

## INTRODUCTION

During the last two decades, three centres for production of provincial Roman ceramics were discovered and explored on the territory of Nicopolis ad Istrum, situated near the present-day towns and villages of Hotnica, Pavlikeni and Butovo (district of Veliko Tărnovo). A number of kilns and potter's workshops were excavated, together with the abandoned ceramic production and ancient masters' tools, potters' lodgings were discovered and the trade routes for the ceramic products were traced out.

The rich numismatic material found during the excavations determined the chronological boundaries of existence of those so far unique ceramic centres, discovered in South-Eastern Europe, i. e. from the first decades of the 2nd century to the beginning of the 4th century A. D.

The complete results of the archaeological explorations near Hotnica, Pavlikeni and Butovo are not yet published, with the exception of some scientific communications at some international congresses, as well as some articles dealing with some problems of ceramic production.<sup>1</sup> Nevertheless, the findings gained popularity both in Bulgaria and abroad.<sup>2</sup> This was favoured by the two seminars organized by the Committee for Culture, the Archaeological Institute and the Institute of Thracology at the Bulgarian Academy of Sciences, which were held on the very sites in 1975 and 1979, and where the results of the studies were discussed.

The general evaluation made by the experts was that these are some of the few preserved records of the past, where one could illustratively follow the complex process of ceramic production and the stratigraphically precisely defined materials allow us to date the origin and the development of the ceramic centres. The ceramics found there could be used for comparisons and dating of ceramics from the same epoch, found at other sites.

For the first time in the present dissertation work, the results from long years of exploration near Hotnica, Pavlikeni and Butovo have been summarized; here we set ourselves the following main tasks:

1. To consider the topography and development of the ceramic centres.
2. To disclose the complex mechanism of setting up a new ceramic production and its improvement, resulting in the gradual substitution of imported goods by local imitations, taking into consideration our observations in the course of archaeological explorations and the material for comparison found in other places.
3. To explore the various ceramic products found together with reliably dated material in situ in potter's workshops and kilns and to make a chronological and typological classification.
4. To compare the ceramic material produced in the explored centres to that apparently originating from them, but found in ancient necropolises and settlements on the territory of Nicopolis ad Istrum and Novae, as well as to reveal the use and distribution of the ceramic products manufactured in them.
5. To look for any local characteristics and traces of the local Thracian tradition in ceramic production and eventually to find the creators of the ancient ceramic centres on the territory of Nicopolis ad Istrum.

The present study had to overcome many difficulties of scientific character. First of all, there were no generalized works on ceramic production in

Bulgaria, therefore the whole study is based mainly on the author's observations, made during the archaeological excavations and subsequent study of the unearthed material. The literature used complements and supports the author's conclusions.

In the course of twenty years vast archaeological material had to be processed and systematized, originating not only from the ceramic centres near Hotnica, Pavlikeni and Butovo, but also from some other places on the territory of Nicopolis ad Istrum. Expressed in figures, it would mean the examination and description of more than 200,000 ceramic fragments, more than 100 pottery kilns and over 200 various pottery tools, as well as a great number of discarded ceramic products.

It turned out to be impossible to consider this vast and various material in one dissertation, that is why we deliberately confined ourselves to only tracing out the basic ceramic production and we neglected a number of points connected with the manufacturing of tiles and bricks, terracotta, trays and lamps, which will be the subject of special research. As to the chronological and typological scheme, we took into consideration the most significant and typical specimens from the ceramic centres, as well as from those ancient sites which had been the direct consumers of this production, in order not to disrupt the general initial pattern of ceramic production. In this respect, the various ceramic material found in the necropolises in Butovo proved to be especially useful and for the first time it was given an interpretation in the present work. This allowed us to follow the development and the functional aspect of ceramic production in the centres of Butovo. Our participation in the Bulgarian-Polish archaeological expedition in Novae, near Svištov, was of great significance for our work. This is the area where we had been studying the ceramic material for more than twenty years, and it was established that a significant part of the fine ceramic production found in Novae originated from Pavlikeni and Butovo.

