### STAMPED AMPHORA HANDLES FROM THE HELLENISTIC WINERIES AT ANCIENT BURGAZ

Dramatic changes had occurred in the social and economic aspects of the Eastern Aegean *koine* caused by the political stabilization and the advancement of the cargo ship building technology in the first quarter of 4<sup>th</sup> c. B.C.¹ Until this transformation period, the Knidians had utilized the arable lands of coastal plains in the territorium, and sustained with the semi-closed agrarian economic system. By the development of the sea-borne trade, the importance of wine production and its trade had increased, leading the Knidians to expand all over marginal agricultural lands mostly with terraces in the peninsula². In order to control the transit sea transportation of the region, the urban centre of the city-state of Knidos was moved to Cape Crio, which had two natural harbours³. Under these political and economic conditions, the territorium and the settlement pattern of Knidians had been re-structured all over the peninsula⁴.

Throughout antiquity, Knidos had an important role in wine production and export beginning with the 4<sup>th</sup> c. B.C.<sup>5</sup> Knidian wine was exported to the major market centres in the Eastern Mediterranean and the Black Sea. Due to the expanding export of wine, many amphora workshops varying in size developed across the Knidian territory during the Hellenistic period. After the hiatus of Knidian workshops in the course of the Mithridatic wars the Knidian production of amphorae never reached the level of the prior periods<sup>6</sup>. The extent and the scale of the amphorae production of workshops across the Knidian Peninsula were decreased in a descending trend till the Arab invasion in 7<sup>th</sup> c. A.D. which is a terminus for the abandonment of settlements and specialized agricultural infrastructure all over the Knidian landscape.

On the basis of the geographical distribution of the stamped amphora handles found at the centres of antiquity, it is certified that Knidos was one of the outstanding Greek city-states in the wine trade<sup>7</sup>. Towards the last quarter of the 19<sup>th</sup> c. A.D., this has been documented archaeologically by the interest of many researchers in the Knidian Peninsula. The amphora workshops of the Knidian Peninsula were firstly introduced to the scientific world by the salvage excavation at Mesudiye carried out by I. C. Love in 1973<sup>8</sup>. In 1980s, Prof. Dr. N. Tuna conducted a survey all over the Knidian Peninsula and investigated a number of amphora workshops on the peninsula<sup>9</sup>. Jean-Yves Empereur and Maurice Picon set forth that the Knidian Peninsula was important in the production of amphorae<sup>10</sup>.

The researches carried out on the Knidian Peninsula during 1980s identified 10 different workshops particularly located across the foothills of the terraced lands of vineyards that pro-

<sup>1</sup> Cook (1935), 137-153; Hornblower (1982), 1-105, 101 no. 180.

<sup>2</sup> Tuna (1990), 349-350.

<sup>3</sup> Bean-Cook (1952), 202; Bean-Cook (1957), 85-87.

<sup>4</sup> Tuna (1990), 348.

<sup>5</sup> Tuna (1990), 350.

<sup>6</sup> Tuna (1990), 351-352.

<sup>7</sup> Tuna (1990), 354.

<sup>8</sup> Love (1978), 1111-1133 pl. 357-360.

<sup>9</sup> Tuna (1984a), 357; Tuna (1984b), 125–131; Tuna (1986), 303–357.

<sup>10</sup> Empereur-Picon (1986), 103-126.

duced amphorae and all types of pottery, within which common ware was in majority<sup>11</sup>. All the amphora workshops were settled at the coastal plain which provided the opportunity of shortest route to reach coastal transfer points. Yet the location of Reşadiye workshops was different because of the close distance to the terraced areas of vineyards and their distinctive geological situation. Besides, they were situated near the streams which had more regular regime at that period.

The complex of workshops at Reşadiye was occupied to the extent of 1 km<sup>2</sup> of land. The results of field studies showed that the workshops were active throughout 1400 years, from the 6<sup>th</sup> c. B.C. till the 7<sup>th</sup> c. A.D. However the extent and the density of workshops and their spatial patterns show distinctive changes for each period<sup>12</sup>.

An archaeological rescue project for the site of Reşadiye had been realized by a collaboration of Turkish and French archaeologists under the supervision of Dr. Numan Tuna and Dr. Jean-Yves Empereur from 1986 to 1992. Excavations brought to light large sized pottery kilns, wetting tanks and cisterns associated with the production activity together with the layers of ceramic dump that has been gradually filled in. The excavation results revealed the organized activities of the potters in a sequence of uses and alterations attested by five kilns with associated installations, dumps and localities of workshops, over a dozen in numbers, disclosed by intensive archaeological surveys.

The result of archaeological field researches testified that the potters supplied amphorae, as well as other types of pottery according to changing demand of the local and export-based economy during the historical periods concerned. In the course of the economic boom of Knidian wine production, the pottery workshops seem to have produced for the fabricants who dealt with wine exporting under a state controlled organization. A variety of the Knidian stamps bear different marks (*boukranion*, trident, *kerykeion*, oar, *labrys*, bee, ivy, rose, crescent, star, etc.)<sup>13</sup> and some names of fabricants implying non-Knidian ones, different ethnic origins in large quantities (e.g. Skirtos, Mormis, Astragalos, Botrys, etc.)<sup>14</sup>. It may be assumed that the amphorae were stamped during the production process and the names most probably referred to the fabricants of the workshops rather than potters.

