

NOTES ON THE ACTIVITY IN THE PORT OF ANCIENT TOMIS

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The construction of modern Constanța over the ancient Tomis represented a drawback in research of the ancient city, a drawback that could be only partly overcome by the endeavours of the archeologists¹⁾. Our image of the beginnings and development of the town in ancient times is incomplete and formed-similar to a mosaic in which many of the *tesserae* are missing especially during the last 20 years²⁾. The few literary and epigraphic sources have only partly contributed to elucidate certain aspects of the economic, social and spiritual life of the ancient Pontic town.

The exceptional geographic position of Tomis, on a promontory, like the blade of a knife³⁾ directed south-south east-ward, offered already in antiquity a place of call, a harbour for seamen⁴⁾, granting moreover to the town throughout history a foremost place not only among the Black Sea ports but also among the large ports of the world. The role of the port in the development of the ancient town whose economic and social life revolved around its harbour⁵⁾, necessitated a general picture of this activity, an image which would certainly be completed by subsequent research.

The first traces of a stable settlement on the headland dates back to the second half of the sixth century B.C., close to the waters of the that formed a natural port, linked directly to the town. From the very beginning Tomis must have been an *emporion*, a harbour and a trading port, without any special arrangement, probably ensuring defence by a *teichos*, the same as other settlements of this kind⁷⁾. It appears in the stage of *emporium* in the first epigraphic document (263 B.C.)⁸⁾, that shows the town to be a bone of contention between Callatis allied with Histria on the one hand, and Byzantion on the other. Among the various theories concerning the causes of the conflict, the most plausible appears to be that considered as the main cause the vast trading possibilities of Tomis at that time¹⁰⁾.

The founding in the third century B.C.¹¹⁾, on the Hinogu hill, near to the present day town of Cernavodă, of the stronghold of Axiopolis, whose name derives from the ancient course of Axios (black river), that flowed very close to Tomis¹²⁾, would explain the particular importance of the Black Sea port around the year 260 B.C. Recent investigations on the hydrogeography of Dobrogea¹³⁾

and its medieval cartography¹⁴⁾ lead to the actual existence, no longer hypothetical, of a direct connection on the waterways between the Danube and the Sea, between Axiopolis-Cernavoda and Tomis-Constanța.

In the 17th century, Carasu valley (Black water¹⁵⁾ medieval name of the ancient Axios) appears on the map under the name of *Lago di Carasu*, clearly showing a navigable route between the Danube and the Black Sea, thus suggesting that this water link existed all the more so in ancient times¹⁶⁾. In these conditions Tomis became the main port connecting the Sea with the Danube, taking the place of Histria which was confronted by silting up of its harbour¹⁷⁾ and diminished activity. Lending support to this conclusion is the fact that starting in the 3rd century B.C. both Tomis and Axiopolis showed an increased development following upon the direct trading connections between them, both benefitting by the fruitful active trade along the Danube, a vital artery in the Hellenistic period, the ships penetrating with their Greek wares in the indigenous lands¹⁸⁾.

The transition of Tomis from the stage of *emporium* to that of *polis* probably previous to the first epigraphic mention of the town council (*βουλη*) in the 2nd century B.C. led to the development and establishing of the port.

The Tomis peninsula has the advantage of offering a natural basin to which the inhabitants contributed by adding a breakwater and building piers along the shore. Unfortunately, the building of the new port in the 19th century destroyed the vestiges of the antique port, and the only possibility of upraising the buildings and structures of the ancient port in the open sea used for closing the basin is by analogy with other ports in similar geographic positions. Moreover, the shore line itself underwent constant changes under the action of natural agents and earthquakes, part of the peninsula being covered by the sea²⁰⁾. The western arm of the gulf has disappeared following the building of the new port²¹⁾. The arch of the gulf was closed by another promontory to the west, still visible today but which in antiquity started from the second and third gate to the modern port, exactly where a hundred years ago one could clearly discern the remains of a pier, as also marked on a map representing the plan of the port of Constanța before the works for the new port started (Plate I)²²⁾. The 1886 plan reveals the break down process associated with subsidence of the western arm of the gulf, with the characteristic retreat of the shore to the south of Constanța²³⁾. Collapse of the western arm started at the site where the plan shows the existence of an older pier which the authors of the plan consider to be Genovese, but which was probably ancient, since it continues the wall of Tomis assumed to pass there (Plate II).