The collaboration with the Rumanian expert G. Popilian on some problems of Roman pottery found on the territory of the provinces Moesia Inferior and Dacia proved to be particularly fruitful as it helped us to discern among the ceramic material unearthed at various sites north of the Danube the production of the centres at Pavlikeni and Butovo, as well as to establish the influence of our ceramic centres on the development of local ceramic production.

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The setting up of ceramic centres near Hotnica, Pavlikeni and Butovo is closely connected with the Roman town Nicopolis ad Istrum, founded at the beginning of the 2nd century A. D., after the Dacian wars of Emperor Traianus. After the foundation of the Roman Province Dacia, the region between the Danube and the Balkan Mountains was no longer a border area disturbed by outside attacks. The political changes which occurred as a result of this created favourable prerequisites for the further development of productive forces on the basis of the slave-owning economy which was strengthening its position. The peaceful development in the course of almost a century and a half afforded an opportunity for development of ancient slave-owning economic relations, which found expression in the flourishing state of big landowning, in the development of craft industry and in the prosperity of a number of town

centres.<sup>3</sup> One of these was Nicopolis ad Istrum, founded within the administrative boundaries of Province Thracia and organized on the same pattern as a polity in Asia Minor. It was towards the end of the 2nd century when the town was integrated within the Roman province of Moesia Inferior.<sup>4</sup> The boundary between the two Roman provinces — Thracia and Moesia — which was definitely set up in 136 A. D.<sup>5</sup> passed to the north of the town, along the present-day town and village of Butovo and Polski Trámbeš.

Nicopolis ad Istrum is situated on a natural crossroad, where the important Roman road leading from Novae across the Balkan Mountains to Augusta Traiana, Constantinople and Asia Minor, crossed the road leading from Odessos to Marcianopolis, Melita and Serdica. A vast territory between the Osâm and the Jantra rivers belonged to it. It covered the most fertile lands of present-day North Bulgaria. To the south, the territory of Nicopolis ad Istrum reached the market place of Discoduratae, founded by Augustus Traianus and situated at the northern foothills of the Balkan Mountains. The market-place known as Emporium Piritensium was also on the territory of Nicopolis ad Istrum. Some scholars locate it near the present-day village of Gorsko Kosovo, others — under the present-day village of Butovo.<sup>6</sup> The population of the town consisted mainly of immigrant craftsmen and tradesmen from Asia Minor, who had no opportunity of making a living under the existing economic conditions in Asia Minor. Part of this population were descendants of settlers from the West Roman provinces, inhabiting the fortified towns along the Danubian border (*limes*) which were founded earlier. At the same time the epigraphic records include some local Thracian names. The immigrants settled down not only in the town, but also in its rich surroundings, where they could find reliable market for their own production.<sup>7</sup> The demand for craft and mass-produced goods on the part of the Roman conquerors and the local population could not be satisfied with imports only, as their delivery depended on a number of circumstances, the most important of these being transport, which raised the cost of the imported goods too much and made them almost inaccessible, especially for the populace. This prompted some craftsmen and tradesmen, who were men of action and enterprise, to start immediate production of objects used in everyday life — in particular earthenware articles.

The flourishing state of the economy in Nicopolis ad Istrum at the time of the Severi is proved by the increase of coin emissions of the town, by its urbanization, as well as by epigraphic records. The development of crafts and trade attracted new settlers, mainly from the Roman provinces in Asia Minor. This advance can be noticed on the territory of the town of Nicopolis, where a great number of country houses, temples and sanctuaries were built and dedicated to Greek, Roman and Thracian deities. The most characteristic document, which reveals the ethnical structure of the population on the territory of the town at that time, is the famous list of the members of a Dionysian Society (*thias*), dating from 227 A. D., which was found during excavations on the territory between Butovo and Nedan. There are Thracians and Romans among the members, but the names of people of Eastern origin are prevalent.<sup>8</sup>

Nicopolis ad Istrum grew as a significant centre of craft industry. Some crafts like stone-cutting and fuller's trade were registered in epigraphic records; some stone-pits near Hotnica, Rusalja and Koevci were archaeologically located. Moreover, a collective find of various tools confirms the presence of a cartwright's trade and iron-smithery in Butovo. Sarcophagi, bronze objects, etc., were also manufactured there.<sup>9</sup>