#### The site of ancient Burgaz

By the end of the 19<sup>th</sup> century, many scholars had taken an interest in Burgaz because of the architectural traces and potsherds seen in a great quantity on the surface<sup>15</sup>. Burgaz is situated 2 km to the northeast of Modern Datça Harbour. The archaeological site, which is surrounded by Classical fortification walls, located at the headland, Dalacak Cape identified as "Acropolis", has high priority of archaeological importance because of the extensive archaeological deposits dated to the Geometric, Archaic and Classical periods (fig. 1) in the context of the Territorium of Knidians. By recent archaeological and epigraphical evidence, the site of Ancient Burgaz in the Territorium of Knidians can probably be identified with Palaia Knidos<sup>16</sup>.

<sup>11</sup> Tuna (1990), 356-360.

<sup>12</sup> Empereur-Hesse-Tuna (1999), 105-115, Tuna (2003), 45-54.

<sup>13</sup> Empereur-Hesse-Tuna (1999), 105-115; see databank at http://www.amphoreus.org/

<sup>14</sup> Tuna-Empereur-Döğer-Desbat (1988), 46.

<sup>15</sup> Bean-Cook (1952), 173-176.

<sup>16</sup> Bean-Cook (1952), 171-212; Tuna-Atıcı-Sakarya-Koparal (2005), 517-531, footnotes 15-18.

Since 1993, the Centre of Research and Assessment for the Historic Environment, The Middle East Technical University (ODTÜ TAÇDAM) has been conducting the excavations in Burgaz. The main work of the Burgaz excavations focused on exploring the extent and chronology of occupation levels<sup>17</sup>. The archaeological deposits of the Classical period were extended and deeply buried over two metres below the existing topsoil, whereas the Hellenistic and Roman levels show some patches of graveyards with sporadic habitation areas in mixed uses of agricultural processing, workshops and storage activities. The production of amphorae for export of wine from the chora of Knidos is apparently indicated by the evidence of the economic development in the polis since the late 4<sup>th</sup> c. B.C. on the basis of expanded industrial quarters and harbour facilities at Burgaz.

The results of the Burgaz excavations attested that the abandonment of Burgaz came into being gradually since there were found some alterations in the spatial organization of houses from the third quarter of the  $4^{th}$  c. B.C. It is well documented that some spaces were reorganized as workshops (wine-oil, metal, weaving)<sup>18</sup>. After this gradual abandonment, the coastal area was redeveloped to serve for the storage of commercial goods and their loading onto cargo vessels during Hellenistic and Roman periods. The inland areas, on the other hand, were developed as shanty workshops for industrial-agricultural activities. One of these workshops is the winery with its presses and well-defined storage units which is located at the northern coastal fringe of Burgaz (fig. 2).

This paper aims to present the study and analysis of the stamped amphora handles found in the Winery and the recently excavated two workshops at the SE sector of Burgaz to identify the owners of the workshops with concern towards a broader understanding of the organization for the export-based wine production of Knidians.

#### The Hellenistic winery

The workshop with the established installations such as its presses, crushing floors and *dolia*, demonstrates the whole production process. The winery was firstly noticed and published with a sketch plan by Bean–Cook in the 1950s<sup>19</sup>. The excavation of this workshop was carried out during the 1995 and 2003 seasons. The 1995 excavation was primarily carried out at the spaces associated with crushing floors and lever presses representing its design features whereas the work of the 2003 excavation season aimed at exposing the entire plan of the workshop.

The winery is installed with two presses confirming the use of the lever press<sup>20</sup>. The well preserved presses with a diameter of 85cm were situated at the north-western side of the workshop. The grape juice obtained after the processing of the crushed remnants on the presses was collected in settler tanks and directed to the channel connecting to the *dolia*. To the west of the presses, a space (Aa) covered with lime cement mixed with sand/*horasani* floor (Z1), related with the crushing activity was established. The crushing floor's sloping side was leading to the gutter which was placed in the wall D4. The juice from the crushing floor Z1 and the presses was directed via channels to the *dolia* series which have a diameter of 140 to 172 cm and were situated

<sup>17</sup> Tuna-Atıcı-Sakarya-Koparal (2005), 517-531.

<sup>18</sup> Tuna-Atıcı-Sakarya (2010), 201-203.

<sup>19</sup> Bean-Cook (1952), 173.

<sup>20</sup> Forbes (1955), 108–111, 131–138; for the similar design features to compare with a winery, from Tyritake as type 3, seen in Savvonidi (1993), 227–235, fig. 2.

to the northeast side (Ac); and which are supported by a platform (Z3) made of rubble stones, delimiting the *dolia* series. Another crushing floor (Ab) is situated to the north of the presses. This floor (Z2) was composed of lime cement mixed with sand/*horasani* floor layer with inserted amphora handles by the *opus incertum* technique<sup>21</sup>. The crushing floor was sloped to the side of the wall D1 where a gutter was used to lead the juice to the tank in the courtyard to the west.

In the area Ad, located to the south of the *dolia*, the botanical sample of *Vitis vinifera L*. attested that the workshop was used to process grape<sup>22</sup>. Another sample taken from the crushing floor of Ab, comprised with grape seeds, verified that the workshop must have been operated as a winery at the time of its use.