It may be assumed that the breakwater was attached to the two arms of the gulf, lengthening them so as to close the basin. Similar natural gulfs, used

as ports in ancient times, were to be found at Fiumicino, the port of Rome (Plate III, 6)²⁴), Centumcellae (Plate III, 1)²⁵), Teracina (Plate III, 4)²⁶), Caesarea in Palestine (Plate III, 5)²⁷), Caesarea in Mauretania (Plate III, 3)²⁸), Leptis Magna in Lybia (Plate III, 2)²⁹). Dredging and the building of a pier for the new port towards the Casino totally destroyed the ancient breakwaters so that it is no longer possible to reconstruct their shape and size. The physico- geographical characteristics of the Tomis gulf would suggest that the ancient breakwaters were built in a straight line.

The shores of the Tomis gulf were consolidated by piers for a landing place. Some thirty years ago V. Canarache described the remains of monumental walls, 2 meters high in places, built of huge blocks of stone, between the second and third entrance to the modern port. He considered these walls to be the remains of the ancient breakwater³⁰). These walls can still be seen today near to the fence surrounding the new port, but their orientation does not suggest that they belonged to the piers, but rather to a tower or large building, connected with the port, and lying along the enclosure wall.

The same as old ancient ports Tomis must also have had a beacon or lighthouse, similar to the lighthouse that appeared on the coins of Histria³¹) during the empire. Nothing precise is known about the wharves, shops and handicraft workshops that must have existed in the port during the Hellenistic period. Archeological diggings during the sixties of the cliffs facing the Ovidiu square revealed a tall Roman building (fourth century A.D.), with shops and warehouses on the ground floor and a large terrace paved with mosaic on the first floor. The building was certainly a trading center. Joined to this building were the *thermae*, contemporary with the mosaic. By analogy with some of the more important ports of the Empire, Forum Iulii³²) and Leptis Magna³³), it may be assumed that within the same area other buildings were raised administrative, hospital, temple³⁴), handicraft works. As it was a favourable harbour of refuge against storms, it may be assumed that in the antique Tomis, already in the Hellenistic period, workshops existed for repairing the ships and shipyards for building and equipping ships³⁵). What has been assumed only for the Hellenistic period, begins to be outlined in the Roman period when a *σῆχος τῶν ἐν Θόμει ναυκληρῶν* was found in Tomis³⁶), in the second century A.D.³⁷), as well as independent shipbuilders such as Theocritos the son of Theocritos³⁸).

The multiple meanings of the word *ναυκληρος*³⁹) let us see not only the broad meaning of the term indicating transport contractor, but also the more restricted meaning designating the last operations before the ship sails off on its way: its equipment⁴⁰). The antique texts give a number of details regarding the material used for building traders; the hull was preferably made of pinewood,

or the wood found in the region⁴¹⁾, the masts and yards were made of fir tree or pine wood, as well as the oars⁴²⁾, the boards being caulked with plant fibers or wool stuck with wax or vegetal tar⁴³⁾. The ships' hull was rubbed with wax, tar or a mixture of these two substances⁴⁴⁾.

Some archeological findings attest to the existence within the Tomis area of forests in the period of autonomy⁴⁵⁾, the forests continuing to exist in the center and south of Dobrogea under the Romans, as revealed by the Column of Trajan on which several kinds of trees⁴⁶⁾ are represented in the scenes of the Dobrogea campaign. Laberius Maximus' Horotesia also attests to the existence of forests in the north of Dobrogea in the first century A.D., and in addition gives details regarding certain species among which are the fir tree and the pine⁴⁷⁾.

The existence of Dobrogea forests is also confirmed by the adoration of the hunting deities in the Pontic cities⁴⁸⁾.

Under these conditions it may be assumed that at least part of the wood necessary for repairs and the building of ships came from the region, the other part was brought from the left banks of the Danube along the navigable Carasu, or overland.

The discovery in rooms 3 and 4 of the Building with mosaic of eight two armed iron anchors, of the admiralty type⁴⁹⁾, 120 amphorae with iron nails and cramps, pine resin, resin turpentine, as well as several large pieces of colophony⁵⁰⁾, thus completes the list of materials used for the building and repair of ships. Within the mosaic building in as far as one can judge by the material discovered there and shops and workshops for repair and fittings. The repairs for the quick works could be done with the ship afloat, but for repair and careening of the hull and keel, the ships were drawn ashore and leaned over, or for the smaller crafts careened in drydocks that sheltered them in winter time, as was the case of the reconstructed docks in the Attic port of Zea (Plate IV, 2)⁵¹⁾.