The middle of the 3rd century was crucial for this flourishing region. A period of socio-economic and political crisis, mass invasions and plundering set in. The invasions of the Goths, who besieged Novae and Nicopolis ad Istrum at the beginning of 250 A. D., stand out most clearly. The attacks of the Barbarians continued for more than three decades and they caused general decline and new ethnical changes in this region. Depopulation of Moesia Inferior compelled the Roman authorities to re-populate the desolate regions with new settlers, different in language, way of living and cultural development. Immigrants from Provincia Dacia, which was deserted by the Romans in 271 A. D., came to live here as well. The Danube became once again a borderline (*limes*) of the Roman Empire on the Balkan Peninsula.<sup>10</sup>

The crisis and the its results were quite clearly discernible during the archaeological excavations in Pavlikeni and especially in Butovo. Here small houses of waste products, stones and clay were built over the destroyed monumental buildings.

In the first decades of the 4th century a partial stabilization of the economic and cultural life was noticed again. It is revealed in Butovo as well, with the extension of the borders of the ancient settlement; some of the new buildings occupied a considerable part of the former potters' quarters, but the workshops which survived gradually died out.

The area between the Danube and the Balkan Mountains was once again ransacked by the Goths' invasion in the second half of the 4th century, thus liquidating completely the ceramic production, as the exploration of the territory of Nicopolis ad Istrum testifies.

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There are no special studies on the problems of provincial Roman ceramics from the 2nd-4th century A. D., found in our land. Almost all scientists have come into contact with that ceramics, but most of them have contented themselves with a general description of the finds without any particular consideration of the different types, variants, decoration and production processes. The brothers Hirmengilt and Karel Škorpil described for the first time the most frequently occurring earthenware used in funerals, thus summarizing the results of the explorations of tumuli and necropolises.<sup>11</sup> One decade later I. Ivanov published the ceramic material found during the excavations in the ancient site and necropolis near the village of Kadin Most, district of Kjustendil. According to him, part of the earthenware belonged to Hellenistic art, another to Roman art, and a third part was of local Thracian origin.<sup>12</sup>

S. Stefanov reported about finds of imported and local ceramics discovered in the surroundings of ancient Novae,<sup>13</sup> and the present-day Belene,<sup>14</sup> while G. I. Kazarov called attention to the earthen jugs found in Gigen.<sup>15</sup>

Varied ceramic material from the tumular necropolises near Enija (present-day Mladinovo) and Bunarčevo (present-day Izvorovo), near Svilengrad, was reported by V. Mikov. Fine pottery with glazing was prevalent among the finds: deep bowls, dishes, earthen jugs and small vessels of coarse clay. The ceramic material found by the author was referred to the Roman era and was dated to the 3rd-4th century A. D.<sup>16</sup>

Analogous in form and apparently from the same time are the ceramic finds from the tumular necropolis near Mezek and Gara Svilengrad, studied by I. Velkov.<sup>17</sup> Small hemispheric, two-handled cups, deep dishes, earthen jars with appliquéed handles and tall earthen jugs were discovered in it. Romanized Thracians had been buried in that necropolis. The new thing noted here by I. Velkov was the presence of Arretine-type earthenware. Although the author did not specify the ceramic centre they originated from, he concluded that ceramic production centres should be sought in our land, created by settlers-craftsmen from the Western and Eastern Roman provinces. He published many finds made of clay (vessels, terracotta, etc.) found in different places in Bulgaria.<sup>18</sup>

Earthenware dating from the Roman era were also published by A. Javašov,<sup>19</sup> D. P. Dimitrov<sup>20</sup> and D. Cončev.<sup>21</sup>

After September 9th, 1944, Bulgarian archaeology was radically reorganized on the basis of new scientific principles of historical exploration. Complex explorations of archaeological sites from different eras began on a large scale. Meanwhile, archaeological excavations were carried out to save a great number of monuments which had been in danger of being destroyed by the extensive construction in different regions of the country. The Bulgarian museums were enriched with many new finds. The necropolises excavated in the surroundings of the Roman towns and on their territories turned out to be particularly rich in ceramic material. They brought to the fore the problem of distinguishing local from imported ceramics.

