Japp & P. Kögler (eds.), *Proceedings of the 1st Conference of IARPotHP, Berlin, November 2013, 7th–10th*, Wien, 2016, p. 123–134.

PALACZYK 2017 – M. Palaczyk, *Gab es Verbreitungsmuster der rhodischen "Fabrikantenstempel?"* in: L. Cappuccini, C. Leypold and M. Mohr (eds.), *Fragmenta Mediterranea. Contatti, tradizioni, e innovazioni in Grecia, Magna Grecia e Etruria*. Studi in onore di Christoph Reusser, Firenze, 2017, p. 231–240.

PALACZYK & SCHÖNENBERGER 2001 – M Palaczyk, E. Schönenberger, *Amphorae stamps. Excavations 1964–2001*, Eretria Ausgrabungen und Forschungen XII, Gollion, 2012, p. 163–233.

PATON & HICKS 1891 – W.R. Paton, E.I. Hicks, *The Inscriptions of Cos*, Oxford, 1891.

PAUL 2015 – S. Paul, *Local Pantheons in Motion: Synoecism and Patron Deities in Hellenistic Rhodes*, CHS Research Bulletin 3, no. 2 (2015). http://nrs.harvard.edu/urn-3:hlnc.essay:PaulS.Local_Pantheons_in_Motion.2015, visited on the 28th of July 2022.

REGER 2017 – G. Reger, *Review* of BADOUD 2015, Topoi 21 (2017), 2, p. 553–563.

SAMUEL 1972 – A.E. Samuel, *Greek and Roman Chronology: Calendars and Years in Classical Antiquity*, München, 1972.

SCHMALTZ 2016 – B. Schmaltz, *Die hellenistischen Amphorenstempel von Kaunos*, Bonn, 2016.

SZTETYŁŁO 1976 – Z. Sztetyłło, *Nea Paphos I: Les timbres céramiques (1965-1973)*, Warszaw, 1976.

SZTETYŁŁO 1991 – Z. Sztetyłło, *Nea Paphos IV: Pottery Stamps (1975-1989)*, Warszaw, 1991.

SZTETYŁŁO 2010 – Z. Sztetyłło, *Nea Paphos VI: Pottery Stamps from Nea Paphos (Excavations in 1990-2006)*, Polish Archaeology in the Mediterranean Monograph Series 2, Warsaw, 2010.

THOMSEN. & FINKIELSZTEJN 2020 – C.A. Thomsen, G. Finkielsztejn, *Review of* BADOUD 2015, Athenaeum 108 (2020), p. 251–258.

TRÜMPY 1997 – C. Trümpy, *Untersuchungen zu den altgriechischen Monatsnamen und Monatsfolgen*, Bibliothek der klassischen Altertumswissenschaften. Neue Folge. 2. Reihe, Heidelberg, 1997.

ZIMMER & ΜΠΑΪΡΆΜΗ 2008 – G. Zimmer, K. Μπαϊράμη, *Ροδιακά εργασήρια χαλκπλαστής*, Athens, 2008.

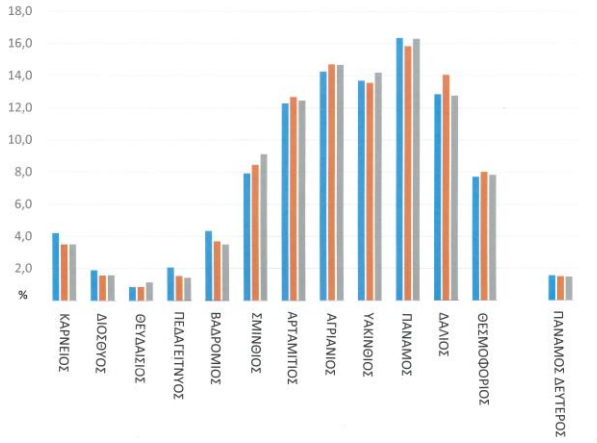

Fig. 1. Occurrences of Rhodian months on amphora stamps as recorded by Nilsson 1909, 127 (left column: 3400 examples), Börker 1978, 195 (central column: 3193 specimens) and the present writer (cf. note 15: 2029 examples), expressed as percentages.

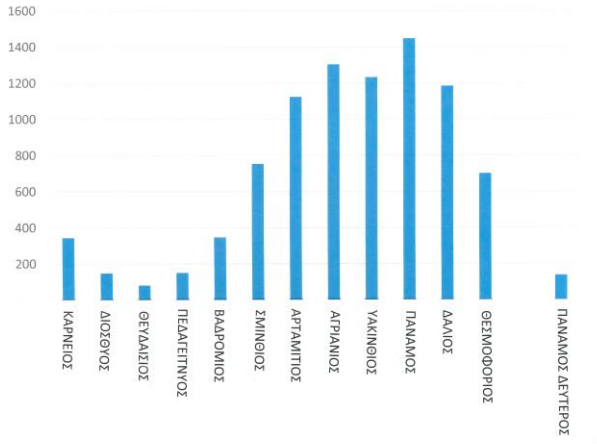

Fig. 2. The combined number of occurrences of Rhodian months on the amphora stamps listed separately in fig. 1 (8622 examples), actual numbers.

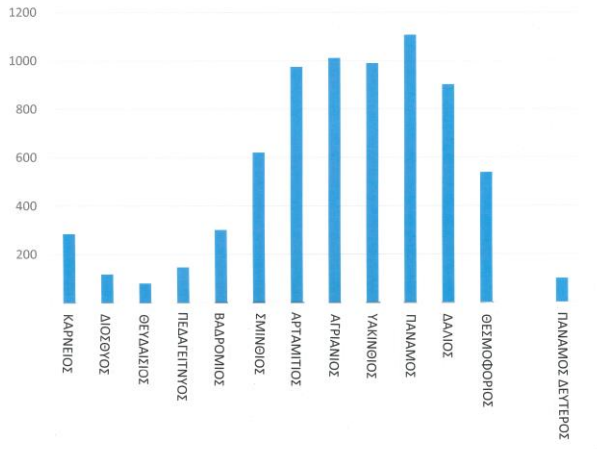

Fig. 3. Occurrences of Rhodian months on dies for amphora stamps dies identified by Gonca Cankardeş-Şenol (http://amphoralex.org/presentatione.php) (7174 examples, actual numbers).

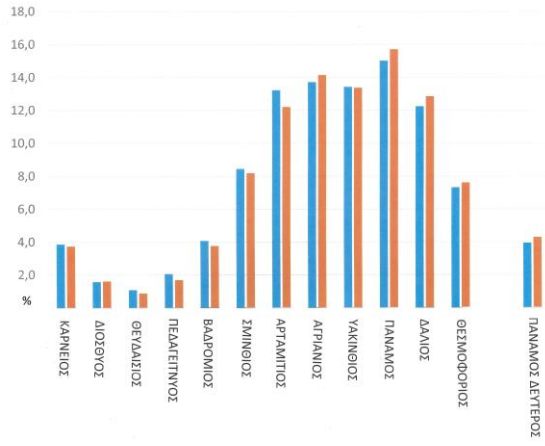

Fig. 4. The occurrences of Rhodian months on the amphora stamps in figs. 2 (left column) and 3 (right column) after the calibration of ΠΑΝΑΜΟΣ ΔΕΥΤΕΡΟΣ, expressed as percentages.