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**Abstract.** The late Roman fine pottery presented in this article was discovered after the archaeological research carried out in the late Roman fortress of Argamum between 1998 and 2001, in the Basilica 2 and Basilica 1 areas, by F. Topoleanu and I. Vizauer. A sample of 84 ceramic fragments was analysed, the typology being based on the geographical area of origin. The 84 shards were divided into three groups: North African pottery, wares made in Asia Minor and wares produced in the Black Sea Basin. The present article represents a first step in the knowledge of Argamum's archaeological realities, both from the perspective of tableware and the historical evolution of the site, especially during the last two centuries of its existence.

Rezumat. Ceramica fină romană târzie prezentată în acest articol a fost descoperită în urma cercetărilor arheologice efectuate în fortificația de la Argamum între anii 1998 și 2001, în zona Bazilicii II și a Bazilicii I, de către F. Topoleanu și I. Vizauer. A fost analizat un lot format din 84 de fragmente ceramice, tipologia fiind realizată pe baza ariei geografice de proveniență a acestora. Cele 84 de exemplare au fost împărțite în trei grupe: veselă nord-africană, veselă produsă în Asia Mică și veselă produsă în bazinul pontic. Articolul de față reprezintă un prim pas în cunoașterea realităților arheologice de la Argamum, atât din perspectiva ceramicii de masă cât și din perspectiva evoluției istorice a sitului, în special în ultimele două secole ale existenței sale.

**Keywords**: Red Slip Pottery, Late Antiquity, Western Black Sea, Argamum.

The fortification of Argamum is located at Cape Dolojman, on a rocky promontory on the shores of Lake Razelm. In ancient times the settlement had direct access to the Black Sea, because the current lagoon was a former golf. The nearest modern settlement is the locality of Jurilovca, which is about eight kilometres west. The oldest evidences of habitation found in the site's perimeter are dated in the first Iron Age<sup>2</sup>. The urban settlement was founded by Greek colonists from Miletus, the toponym associated with it being *Orgame*<sup>3</sup>, which in Roman times is Latinised into *Argamum*. The existence of the fortress ceases in the context of the

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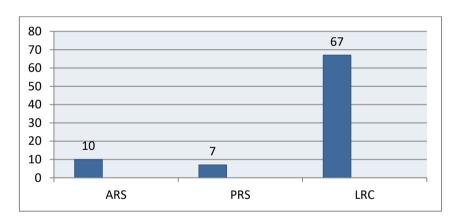
<sup>&</sup>lt;sup>2</sup> AILINCĂI, MIRIŢOIU, SOFICARU 2006.

<sup>&</sup>lt;sup>3</sup> MĂNUCU-ADAMEȘTEANU 1992.

diminution of political power of the Late Roman Empire at Lower Danube at the beginning of the 7<sup>th</sup> century<sup>4</sup>.

Archaeological research at Argamum began in 1965, led by Maria Coja and continues today. Over the years more areas of the city have been investigated<sup>5</sup>, but unfortunately in terms of publishing the results, especially those related to the Roman times, is deficient. About roman ceramic discoveries resulting from archaeological research the only results published so far are about discoveries outside the fortified perimeter, the Extramuros research area. One of them is about amphorae<sup>6</sup> and the other is dedicated to kitchenware<sup>7</sup>.

The late Roman fine pottery presented in this article was discovered after the archaeological research carried out in the late Roman fortress of Argamum between 1998 and 2001, in the Basilica 2 and Basilica 1 areas, by F. Topoleanu and I. Vizauer<sup>8</sup>. A sample of 84 ceramic fragments was analysed, the typology is based on the geographical area of origin. The 84 shards were divided into three groups: North African pottery, wares made in Asia Minor and wares produced in the Black Sea Basin. From the point of view of the forms, the ceramic fragments were framed based on the Hayes's typology for the wares from North Africa and Asia Minor<sup>9</sup>, while for the wares from the Pontic basin was used the typology drown by T.M. Arsen'eva and K. Domzalski<sup>10</sup>.