Earthenware from the Roman era was found quite often in the ancient sites and necropolises on the territory of the ancient Philippopolis.<sup>22</sup> The ceramic material found in the present-day town of Plovdiv is of great interest. The hypothesis about its being a local production, stated in the past by I. Ivanov and I. Velkov, was developed further by L. Botušarova, who published the results from the archaeological exploration, making a distinction between local ceramics and ceramics imported from Asia Minor.<sup>23</sup>

K. Žuglev showed that there were ancient traditions in pottery making in Thrace — various Thracian ceramics had been manufactured, as well as some local imitations of imported terra sigillata.<sup>24</sup>

Various earthenware of fine clay, consisting of vessels similar in form, turned on a potter's wheel, were discovered in the ancient necropolises, explored during the last three decades on the territory of Augusta Traiana.<sup>25</sup> Deep two-handled urns were usually discovered, as well as slender earthen jugs, amphora-like vessels, deep dishes and small, two-handled cups with heavily bulging middle part. Almost all vessels had no decoration, with the exception of some urns whose upper cylindrical part was decorated with incised, stylized, plant ornaments. Most of the pottery found on the territory of Augusta Traiana had exact parallels among the finds from the ancient necropolises in the districts of Kazanlák,<sup>26</sup> Sliven<sup>27</sup> and Nova Zagora.<sup>28</sup> Probably, they were made in some ceramic centre. Some pottery, dating from the Roman era and found along the Bulgarian Black Sea coast,<sup>29</sup> had parallels in the ceramics manufactured in the interior of the country, but most of them were closely related to the ceramic production of Hellas and Asia Minor, and dated to the same era.<sup>30</sup>

The results from the archaeological exploration of Cabyle, which began a few years ago, confirm the presence of local production during the Roman era. Four pottery kilns and a lot of ceramics and potsherds were discovered here, and this provides the possibility of defining the production list of the ceramic workshops in the ancient town.<sup>31</sup>

Intensive explorations of many sites in North Bulgaria began during the last three decades, but the ceramic material is missing so far in scientific communications about the results of the archaeological excavations.

Novae is an exception to a certain extent in this respect. A Bulgarian-Polish archaeological expedition has been working on this site for more than two decades and every year the members publish preliminary reports about their respective work. These preliminary short reports give an idea of the rich variety of ceramic material found on the site.<sup>32</sup> Side by side with the imported ceramics manufactured in the western workshops, the so-called *terra sigillata* was discovered in Novae, also brought from Asia Minor. A significant part of the vessels offered at the market in Novae were manufactured in the ceramic centres near Pavlikeni and Butovo or moulded in local workshops, and if the lack of any reports prevents us from forming an idea of the ceramics manufactured in all other towns, the explorations carried out on their territory presented various ceramic material which compensates to a certain extent this deficiency. In this respect, we could point out the explorations of the necropolises in the districts of Vidin,<sup>33</sup> Vraca,<sup>34</sup> Pleven,<sup>35</sup> Veliko Tŕrnovo,<sup>36</sup> Ruse,<sup>37</sup> Tăgovište,<sup>38</sup> Varna,<sup>39</sup> and Tolbuhin.<sup>40</sup> All of these necropolises date from the 2nd-4th century. Small earthen jugs, with the typical flattened cone-shaped necks, one- or two-handled jugs, amphora-like small vessels, censers, etc., prevailed among the ceramic finds discovered in them.

The comparison of the ceramic material discovered on the sites in Bulgaria shows earthenware similar in form, but different in workmanship. This suggests that a great number of workshops functioned during the Roman era, where fine ceramics were manufactured as an imitation of the imported potteries. This opinion, as it was already pointed out, has been expressed by a number of Bulgarian archaeologists. It is confirmed by the pottery kilns discovered recently on many ancient sites in the country.