The building material in the edifice with mosaic, in the immediate vicinity of the landing wharf, clearly showed that here was the town agora⁵²⁾. A Tomis decree speaks about a college of *archontes*⁵³⁾ who might be the magistrates whose task it was to organize a fair on the great Panegyries of Tomis⁵⁵⁾.

Most of the imported as well as the exported wares: cereals, wine, oil, honey, fish, wood, ceramics, marble, common metal objects entered and left the ancient port loaded on ships. Sculptured monuments and the monetary pondera of Tomis help us to gain an insight regarding the types of ship that anchored, or were repaired or built in the port of Tomis⁵⁶⁾. Among them are ships recorded of the *corbita*, *candicaria*, *lapidaria*, *scapha piscatoria* or *scapha speculatoria*⁵⁷⁾ type.

The discovery in the spring of 1987 in a grave dating back to the Roman period, of a bronze *strigil* upon which two ships were incised⁵⁸⁾ (Plate V), completes the catalogue of ships of the ancient Tomis known up to date.

The first of the two ships on the *strigil* formed part of the category of symmetrical crafts, with a single mast⁵⁹⁾, listed among the merchant, *navis oneraria*, the *corbita* type⁶⁰⁾. The hull was symmetrical a basket-like shape⁶¹⁾, with a high prow (*stolos*) at the extremity of which a sharp triangle was carved with its tip inward, suggesting curving of the prow in this direction (*akrostolion*)⁶²⁾. On the hull two oblique lines divided in three parts, the prow part being hatched with thin lines that suggested the volume, the mass of the front part, the middle part was marked by two horizontal lines suggesting the panels of which the hull is built, and the third, the stern contained the governing system from which only half of the rudder oar could be seen. The stern ended in a stylized *cheniscus*⁶³⁾, with three oblique, unequal yards from which a scarf hung. The captain's cabin (*diaeta*) was likewise in the stern, represented by two concentric circle sections, decorated towards the stern by three circular marks. Six small, triangular incisions towards the prow, suggesting hightening of the side plating.

The rigging had a single mast (*malus*) fixed in the center of the ship. Towards its upper extremity was the yard (*antenna*) fixed to the mast by lifts (*ceruchi*). One of the ends of the yard (*cornua*) was fixed to larboard and starboard by two arms (*versoriae*). The mast was anchored by six ropes (*candelae*) towards the prow and three towards the stern. Two sails were fixed to the mast and a triangular one (the *supparum*) on the upper part of the yard, and a large rectangular one (*uela*, *carbassa*) to the lower part of the mast. Both the large sail, swollen by a wind blowing from the stern, and the smaller sail are decorated by thin, finely chiseled lines⁶⁴⁾.

An anchor of the admiralty type with two arms hangs from the stern, slightly curved outwards⁶⁵⁾.

A second ship below the other is smaller and stylized but can be listed in the category of the *oneraria* class, *corbita* type.

Of hemispheric, symmetrical shape, the ship has an exaggerately long *akrostolion*, curved outward, with a short *aphlaston* curved inward and slightly widened at the end. A broken line above edge of the hull suggests the lower end of a sail, not shown because of the lack of space, or a sail furled around a mast resting on its supports (?)

There is no reason to doubt that large ships of the *oneraria* class, such as those attested to have anchored in the antique Callatis⁶⁶⁾, also landed at the breakwaters of Tomis.

The exceptional economic importance of Tomis was increased twofold with time especially after the firm settling of the Roman rule in Dobrogea due to its strategical importance which, starting from the second century A.D., conferred upon the city its position of center of the Dobrogea shore line defence⁶⁷⁾. The epigraphic documents only partly clarify the military status of the Tomis port but nevertheless show that Tomis was one of the harbours of the Moesia fleet⁶⁸⁾ whose task was surveillance of the Danube and western shores of the Black Sea northward up to Chersonese⁶⁹⁾.

That the Moesia fleet also had sea ships is demonstrated by the Noviodunum inscription where *Liburna Armata*⁷⁰⁾ is mentioned, as well as the Column of Trajan which shows *Liburnae* vessels used along the Danube in the first Dacian war.