Graph 1. The pottery sample from Argamum — the workshops

<sup>&</sup>lt;sup>4</sup> MĂNUCU-ADAMEȘTEANU 2001.

<sup>&</sup>lt;sup>5</sup> Concerning archaeological research in the Basilica 2 area, a preliminary report was published by F. TOPOLEANU (1999).

<sup>&</sup>lt;sup>6</sup> PARASCHIV 2006.

<sup>&</sup>lt;sup>7</sup> HONCU 2016.

<sup>&</sup>lt;sup>8</sup> The fine ceramics for this article were given to us by F. Topoleanu,.

<sup>9</sup> HAYES 1972; 2008.

<sup>&</sup>lt;sup>10</sup> ARSEN'EVA, DOMZALSKI 2002.

## African Red Slip

Of the 84 ceramic fragments from Argamum, ten are imported from North Africa. Forms discovered in the ancient settlement from Jurilovca circulated in the chronological range between the half of the 5th century and the end of the 6th century.

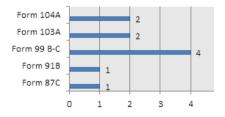
A ceramic fragment from the rim and the upper part of the bowl was discovered inside Basilica 2 and features the characteristic of Hayes Form 87, variant C. In West-Pontic area Form 87 is present at Topraichioi<sup>11</sup>, Halmyris<sup>12</sup>, Ibida<sup>13</sup> and Capidava<sup>14</sup>. The shard discovered in Basilica 2 dates back to the first half of the sixth century.

Form Hayes 91 is present in our sample trough a ceramic fragment from the rim and the upper part of the body of a small bowl, characteristic to variant B. Apart from the Argamum specimen, Form 91 is little known in Dobrogea, analogies are encountered at Histria, where three shards were discovered inside the Episcopal Basilica<sup>15</sup> and Ibida, where such type of pottery were found in Extramuros West 3 area<sup>16</sup> and Sector X area<sup>17</sup>. The Form 91, variant B is dated in the second half of the 5<sup>th</sup> and the beginning of the 6<sup>th</sup> century.

At Argamum, Hayes Form 99 is the most common form of North African red slip ceramics, a specific situation for all the late Roman settlements in the Western Black Sea. Four pottery fragments discovered between 1998 and 2001 within Basilica 2 belong to Form 99. Two of them are specific to the variant B and the other two have the features of variant C. The Form

99 is present at Histria<sup>18</sup>, Capidava<sup>19</sup>, Halmyris<sup>20</sup>, Tropaeum Traiani<sup>21</sup>, Ibida<sup>22</sup> and is dated to the 5<sup>th</sup> century.

Two pottery shards discovered inside Basilica 2 presents the characteristics specific to Hayes Form 103, variant A, dated during the sixth century. In the Western Black Sea area the presence of this type of ceramics are certified in settlements like Capidava<sup>23</sup>, Halmyris<sup>24</sup> and Tropaeum Traiani<sup>25</sup>.



Graph 2. African Red Slip at Argamum

<sup>&</sup>lt;sup>11</sup> OPAIŢ 1985, 158, fig.4/9.

<sup>&</sup>lt;sup>12</sup> TOPOLEANU 2000, 73-74, pl.18/151-152.

<sup>13</sup> MOCANU 2011, 228, pl.2/13.

<sup>&</sup>lt;sup>14</sup> OPRIŞ 2003, 145-146, pl.50/339, pl.54/340.

<sup>&</sup>lt;sup>15</sup> SUCEVEANU 2007, 208-209, pl.75/29-31.

<sup>&</sup>lt;sup>16</sup> MOCANU 2011, 228, pl.2/4.

<sup>&</sup>lt;sup>17</sup> MOCANU 2014, 287, fig.2/4.

<sup>&</sup>lt;sup>18</sup> SUCEVEANU 1982, 97, fig.14/8; 2007, pl.75/32-35.

<sup>&</sup>lt;sup>19</sup> COVACEF 1999, 164, pl.15/1a-b.