The threshold of the entrance which served as one of the passages from the courtyard is located at the west side of the workshop. This space is identified as a storage room, due to the presence of the large number of *pithoi*, amphorae and grinding stones fragments<sup>23</sup>. The main entrance, on the other hand, was identified at the southern side of the roofed sector of the winery which has direct access to the courtyard enclosed by *peribolos* walls. On the northeast side of the workshop, semi-closed storage rooms were uncovered during the excavation. These rooms might have been used for storage, as well as domestic purposes implied by the Hellenistic fragments of storage vessels, common ware, fine ware and roof tiles. Adjacent to these rooms, alongside to the sea shore, the quay with large limestone blocks was presumably constructed as embankment to serve cargo vessels for loading processed products<sup>24</sup>.

#### Amphora stamps from the winery

The corpus of amphorae stamps comprises eight stamped amphora handles recovered from the field works of the 1995 and 2003 seasons of excavation at the winery. All items came from a closed archaeological complex of the Hellenistic winery. The archaeological deposits, however, were mostly in secondary context due to human interventions since antiquity. Four of them came from the Ab area, Z2 floor. Two of these stamps are rectangular (figs. 5, 6), and the other one is circular (fig. 7). The fourth is less preserved but might be a rectangular stamp (fig. 4). A monogram stamp (fig. 8) which is half preserved came from the northeast of the *dolium E3*, the area of Ac. Two stamps came from the infill of *dolium E3*. One of them is a circular (fig. 10) and the other is a rectangular stamp (fig. 11). The other circular stamp (fig. 9) came from the area of Ad.

The rectangular stamp (fig. 5) from the Z2 floor is dated to the late  $2^{nd}$  – early  $1^{st}$  c. B.C. (Period VI). The emblem on the stamp is a cluster of grapes that was placed in the group of "seal of firms or a pair of official" by V. Grace <sup>26</sup>. The stamp which bears a ligature (fig. 6) found in the area of Ab most probably comes from the matrices of Muhaltepe workshops in the Knidian Peninsula<sup>27</sup>. It is dated to the last quarter of the  $3^{rd}$  c. B.C. in Period II.

<sup>21</sup> Tuna (1996), 258-259.

<sup>22</sup> The analyses of the botanical sample were carried out by Assistant Prof. Emel Oybak Dönmez from Hacettepe University.

<sup>23</sup> Tuna (1996), 259.

<sup>24</sup> For a detailed analysis and discussion on the winery: Koparal-Tuna-İplikçi (2014), 93–107.

<sup>25</sup> Grace-Savvatioannou-Petropoulakou (1970),351, E187, pl. 59.

<sup>26</sup> Grace (1934), 265, no. 185.

<sup>27</sup> Empereur-Tuna (1988), 355, fig 7, no. 21.

The less preserved rectangular stamp (fig. 4) bears the names of the Duoviri Λάχης and Εὐπόλεμος<sup>28</sup>. It is dated to the late  $2^{nd}$  – early  $1^{st}$  c. B.C. Although the stamp is nearly rubbed out except for the symbol (fig. 7), the inscription for consideration can be inferred by the characteristics of the symbol. The stamp bears the names of the eponym  $\Delta \alpha \mu \acute{o} κριτος$  and the fabricant Ἐπίγονος<sup>29</sup>.

The half of a monogram stamp (fig. 8) from Ac is dated to the Period II. It is the part of  $\Pi AO$ ,  $\Pi A\Theta$  or E\PiI monogram the complete example of which can be seen in the matrices of the Reşadiye workshops. It is dated to the end of the  $4^{th}$  c. – beginning of the  $3^{rd}$  c. B.C. by the chronology made by V. Grace and revised by J.-Y. Empereur<sup>30</sup>.

Two stamped amphora handles are found in *Dolium* E3. One of them is a circular stamp (fig. 10). The stamp bears the name of the eponym Λέων with ligatured letters *tau* and *alpha* in the centre<sup>31</sup>. The other is a rectangular stamp (fig. 11)<sup>32</sup>. The Rhodian stamp consists of three lines of inscription. The stamp is dated to the Period IVa (c. 159/158 B.C.). The stamp bears the eponym name of Τιμούρροδος and the month name of Ύακίνθιος. The stamp reveals a new matrice for the eponym Τιμούρροδος.

To the south of the *dolia* in the deposits of Ad, a circular stamp was found (fig. 9). The symbol of the stamp is not very well preserved; therefore the identification is not clear. It might be the forepart of a lion. The surrounding inscription is  $\dot{\epsilon}\pi\dot{\imath}$   $\Delta\alpha[\mu\kappa\rho(\tau\sigma)]$ . In addition to the eponym name  $\Delta\alpha\mu\dot{\kappa}\rho$ itos, the stamp bears the fabricant name Έπίγονος. The eponym is dated to the Period VI (late  $2^{nd}$  – early  $1^{st}$  c. B.C.)<sup>33</sup>.

The analysis of the amphora stamps from the winery

According to the stamped amphora handles found, it is testified that the workshop was in use from the first quarter of the 3<sup>rd</sup> c. B.C. and until the second half of the 1<sup>st</sup> c. B.C. When we take into consideration the findings and related evidence derived from the filling debris within which the stamped amphora handles were found, the material is dated to the 2<sup>nd</sup> c. B.C. The materials from crushing floor (Ab) composed of lime cement mixed with sand/horasani with inserted amphora handles by opus incertum technique are dated to the last quarter of the 3<sup>rd</sup> c. B.C., 2<sup>nd</sup> c. B.C., and the first half of the 1<sup>st</sup> c. B.C. The amphora stamps found inserted on the floor are evidence of terminus post quem to date the basin to the period VII of the Knidian amphora stamp chronology. The platform composed of rubble stones in the area of Ac limiting the dolia does not have much material. The monogram stamp found here is dated to the 280–240 B.C. The study in dolia yielded mixed materials from the 3<sup>rd</sup> and 2<sup>nd</sup> c. B.C. The scanty material from the west side of the dolia (Ad) is dated to the last quarter of the 3<sup>rd</sup> c. and 2<sup>nd</sup> c. B.C.