The retreat from Tomis of certain veterans of the fleet such as Valerius Valens, and especially the appointment as prefect of the Moesia fleet of P. Aelius Ammonius⁷²⁾, former prefect of the *Flavia Gaetulorum* stationed at Tomis, appears to indicate apart from the unquestionable fact that it was the largest port on the Black Sea shores - the presence of a permanent Moesian fleet in Tomis in the third century A.D.⁷³⁾. Moreover, the exceptional importance of the town in the third-fourth centuries A.D., as well as the communication along the waterway with Axiopolis, where *nautae universi Danubii* is attested to, has a double character, both civilian and military⁷⁴⁾. It is not excluded that here, at Tomis should have been the High Command of the *Classis Flavia Moesica*.

NOTES

1. A. Rădulescu, *Pontica* 10, 1977, p. 54.
2. Systematic excavations could only be carried out over a restricted area in the Constantza promontory. For the excavations reports see A. Rădulescu and C. Scorpan, *Pontica* 8, 1975; C. Scorpan, *R.R.M.*, 15, 1, passim; A. Rădulescu, *Pontica* 10, 1977, pp. 53-57; A. Rădulescu and I. Bitoleanu, *Istoria românilor dintre Dunăre și Mare, Dobrogea*. Ed. șt. și Encicl., Buc., 1979, p. 46.
3. I. Stoian, *Tomitana. Contribuții epigrafice la studiul cetății Tomis*. EA R.P.R., 1962, p. 16.
4. R. Vulpe, *Pontica*, 2, 1969, p. 151.
5. We subscribe to the idea of M.I. Finlay *The ancient economy*, London, 1975, p. 129: "Ready access to the sea or to a more important river was only a necessary condition for growth of the town, but was not a sufficient condition".
6. More accurately 546-494 B.C., see A. Rădulescu, *Pontica* 10, 1977, p. 57 and n. 10; idem *Istoria românilor* p. 46.
7. Dinu Adameșteanu, *La Basilicata antica*, ed. Di Mauro, 1974, p. 66.
8. FHG, III, p. 537, fr. XXI, see I. Stoian, *op. cit.*, p. 20.
9. I. Stoian, *op. cit.*, p. 21; R. Vulpe, *Histoire ancienne de la Dobruđa*, Buc., 1938, p.

10. R. Vulpe, *Pontica*, 2, 1969, p. 155; Al. Suceveanu, *Viața economică în Dobrogea romană*. EA. R.S.R., Buc., 1977, p. 123, 142 and n. 404. A similar conflict between Apollonia and Mesambria for the port of Anchialos is related in a Histria decree in honour of Hegesagoras (ISM, I, 1983, nr. 64).

11. For the Hellenistic period under Lysimach, see W. Thomascheck RE, 2 (1895), p. 2628 and follow.; V. Pârvan, *Getica*, Ed. Meridiane, Buc., 1982, p. 68; I. Barnea, SCIV, XI, 1960, 1. pp. 69-78; R. Vulpe *Histoire ...*, p. 81; idem, *Pontica* 2, 1969, p. 157.

12. Claudius Aelianus, 12, 45.

13. C. Scarlat, Muzeul Național, III, Buc., 1976, pp. 101-114.

14. P.I. Panait and A. Ștefănescu, *Pontica*, 17, 1984, pp. 169-176.

15. I. Ujvari, *Geografia apelor României*, Ed. Șt., Buc., 1972, p. 562.

16. In 1912 between Cernavodă and Mircea Vodă was the swamp of Carasu valley; from this point till Castelu, to the West, it was water as it may be seen on C. Schuchard's map (*apud* R. Vulpe, *Histoire ...*, pl. XLVII).

17. Strabon, *Geografia*, 1, 3, 4; Polibiu, *Ist.*, 4, 41. About this event see also D.M. Pippidi, *Contribuții la istoria veche a României*, Ed. șt. și Enciclopedică, Buc., 1967, p. 35 and follow.

18. Apollonios of Rodos, *Arg.*, IV, 282-284.

19. I. Stoian, *op. cit.*, p. 79-81.

20. Recent under water researches in the area between the modern Casino and the pier of the new harbour, has demonstrated that here were constructions which belong to the ancient city. References at these researches at M. Irimia, *Pontica* 3, 1970, p. 19.

21. V. Canarache, *Edificiul cu Mozaic din Tomis*, Constanța, 1966, p. 4.

22. *Dobrogea. Cincizeci de ani de viață românească*, Buc., 1928, Ed. Cultura Națională, p. 456, fig. 127.

23. *Enciclopedia Geografică a României*, Ed. Șt. și Encicl., 1982, p. 387.