Many pottery kilns have been discovered in Bulgaria so far, but some of them have not been published yet. A pottery kiln dating from the 2nd-4th century A. D., which is of great interest, was unearthed near the village of Novo Selo, district of Vidin.<sup>41</sup> It had two chambers and was dug into the ground. The interesting thing about it are the side chimneys conducting the hot gases without directly affecting the fired ceramic products. This was characteristic of the kilns where oxidized firing of fine potteries of the type *terra sigillata* took place. The kiln in Novo Selo was the only one of this type discovered in the country. Another partially destroyed kiln was also discovered there, full of clay lamps of different sizes and shapes.<sup>42</sup>

Ancient pottery kilns were also discovered near Raciaria, half-dug into the ground, with round grates supported by one pillar.<sup>43</sup>

A round, two-chambered kiln with one supporting pillar was discovered in the locality called Horosanja near the village of Altimir, district of Vraca.<sup>44</sup> Considering the other materials and coins dating from the 4th century discovered in that region, the author himself dated the kiln together with the ceramic products found in it, to the same era. However, the small earthenware jugs discovered in the kiln were typical of those dating from the mid-2nd century and the beginning of the 3rd century A. D., when that particular type of earthenware had completely disappeared.

Many kilns were discovered during the exploration of the ancient town of Novae. In 1959, eight destroyed pottery kilns were discovered east of the fortified city wall.<sup>45</sup> When they were published, comparative material from other

ancient centres was used: different types of kilns dating from the Roman era were described and the stages of their construction were traced. In 1966 two pottery kilns were discovered in the eastern sector of Novae, partially destroyed at the time of construction of the southern city-gate.<sup>46</sup> A pottery kiln which had functioned in the second half of the 4th century was excavated in the northern part of the forum of Novae. It belonged to the half-dug pottery kilns having one tongue-shaped pillar.<sup>47</sup> The kiln discovered outside the west city wall dated from the same era; it was large, rectangular and had one supporting (tongue-shaped) pillar.<sup>48</sup> This type of kiln was usually designed for baking bricks and tiles. Quite often, however, rectangular kilns had also been used for baking ordinary earthenware of bigger sizes. This fact was confirmed by the discovery of a great number of potsherds in the kiln and around it. Similar cases were known from Butovo and other ceramic centres.

Three pottery kilns were explored in the Roman villa near Augusta Traiana.<sup>49</sup> They were round, half-dug into the ground, with one tongue-shaped supporting pillar and were grouped around one common working platform. The kilns functioned from the 2nd to the 3rd century. Ceramics used in everyday life were produced in them.

Two-chambered pottery kilns with a round grate, supported by one pillar, were found during the excavations of the Roman villa in Kalimantci, near Mihailovgrad.<sup>50</sup>

The explorations near the village of Pet Mogili, district of Šumen, threw considerable light on the problems of ceramic production in the Bulgarian lands.<sup>51</sup> A whole complex for production of fine and even coarse earthenware was discovered there. The five kilns explored so far were half-dug into the ground and their round grates were supported by one tongue-shaped pillar. The ceramics produced near the village of Pet Mogili were somewhat different in comparison with the other contemporary Roman ceramics produced by the centres around Nicopolis ad Istrum. The 'fine' ceramics had considerably coarser fabric, although they had preserved their typically Roman forms and were dated to the 2nd-4th century.

The problems of ancient ceramics have been examined for many years now by T. Ivanov,<sup>52</sup> A. Balkanska,<sup>53</sup> C. Dremsizova,<sup>54</sup> D. Džonova<sup>55</sup> and A. Dimitrova.<sup>56</sup>

After the archaeological explorations in Nicopolis ad Istrum had been resumed in 1945, T. Ivanov paid attention to the ceramic material as well (greyish-black and fine ceramics) and dated it to the 3rd-4th century on the basis of the coins found.

With the extension of the excavations in the following years, the collection of ceramic finds was enriched with some new specimens which will be published soon. The ceramic material from the Roman era and that discovered during archaeological excavations in ancient Apollonia and the present-day town of Sandanski was explored and published under his guidance.

The studies of A. Balkanska focus on the ceramics discovered during the archaeological excavations in Serdica, Nicopolis ad Istrum and Oescus. She came to the conclusion that the rich variety of earthenware forms and decorations dating from the Roman era testified to development of local production, which took an important place in the economy of Thrace and Moesia.

For the first time in Bulgaria, C. Dremsizova drew attention to the local greyish-black earthenware used in everyday life, which is usually found together with fine ceramics.

D. Džonova investigated ceramics decorated with Dionysian scenes, as well as clay urns with human faces on them.

A. Dimitrova established the presence of some terra sigillata — local production. She extended her investigation in that sphere and wrote about the terra sigillata found in the country until now, which was produced in the West Roman workshops.