Based on the archaeological evidence recovered by excavations and the results of the analysis of the ceramics, the winery was intensively used all through the  $2^{\rm nd}$  c. B.C. Taking into consideration of all the materials together with the amphora stamps, it can be assumed that the workshop activity began in the first quarter of the  $3^{\rm rd}$  c. B.C., continued intensively during the  $2^{\rm nd}$  c. B.C., and

<sup>28</sup> Communication with Gonca Cankardeş-Şenol.

<sup>29</sup> Grace-Savvatioannou-Petropoulakou (1970), 344, E158.

<sup>30</sup> Tuna-Empereur (1990), 558-565, fig. 7; Tuna-Empereur-Picon-Döğer (1987),48-50, fig. 2.

<sup>31</sup> Jöhrens (1999), 111, no. 307.

<sup>32</sup> Cankardeş-Şenol (2017), vol. 4, 131–132.

<sup>33</sup> Grace-Savvatioannou-Petropoulakou (1970), 344, E158.

ceased to function in the mid of the  $1^{st}$  c. B.C. Moreover, as an evidence by implication on the amphora stamps found, the winery seems to have served various fabricants during the lifetime of wine-making activities from the beginning  $3^{rd}$  c. B.C. till the mid of  $1^{st}$  c. B.C.

The workshops at the SE sector of Burgaz

In the pursuit of understanding the Classical housing pattern in SE sector, the area between the late  $4^{th}$  century fortification wall and the open public area in the west, the Hellenistic terrace wall (D441) and the associated installations was recovered in the seasons of 2008–9. The excavation results permit us to identify at least two workshops for winemaking (fig. 3), and perhaps the southern limit of the third one. The measurable extent of Workshop A in the middle is approximately about 10 x 15 m; moreover, two plastered basins probably used for crushing with dimensions of 1 x 1.6 m and 1 x 2 m are also identified at the north-east part of the workshop. The other workshop in the southern position (Workshop B), two plastered basins with dimensions of 1 x 1.60 m and 0.8 x 1.6 m, further to the northwest the third basin measured as 0.8 x 1.75 m are identified as well. According to their design features, such as the placement of plastered tank series, lever screw presses were used in those wineries<sup>34</sup>, which denotes the application of more advanced technological innovations in comparison with the Hellenistic winery mentioned above.

The open area rests between the workshops and the Hellenistic terrace wall (D441) identified with pits of silted material probably due to drainage from the workshops. The extensive dump of workshops mixed with earlier materials along the Hellenistic terrace wall is localized at the heaps extending 32 m in length and 7 m in width. Due to the Roman interventions at the dump, the upper part of the Hellenistic deposits mixed with the earlier materials had been moved to the west of the Hellenistic terrace wall (D441), however, primary contexts of the Hellenistic deposits reveal that the majority of potsherds belong to amphorae and common ware. At the northern part of the workshop at the north, a floor with intact amphorae dated to the 2<sup>nd</sup> half of the 3<sup>rd</sup> c. B.C. was recovered implying a storeroom, but in-filled by later alterations.

Analysis of the amphora stamps from the workshops at the SE sector

The stamped amphora handles recovered from the context of Hellenistic workshops over the course of two seasons of excavation of the SE sector consist of 22 items. However, 6 of them have been examined so far to be included in this paper, further studies for the final publication will commence. Three of them are selected (figs. 15, 16, and 17) from the Hellenistic dump located to the east side of the Hellenistic wall, and the others (figs. 12, 13, and 14) are from the mixed deposits of the workshops.

The amphora stamps (figs. 15, 16, and 17) recovered from the upper level of the Hellenistic deposit at SE.12.7.B1 represent the periods II and III of the Knidian amphora stamp chronology which denotes the activities of workshops serving different fabricants for the wine-making business. The monogram stamp (fig. 15) as evidence from homeland – not only from amphorae production but also from the wine-making site – adds new material to the corpus of the region reflecting the beginning era of the Knidian stamping system to control the economic boom of

<sup>34</sup> Compare with the fourth type of winery from Mirmekion in Savvonidi (1993), 230–230, fig. 4; Forbes (1955), 108–111, 131–138.

Knidian wine production<sup>35</sup>. A stamp of the Rhodian fabricant (fig. 16) bears witness to the Rhodian affiliation or hegemony on the Knidian wine-making system. The names on the stamped amphora (fig. 17) as Πολιούχης and Νικασίβουλος are also known from the matrices of deposits of the Middle Stoa and Stoa of Attalos at Athens<sup>36</sup>.

Moreover, the stamp (fig. 12) found at the peribolos wall debris of Workshop A implies wine-making activities during the period VII. Similarly, the stamps (figs. 13 and 14) found on the deposits lying on the platform backyard of Workshops A and B certify wine-making activities that had been carried out during the last period of the Knidian stamping system.