24. H.D.L. Viereck, *Die Römische Flotte. Classis Romana.*, Koehlers Verlagsgesellschaft, MBH Herford, 1975, p. 266. fig. 173.

25. Lehman-Hartleben, *Klio*, 14, Leipzig, 1923, *passim*.

26. *Ibidem*.

27. *Ibidem*.

28. *Ibidem*.

29. Ward-Perkins, J.B., *JRS*, 38, 1948, fig. 5.

30. V. Canarache, *Tomis*, Ed. Meridiane, Buc. 1961, p. 22.

31. B. Pick, *Die antiken Münzen Nord-Griechenlands*, I, 1, 1898. p. 176, nr. 511. For the lighthouse of Histria see also D.M. Pippidi, *St. Clas.*, 9, 1967, pp. 228-230.

32. C.G. Starr, *The Roman Imperial Navy*, London, 1960, p. 12.

33. Ward-Perkins, *op. cit.*

34. L. Casson, *JRS*, IV, 1965, p. 33 and follow.

35. In an inscription during the Roman period see I. Stoian, *op. cit.*, p. 78, no. 2, where the term appears, designating in the Hellenistic period the best organized ports. For valences of the term see: J. Rouge, *Le commerce maritime dans la Méditerranée*, Paris, 1965, p. 115-117.

36. IGRR, I. p. 205, No. 610; V. Pârvan, *Die Nationalität der Kaufleute im römischen Kaiserreiche*, Breslau, 1909. p. 86; Gr. Tocilescu, *Fouilles et recherches archéologiques en Roumanie*, Buc., 1900, p. 2222 and follow.; R. Vulpe, *Histoire* p. 236; I. Stoian, *op. cit.*, p. 41.

37. Gr. Tocilescu, *loc cit.*

38. IGRR, I, p. 214, no. 645; MINAC, No. inv. 31.

39. Maurice Besnier, in *DA.*, IV, 1, p. 20: 1. The owner of a ship that rents it to a fitter-out; 2. The fitter-out of a ship when he is also the owner or the tenant; 3. the captain of

the ship appointed by the fitter-out to administer and command the ship. M.A. Bailly, *Dictionnaire grec-français*, Paris, 1894, also mentions another meaning that of *pilot*.

40. I. Manole, Gh. Ionescu, *Dicționar marinăresc*, Ed. Albatros, Buc., 1982, p. 41: to fit-out a ship to equip it with all necessary gears and fittings.

41. Teophr. *Hist. plant.* V, 7, 1.

42. Plin., XVI, 39, 195, 201, 202; Teophr., *Hist. plant.* V, 1, 6.

43. Plin., XXIV, 9.

44. Plin., XVI, 11, 52, 56; Ovidiu, *Metamorph.*, XI, 514-515.

45. V. Canarache, *Tomis*, p. 32, relates about the discovery in the rural area around Tomis of tree trunks 2-3 m long, prevalently oaks.

46. C. Stoiculescu, *Dacia NS*, 1-2, Buc. 1985, p. 96, annex 1, scenes 36, 37, 39. For the contemporary period see *Encicl. Geografică a României*, p. 394, that describes the existence in SW Dobrogea of forests of deciduous trees of submediterranean type.

47. ISM, I, p. 187. nr. 67 (ex. A), r. 20; cf. and notes of D.M. Pippidi, p. 204.

48. The cult of the goddess Artemis-Diana in Tomis and Callatis is attested to in Al. Suceveanu, *op. cit.*, p. 88 and n. 125; p. 93 and n. 189.

49. For this type of anchor see D.A., I, 1, p. 266 and follow.; H.D.L. Vierek, *op. cit.*, p. 135 and fig. 128, 129.

50. V. Canarache, *Edif. cu Mosaic*, p. 28 and 40; M. Bucovală, *Das grosse römische Mosaik von Tomis*, Constanța, 1977, p. 29 a. follow., fig. 21 and 23.

51. H.D.L. Vierek, *op. cit.*, p. 297, fig. 41.

52. V. Canarache, *Edificiul cu Mosaic*, p. 4.

53. According to Aristotle, *Polit.*, VI, 5, 2, a body of magistrates was above all, supervising and policing the market and the transactions between the citizens. It may be added that the *agoranom* inspected all the wares, except for the cereals for which a special magistrature existed, that of the *sitophylakes* (E. Caillemier in DA 3, 1881, *Agoranomoi*, p. 155).