Separate finds of Roman ceramics were published in the works of a number of Bulgarian archaeologists.<sup>57</sup>

The archaeo-magnetic studies of M. Kovačeva<sup>58</sup> contributed to clarifying the ancient ceramic production and dating of the production equipment, as well as the technological investigation carried out by V. Načeva<sup>59</sup> on red glaze on vessels found in the Roman ceramic centres in Butovo, Pavlikeni and Hotnica.

A great number of foreign scholars showed an interest in Roman ceramics found in the Bulgarian lands.

We should mention the article of the Polish archaeologist B. Rutkowski about Roman ceramics in Bulgaria and especially about the results from the explorations in the ancient ceramic centres near Hotnica and Butovo.<sup>60</sup> The investigation of G. Popilian about the ceramics from Oltenia<sup>61</sup> was very important for the identification of our ceramics abroad. In his work the Romanian scholar used abundant comparative material discovered in Bulgaria and found ceramic production from Butovo and Pavlikeni north of the Danube. The results from the archaeological explorations of the ceramic centres discovered on the territory of Nicopolis ad Istrum<sup>62</sup> are an important part of the studies of the German scholar I. Henning, based upon the tendencies in the development of ceramic production in the lands along the Middle and Lower course of the Danube during the 1st millennium A. D.

The survey of the investigations on Roman ceramics in Bulgaria carried out so far shows that there is a considerable number of works on this problem; many opinions and considerations have been stated and a great number of ideas of true merit have been suggested. All this provides a solid basis for a complete and detailed investigation of the problems of the provincial Roman ceramics, dating from the 2nd-4th century A. D., discovered in the Bulgarian lands.