#### Concluding remarks

Last but not least, the new evidence from Burgaz related to wine-making organization in the Knidian Territorium suggesting that the Hellenistic wineries are likely to have served different fabricants of wine production, implies a similarity to the case of the potters' workshops involvement in the organization of the 'wine business'. This argument that interprets the evidence of wineries in Burgaz as serving different fabricants in a management model of hyper coherent nature may be falsified by possible alternative scenarios. The important point is that the new evidence accumulating through the recent researches would be expected to deepen our understanding of the wine-making organization in the past.

#### CATALOGUE

# Fig. 4 Burgaz Corpus no. 53 (Inv. No. BZ.95.ZA.Ab.1.6) Rectangular inscription of three lines, broken x 1.9 cm. Clay: 2,5 YR 6/6 light red.

['Ανδρῶ]ν [Λάχητο]ς [Εὐπολέ]μου

KT 1592. The stamp bears the names of the Duoviri Λάχης and Εὐπόλεμος. The *sigma* in the second line is lunate. It is dated to Period VI.

## Fig. 5 Burgaz corpus no. 56 (Inv. No. BZ.95.ZA.Ab.1.8) Rectangular, three lines of inscription, 3.9 x 2.4 cm. Clay: 5 YR 7/6 reddish yellow.

['Α]νδρῶ[ν] ['Αρι]σ grape cluster τοβ[ούλου] [Με]λάν[τας]

<sup>35</sup> Empereur-Picon (1986), 103–126; Tuna (1990), 347–371; Empereur-Hesse-Tuna (1999), 105–115.

<sup>36</sup> Grace (1985), 13, 32.

KT 1531. The stamp bears the names of the Duoviri ἀριστόβουλος and Μελάντας. The inscription is not well preserved. The symbol is a cluster of grapes. It is dated to Period VI.

#### Fig. 6

Burgaz Corpus no. 57 (Inv. No. BZ.95.ZA.Ab.1.9) Rectangular, 1.4 x 1.3 cm. Clay: 10 YR 8/4 very pale brown.

 $KP\Lambda IM$ 

The letters *kappa*, *rho*, *lambda*, *iota*, and *my* are identified on the stamp and all the letters are ligatured. It is dated to the Period II.

#### Fig. 7

Burgaz Corpus no. 60 (Inv. No. BZ.95.ZA.Ab.1.11) Circular. Clay: 5 YR 7/3 pink.

[Ἐπὶ Δαμοκρίτου Ἐπιγόνου] forepart of lion

KT 556. The stamp bears the names of the eponym  $\Delta \alpha \mu \acute{o} κριτος$  and the fabricant Ἐπίγονος. The inscription is nearly completely rubbed out except for the symbol. The style of the characteristic of the symbol allows an interpretation of the inscription. It is dated to the Period VI.

#### Fig. 8

Burgaz Corpus no. 59 (Inv. No. BZ.95.ZA.Ac.1) Square, broken. Clay: 5 YR 6/4 light reddish brown.

perhaps ΠΑΟ, ΠΑΘ or ΕΠΙ

The stamp cannot be identified since it is broken. It might be part of a  $\Pi$ AO monogram the complete example of which can be seen in the matrices of the Reşadiye workshops. It is dated to the end of the  $4^{th}$  c. – beginning of the  $3^{rd}$  c. B.C.

#### Fig. 9

Burgaz Corpus no. 54 (Inv. No. BZ.95.ZA.A.d.1.16) Circular, R. 3.0 cm. Clay: 5 YR 6/4 light reddish brown.

'Επὶ Δα[μοκρίτου 'Επιγόνου] forepart of lion

KT 556. Identical to fig. 7. The stamp bears the names of the eponym  $\Delta$ αμόκριτος and the fabricant Ἐπίγονος. It is dated to the Period VI.

#### Fig. 10

Burgaz Corpus no. 55 (Inv. No. BZ.95.ZA.Ae.1)

Circular, R. 2.2 cm. Clay: 5 YR 6/4 light reddish brown.

```
 Έπὶ [Λέοντος] retr. TA
```

KT 1433. The stamp bears the name of the eponym  $\Lambda \dot{\epsilon} \omega \nu$ . Ligatured letters (tau and alpha?) are in the centre. It is dated to the Period III.

#### Fig. 11

```
Burgaz Corpus no. 61 (Inv. No. BZ.95.ZA.Ae.2)
Rectangular, inscription of three lines, 5.0 x 1.6 cm. Clay: 5 YR 7/3 pink.
```

```
['Ε]πὶ Τι[μουρ]-
ρόδου ['Υ]α-
κυνθίου
```

```
Fig. 12
```

```
Burgaz Corpus no. 103 (Inv. No. BZ.08.SE.10.8.C6A.3) Oval, 2.1 \times 1.7 cm. Clay: 2,5 \times 7/6 light red.
```

N retr.

Rhodian Peraea. The letter N is retrograde. It is dated to the Period Ia of the Rhodian stamp chronology.

#### Fig. 13

```
Burgaz Corpus no. 102 (Inv. No. BZ.08.SE.11.8.A4.3)
Rectangular, 2.5 x 1.9 cm. Clay: 2,5 YR 7/6 light red.
```

```
\Sigma\omega ? or M\omega ?
```

The letters on the stamp are probably sigma and omega or my and omega. This abbreviation  $\Sigma\Omega$  is known from Reşadiye, from the sector 25.1. It is on an early Knidian amphora. It can be a different type of stamp referring to the same person. The stamp from Burgaz is suggested to the date  $3^{rd}$  c. B.C.