54. Dittenberger, SIG, 2, II, p. 182, n. 11.

55. In this connection see I. Stoian, *op. cit.*, p. 166. For the great Panegyries attested to in Tomis, *idem* p. 41 a.p. 176 and I.I. Russu, *Dacia II. N.S.*, 1957, p. 185.

56. For description of the types of ships on the sculptured monuments and Tomis coins, see V. Bounegru, *Istros*, 1, 1980, p. 183-190; *idem* in *Münsterische Beiträge zur Antike Handelsgeschichte*, Münster, III, 2, 1984, pp. 1-17, no. 3, 5, 6, 12, 16.

57. Schematic treatment of this type on a Tomis monetary pondera does not allow us to establish to which of the two categories it belongs.

58. The discovery belongs to Virgil Lungu, whom we wish to thank once again for the amiability with which he offered us the object to study.

59. This type of ship has a precise designation in the ancient sources: those with two and three masts are called *diannenos* (Synesius, *Scrisori*, IV) and *triannenos* respectively (Plin. *Nat. Hist.*, XIX, 5), ships with more masts were not known in antiquity. In this connection see also J. Rouge, *Recherches sur l'origine du commerce maritime en Méditerranée sous l'empire Romain*, Paris, 1966, p. 49 and follow.

60. For this type see P.M. Duval, *MEFR*, Paris, 61, 1949, p. 133 and follow., J. Rouge *op. cit.*, p. 74; E. Rossbach, art. *Corbita*, in D.A., X., p. 1505; H.D.L. Vierek, *op. cit.*, fig. 113.

61. The very name of the ship, *corbita*, probably derives from basket.

62. The upper end of the prow was called *akrostolion*, the upper end of the stern *aphlaston*, as a rule embellished with anthropomorphous masks, zoomorphous figures, discs I. Pekáry, *Boreas*, 6, 1983, p. 119-127 groups them in five types: I head of animal; II head of bird; III discs; IV anthropomorphous masks; V various protomes.

63. Ornament in the form of a swan head and neck. V.J. Schefferi Argentoratensis, *De Militia nauali ueterum*, Upsala, 1654, p. 158 and follow.; P.M. Duval, R.A., Mèl. Ch. Picard, Paris, 1948, fig. 15 and 16; I. Pekáry, *Boreas* 5, 1982, pp. 273-279; idem *Boreas* 7, 1984, p. 184 and follow.

64. The same decoration, with small parallel lines on a relief in Copenhagen (I. Pekáry, *Boreas* 6, 1984, p. 184) and on a Tunisian mozaic (L. Foucher, *Navires et barques figurées sur des mosaïques découvertes à Souse et aux environs. Notes et Documents*, XV, Tunis, 1957, fig. 5 and 7).

65. The two armed anchor is called *αμφισιομος* or *αμφιβολος*, being as a rule suspended in front or on the side of the ship. For bibliography see above no. 49.

66. C. Scorpan, *SCIV*, 21, 4, 1974, p. 645.

67. Al. Suceveanu, *RRH*, 2, p. 232.

68. Thus also recorded by H.D.L. Viereck, *op. cit.*, p. 255. C.G. Starr, *The Roman Imperial Navy*, London, 1960, p. 135 and follow. excludes the possibility that Tomis should be the port of the Moesic fleet, yet in note 42 of the same chapter he places Tomis at the head of the list of the most important ports of the Danube fleet...

69. Where there existed a naval basis of *Classis Moesica* as appears to be attested to by inscription put up by the trierarch T. Aurelius Secundus (CIL, III, 14214 and 14215). See also V. and G. Webster, *The Roman Imperial Army of the first and second centuries A.D.*, London, 1969, p. 155 and follow.

70. Gr. Florescu, *RIR*, 16, 1946, 1, p. 13.

71. CIL. III, 6552, Suppl. Epigraf., 104. = ISM, II, nr. 199 (35).

72. I. Stoian, *op. cit.*, p. 209, nr. 1; H.G. Pflaum, *Les carrières procuratoriennes equestres sous le Haut-Empire romain*, II, Paris, 1960, p. 854, nr. 329; ISM, II, nr. 106 (72). Paris, 1960, p. 854 and follow., nr. 329.

73. D. Kienast reaches the same conclusion in *Untersuchungen zu den Kriegsflotten der römischen Kaiserzeit*, Bonn, 1966, p. 117, no. 109, conclusion based on the inscription of P. Aelius.

74. A. Aricescu, *Annata în Dobrogea romană*, Ed. Militară, Buc. 1977⁴; p. 71.