## NOTES TO THE INTRODUCTION

- <sup>1</sup> СУЛТОВ Б., 1962, 30—34; 1969а, 12—24; 1969б, 479—488; 1972а, 177—182; 1972б, 21—29; 1976; 1977, 11—62; 1979, 13—21; SULTOV B., 1963, 46—47; 1979, 103—110; 1984, 184—190.
- <sup>2</sup> RUTKOWSKI B., 1963/64; 1963, 234—240; POPILIAN Gh., 1976, 50 sqq; HENNING J., 1977 181—206; POIRIEUX C., 139 1980, 72—73.
- <sup>3</sup> ИСТОРИЯ НА БЪЛГАРИЯ I, 1979, 304 сл.
- <sup>4</sup> ИВАНОВ Т., 1977, 16—29 with literature
- <sup>5</sup> ГЕРОВ Б., 1950, 19 сл.
- <sup>6</sup> Cf. Notes Nos. 37, 38 and 39 to Chapter One
- <sup>7</sup> ГЕРОВ Б., 1950/51 — 1951/52, 105 сл.; ТАЧЕВА М., 1968
- <sup>8</sup> ГЕРОВ Б., Op cit., 110 сл.
- <sup>9</sup> ИВИДЕМ, 115 сл.; СУЛТОВ Б., 1962, 30 сл.; Unpublished materials
- <sup>10</sup> ВЕЛКОВ В., 1959, 27 сл.
- <sup>11</sup> ШКОРПИЛ Х. и К., 1898, 168
- <sup>12</sup> ИВАНОВ Й., 1910, 178—188
- <sup>13</sup> СТЕФАНОВ Ст., 1928/29, 324
- <sup>14</sup> СТЕФАНОВ Ст., 1932/33, 396—397
- <sup>15</sup> КАЦАРОВ Г., 1930/31, 117 сл., обр. 124, 125
- <sup>16</sup> МИКОВ В., 1932—34, 108—121
- <sup>17</sup> ВЕЛКОВ Ив., 1937, 117—170
- <sup>18</sup> ВЕЛКОВ Ив., 1925, 250, обр. 64; 1926/27, 315—316; 1938, 259—280; 1940—42, 214—215; ИВИДЕМ, 183—189, 247 сл.
- <sup>19</sup> ЯВАШОВ А., 1930, 55—57
- <sup>20</sup> ДИМИТРОВ Д., 1931—34, 83—88
- <sup>21</sup> ЦОНЧЕВ Д., 1940/41, 71—73
- <sup>22</sup> БОТУШАРОВА Л., 1950а 101—135; 1950б 244—246; ЦОНЧЕВ Д., 1954, 222 сл.; ДЖАМБОВ Хр., 1954, 298; 1960, 50—52; ЖУГЛЕВ К., Й. КАЛУДОВА, 1963, 33—39; МОРЕВА Р., П. АНГЕЛОВА, 1968, 29—37; ДЕТЕВ П., 1971, 39—62
- <sup>23</sup> БОТУШАРОВА Л., 1956, 121—123, 127—129; 1960, 172—175
- <sup>24</sup> ЖУГЛЕВ К., 1965, 39—41; 1966, 57—61
- <sup>25</sup> ГЕРАСИМОВ Т., 1964, 180—184; БУЮКЛИЕВ Хр., 1962а, 50—55; 1962б, 45—51; 1973, 35—45; АЛАДЖОВ Д., 1965, 77—122; НИКОЛОВ Д. и Хр. БУЮКЛИЕВ 1967а, 19—31; 1967б 10—25
- <sup>26</sup> ГЕТОВ Л., 1969, 36—47; ТАБАКОВА Г., Л. ГЕТОВ, 1969, 29—40
- <sup>27</sup> БАЦОВА Е., 1960, 47—49; 1964, 52—58
- <sup>28</sup> КОЙЧЕВ Н., 1952, 366—368; 1958, 469—471
- <sup>29</sup> ЛАЗАРОВ М., 1962, 44—49
- <sup>30</sup> ТОНЧЕВА Г., 1961, 32—34; БАЛАБАНОВ П., 1979, 23—32
- <sup>31</sup> The author gratefully acknowledges the information, communicated by Senior Research Associate A. DIMITROVA.
- <sup>32</sup> ДИМИТРОВ Д. П., et al., 1963, 133—140; 1964, 217—235; 1965, 43—62; 1966, 99—114; 1967, 70—100; 1970, 55—71; 1974, 138—176; МАЕВСКИ К. et al, 1963, 115—132; 1964, 195—215; 1965, 31—41; 1967, 59—74; 1970, 73—89; 1974, 176—203; ПАРНИЦКИ-ПУДЕЛКО et al, 1966, 83—93
- <sup>33</sup> ДЖОНОВА Д., 1962, 30—37
- <sup>34</sup> МАШОВ С., 1975, 41—50
- <sup>35</sup> ТАБАКОВА — ЦАНОВА Г., 1964, 48—52; КОВАЧЕВА Т., 1968, 66—71; 1973, 49—54; 1977, 259—260; ГЕНОВА Е., 1964, 54—56

- <sup>36</sup> ВЪЛОВ В., 1965, 27—34; СУЛТОВ Б., 1968, 41—55; ПИСАРЕВ Ат., 1977, 201—204
- <sup>37</sup> ДИМОВА В., 1966, 11—28; 1970, 13—19
- <sup>38</sup> ОВЧАРОВ Д., 1965, 34—37; 1972, 46—55; 1979, 33—46;
- <sup>39</sup> ТОЧЕВА Г., *Op. cit.*, 60; МИНЧЕВ А. и П. ГЕОРГИЕВ, 1979, 101—111
- <sup>40</sup> ТОНЧЕВА Г., 1962, 55—60
- <sup>41</sup> ДЖОНОВА — МИТОВА Д., 1959, 79—80
- <sup>42</sup> ВЕЛКОВ Ив., 1932/33, 405
- <sup>43</sup> The author acknowledges the information communicated by J. ATANASOVA.
- <sup>44</sup> НИКОЛОВ Б., 1961, 51—52
- <sup>45</sup> ДЖОНОВА — МИТОВА Д., 1966, 38—44
- <sup>46</sup> ДИМИТРОВ Д. П. et al., 1970, 60—65, *puc.* 10—13
- <sup>47</sup> This kiln was unearthed by A. DIMITROVA.
- <sup>48</sup> This kiln was unearthed by B. SULTOV — unpublished.
- <sup>49</sup> The author acknowledges all the information provided by his colleagues Senior Research Associate D. NIKOLOV, who explored these kilns.
- <sup>50</sup> Acknowledgements to my colleague G. ALEXANDROV.
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