#### Fig. 14

```
Burgaz Corpus no. 104 (Inv. No. BZ.08.SE.11.8.A4.4)
Oval, 2.0 x 1.6 cm. Clay: 2,5 YR 7/6 light red.
```

[...]

Rhodian Peraea. The stamp is nearly completely rubbed out so that the monogram is not identified. It is dated to the Period Ia of the Rhodian stamp chronology.

#### Fig. 15

Burgaz Corpus no. 196 (Inv. No. BZ.09.SE.12.7.B1.3) Rectangular, 1.2 x 2.6 cm. Clay: 5 YR 6/8 reddish yellow.

```
\Lambda v or \Gamma \lambda (retr.)?
```

KT 5023. The stamp bears an abbreviated name beginning with  $\Lambda \upsilon$ - or  $\Gamma \lambda$ - in retrograde<sup>37</sup>. It is dated to the Period II.

#### Fig. 16

Burgaz Corpus no. 210 (Inv. No. BZ.09.SE.12.7.B1.4) Circular, R. 2.9 cm. Clay: 5 YR 7/8 reddish yellow.

```
Παυσανίας vac. rose
```

The stamp bears the name of the eponym  $\Pi\alpha \nu \sigma \alpha \nu i \alpha \zeta$  II. It is dated to c. 203 – c. 199 B.C.<sup>38</sup> The name on the stamp is in the nominative form.

#### Fig. 17

Burgaz Corpus no. 198 (Inv. No. BZ.09.SE.12.7.B1.10)

Rectangular, inscription of three lines, 1.9 x 3.3 cm. Clay: 5 YR 6/4 light reddish brown.

```
Ἐπὶ Πολιού-
χευς Νικα- anchor pointing down
σιβούλου
```

KT 1071. The stamp bears the name of the eponym Πολιούχης and the fabricant Νικασίβουλος. It is dated to the Period III.

#### **BIBLIOGRAPHY**

Bean-Cook (1952): Bean (G. E.) - Cook (J. M.), The Cnidia, BSA 47 (1952), p. 171-212.

Bean-Cook (1957): Bean (G. E.) - Cook (J. M.), The Carian Coast III, BSA 52 (1957), p. 58-146.

Cankardeş-Şenol (2015): Cankardeş-Şenol (G.), Early Cnidian Amphora Exports to Alexandria, Egypt, in E. Laflı and S. Patacı (eds.), *Studies on the Archaeology of Anatolia*. BAR International Series 2750, Oxford (2015), p. 169–192.

Cankardeş-Şenol (2017): Cankardeş-Şenol (G.), *Lexicon of Eponym Dies on Rhodian Amphora Stamps Volume 4, Eponym T to X,* Alexandria (2017).

Cook (1935): Cook (J. M.), The Greeks in Ionia and the East, London (1935).

Empereur–Picon (1986): Empereur (J.-Y.) – Picon (M.), A la recherche d'amphores, *BCH Suppl.* XIII, Paris (1986), p. 103–126.

<sup>37</sup> Cankardeş-Şenol (2015), 173–174 no. 5 with footnotes 25–28; 181 no. 28; 185 no. 37.

<sup>38</sup> Cankardeş-Şenol (2017), vol. 3, 199, matrix: RE- $\Pi$ AY $\Sigma$ ANIA $\Sigma$  02-005.

- Empereur-Tuna (1988): Empereur (J.-Y.) Tuna (N.), Zenon de Caunos et Lepave de Serçe Limanı, BCH 112 (1988), p. 341–357.
- Empereur-Tuna (1989): Empereur (J.-Y.) Tuna (N.), Hiérotélès, potier rhodien de la Pérée, BCH 113 (1989), p. 277–299.
- Empereur-Hesse-Tuna (1999): Empereur (J.-Y.) Hesse (A.) Tuna (N.), Les ateliers d'amphores de Datça, péninsule de Cnide, in Y. Garlan (ed.), *Production et commerce des amphores anciennes en Mer Noire*, Aix en Provence (1999), p. 105–115.
- Forbes (1955): Forbes (R. J.), Studies in Ancient Technology, Vol. II, Leiden (1955).
- Grace (1934): Grace (V. R.), Stamped amphora handles found in 1931–1932, *Hesperia* 3/3 (1934), p. 197–310.
- Grace-Savvatioannou-Petropoulakou (1970): Grace (V. R.) Savvatioannou Petropoulakou (M.), Les timbres amphoriques grecs, *EAD* XXVII, L'ilot de la maison des comédiens, Paris (1970), p. 277-382.
- Grace (1985): Grace (V. R.), The middle stoa dated by amphora stamps, *Hesperia* 54/1 (1985), p. 1–54.
- Hornblower (1982): Hornblower (S.), Mausolus, Oxford (1982).
- Jöhrens (1999): Jöhrens (G.), Amphorenstempel im Nationalmuseum von Athen, Mainz (1999).
- Koparal–Tuna–İplikçi (2014): Koparal (E.) Tuna (N.) İplikçi (A. E.), Hellenistic wine press in Burgaz/Old Knidos, *METU JFA* 2014/2 (2014), p. 93–107.
- Love (1978): Love (I. C.), A brief summary of excavations at Knidos, 1967–1973, in E. Akurgal (ed.), *The Proceedings of the Xth International Congress of Classical Archaeology*, Ankara İzmir 23–30/IX/1973, II (1978), p. 1111–1133 pl. 357–360.
- Savvonidi (1993): Savvonidi (N.), Wine-making on the northern coast of the Black Sea in antiquity, *BCH Suppl.* XXVI (1993), p. 227–235.
- Tuna (1984a): Tuna (N.), Datça Yarımadası Yüzey Araştırmaları, 1981, *IV. Kazı Sonuçları Toplantısı*, Ankara (1984), p. 357–367.
- Tuna (1984b): Tuna (N.), Datça Yarımadası Yüzey Araştırmaları, 1982, *I. Araştırma Sonuçları Toplantısı*, Ankara (1984), p. 125–131.
- Tuna (1986): Tuna (N.), Ionia ve Datça Yarımadası Arkeolojik Yüzey Araştırmaları, 1984, III. Araştırma Sonuçları Toplantısı, Ankara (1986), p. 303–357.
- Tuna-Empereur-Picon-Döğer (1987): Tuna (N.) Empereur (J.-Y.) Picon (M.) Döğer (E.), Rapport préliminaire de la prospection archéologique turco-française des ateliers d'amphores de Reşadiye-Kiliseyanı, sur la péninsule de Datça (15 juillet 3 août 1986), *Varia Anatolica* I (1987), p. 47–52.
- Tuna-Empereur-Döğer-Desbat (1988): Tuna (N.) Empereur (J.-Y.) Döğer (E.) Desbat (A.), Rapport sur la première campagne de la fouille franco-turque de Reşadiye (péninsule de Cnide), juillet 1988, Anatolia Antiqua 32, p. 38–49.
- Tuna (1990): Tuna (N.), Datça Yarımadası'nda Hellenistik Dönem Amphora Üretim Merkezleri, X. Türk Tarih Kongresi (1990), p. 347–371.
- Tuna-Empereur (1990): Tuna (N.) Empereur (J.-Y.), Datça/Reşadiye Antik Seramik Atölyeleri Kazısı, 1988, VII. Araştırma Sonuçları Toplantısı, Ankara (1990), p. 555–567.
- Tuna (1996): Tuna (N.), Burgaz Arkeolojik Kazıları, 1995, XVIII. Kazı Sonuçları Toplantısı II, Ankara (1996), p. 255–272.
- Tuna (2003): Tuna (N.), Datça/Reşadiye Seramik Atölyelerinde Hellenistik Dönem Günlük Seramik Üretimi, in C. Abadie-Reynal (ed.), *Varia Anatolica* XV, Les céramiques en Anatolie aux époques hellénistique et romaine, İstanbul (2003), p. 45–54.

Tuna-Atici-Sakarya-Koparal (2009): Tuna (N.) – Atici (N.) – Sakarya (İ.) – Koparal (E.), The preliminary results of Burgaz excavations within the context of locating Old Knidos, in F. Rumscheid (ed.), *Die Karer und die Anderen. Internationales Kolloquium an der Freien Universität Berlin* 13. bis 15. Oktober 2005, Bonn (2009), p. 517–531.

Tuna-Atıcı-Sakarya (2010): Tuna (N.) - Atıcı (N.) - Sakarya (İ.), Burgaz Yerleşimindeki M.Ö. 4.-3. Yüzyıl Zeytinyağ ve Şarap Atölyeleri Üzerine Değerlendirmeler, in Ü. Aydınoğlu (ed.), Olive Oil and Wine Production in Anatolia during Antiquity, İstanbul (2010), p. 199–212.

#### Özet

1993 yılından beri Eski Burgaz'da devam eden arkeolojik araştırmalar İ.Ö. 8. yüzyıla kadar uzanan Arkaik/Klasik Knidos'un yerleşim katlarını günyüzüne çıkarmıştır. Sit bölgesinden arkeolojik bulgular yerleşim alanlarının İ.Ö. 330'lardan sonra terkedilmiş olduğunu göstermiştir. Ancak, yerleşim bütünüyle terkedilmemiş, fakat dağınık atölyeler ve liman kullanışlarına dönüşmüştür. Hellenistik atölyelerin presler, ezme düzlemleri ve dolia gibi üretim sürecinin tümünü gösteren şarap üretimine ait iyi korumuş tesisatları 1995–2009 yılları arasında yapılan arazi çalışmalarında bütünüyle kazılmıştır.

Ele geçen amphora mühürlerinden edinilen bulgulara göre, Burgaz NE sektöründe bulunan şarap atölyesinin İ.Ö. 3. yüzyıl başlarından İ.Ö. 1. yüzyıl ortalarına kadar devam eden bazı üreticilerin şarap yapımı faaliyetlerine hizmet ettiği anlaşılmaktadır. Diğer bir çalışma alanı olan SE sektöründe ise, Hellenistik atölyelerin konteksinde ele geçen amphora mühürleri de benzer sonuçlara işaret eden bilgiler vermiştir.

İzmir Middle East Technical University, TACDAM, METU Museum, Ankara Numan Tuna İlham Sakarya

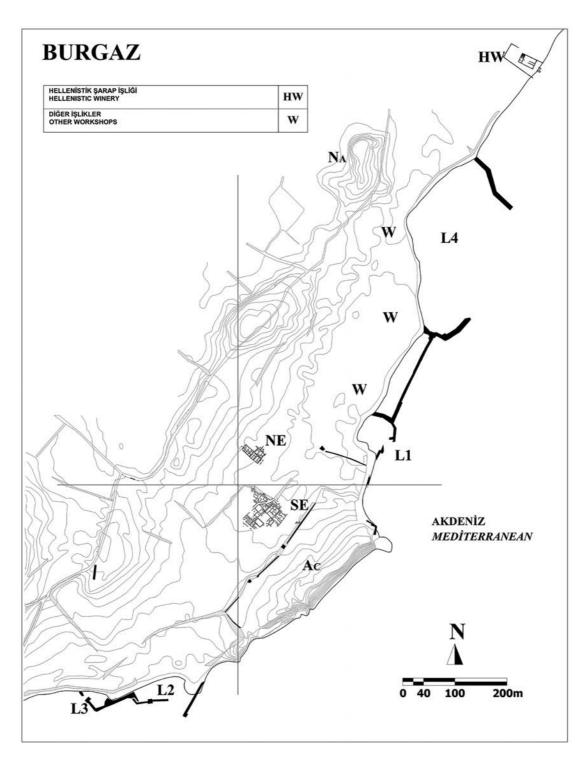


Fig. 1. The site of Burgaz

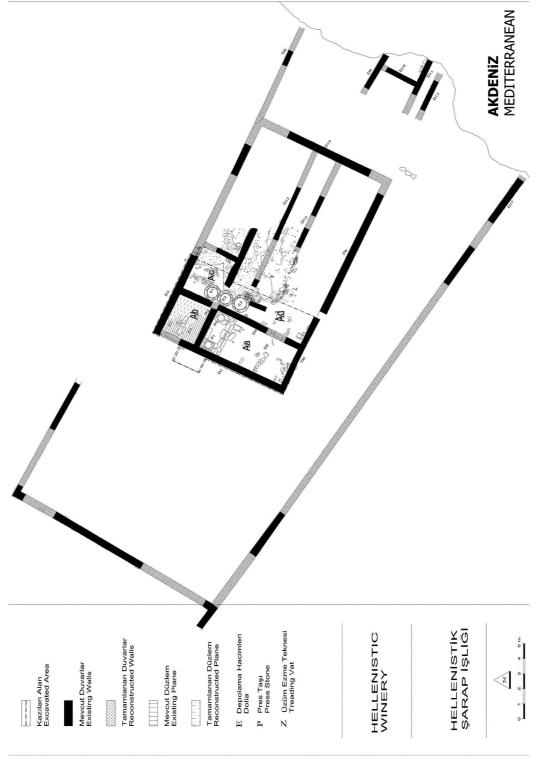


Fig. 2. The Hellenistic winery

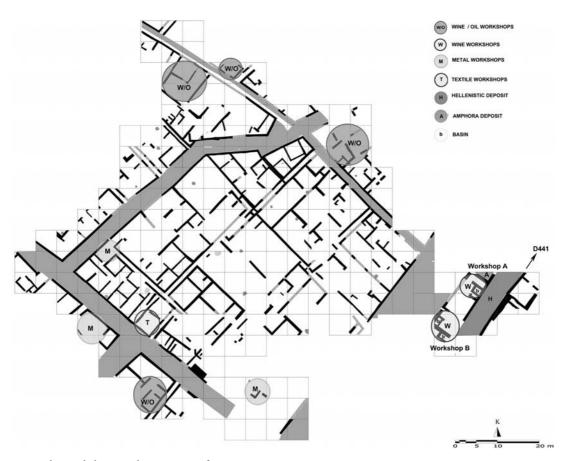


Fig. 3. The workshops at the SE sector of Burgaz  $\,$ 



Fig. 4. BZ.95.ZA.Ab.1.6



Fig. 5. BZ.95.ZA.Ab.1.8





Fig. 7. BZ.95.ZA.Ab.1.11



Fig. 8. BZ.95.ZA.Ac.1



Fig. 9. BZ.95.ZA.A.d.1.16





Fig. 10. BZ.95.ZA.Ae.1

Fig. 11. BZ.95.ZA.Ae.2



Fig. 12. BZ.08.SE.10.8.C6A.3



Fig. 13. BZ.08.SE.11.8.A4.3

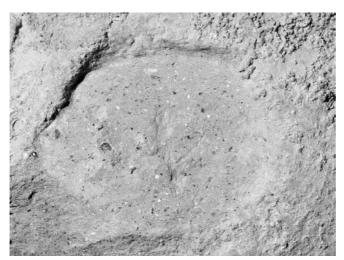


Fig. 14. BZ.08.SE.11.8.A4.4



Fig. 15. BZ.09.SE.12.7.B1.3



Fig. 16. BZ.09.SE.12.7.B1.4

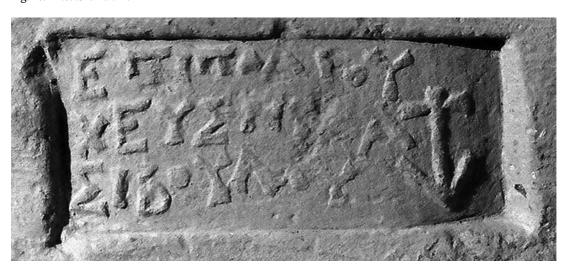


Fig. 17. BZ.09.SE.12.7.B1.10