<sup>&</sup>lt;sup>20</sup> TOPOLEANU 2000, 75-76, pl.18/157-160.

<sup>&</sup>lt;sup>21</sup> GĂMUREAC 2009, 267, pl.13/112.

<sup>&</sup>lt;sup>22</sup> MOCANU 2014A, 151-152, fig.3/13.

The last two north-African shards belong to the Hayes Form 104, variant A. The first one was found inside Basilica 2, while the last one was discovered around Basilica 1. Like Form 99, Form 104 circulated on large areas in the west-Pontic basin, being encountered at Tropaeum Traiani<sup>26</sup>, Halmyris<sup>27</sup>, Capidava<sup>28</sup> or Ibida<sup>29</sup>.

## Pontic Red Slip

Although the presence of ceramic produced in Pontic workshop is quantitatively reduced in the Western Black Sea, in the last decade a series of samples have been identified in several late Roman settlements in northern Dobrogea. In the case of Argamum fine ceramics, Pontic workshops are represented by two distinct forms.

A ceramic fragment of the rim and the upper third of a small bowl belong to Form 4. As far as we know the specimen from Argamum is the first attestation of Form 4 in Dobrogea. Analogies for the wares specific to Form 4 are known at Tanais, where it appears in archaeological contexts dated between the end of the 4th century and the middle of the 5th century<sup>30</sup>.

Form 7 of the Pontic workshops along with Form 3 is the most common in the Western Black Sea basin. In the sample at Argamum, we find six specimens, two of them found inside Basilica 2, and the other six in the vicinity of Basilica 1. In Dobrogea similar wares appear at Topraichioi<sup>31</sup> or Ibida<sup>32</sup>. In the north of the Black Sea, analogies are known in Tanais, where form 7 is dated in the second half of the 5<sup>th</sup> century<sup>33</sup>.

## Phocaean Red Slip/Late Roman C

Since the 5<sup>th</sup> century, the Asia Minor workshops have experienced considerable expansion in the Western Black Sea region. As a result of the demographic development of Constantinople<sup>34</sup>, in the second half of the 4<sup>th</sup> century, one of the most important centres of fine pottery production in late antiquity is developing in Phocaea, the wares from there being

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<sup>23</sup> OPRIŞ 2003, 149–150, pl.53/348–349
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<sup>&</sup>lt;sup>24</sup> TOPOLEANU 2000, 76-77, pl.19/163.

<sup>&</sup>lt;sup>25</sup> GĂMUREAC 2009, 267, pl.13/113.

<sup>&</sup>lt;sup>26</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 189, fig.167/2.2.

<sup>&</sup>lt;sup>27</sup> TOPOLEANU 2000, 76-77, pl.19/163.

<sup>&</sup>lt;sup>28</sup> OPRIŞ 2003, 149, pl.53/345.

<sup>&</sup>lt;sup>29</sup> MOCANU 2011, 228-229, pl.2/5.

<sup>&</sup>lt;sup>30</sup> ARSEN'EVA, DOMZALSKI 2002, 427, fig.13/568-574.

<sup>&</sup>lt;sup>31</sup> OPAIT 1985, 155(Type 4), fig.1/7-9, 11.

<sup>32</sup> MOCANU 2011, 230/9, pl.2/9.

<sup>&</sup>lt;sup>33</sup> ARSEN'EVA, DOMZALSKI 2002, 427, fig.13/575-577.

<sup>34</sup> HAYES 1972, 368-369.

exported throughout the Roman Empire. In the sample studied from Argamum we identified 69 specimens imported from West Asia Minor. They are grouped into two distinct forms, Hayes Form 1 with two ceramic fragments and the remaining 67 belong to the Hayes Form 3.

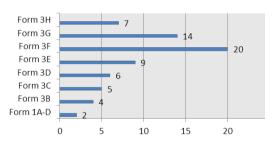
As said in the previous lines, two specimens are framed in the Hayes Form 1. The first of them, discovered at Basilica 2, belongs to Variant A, dated in the second half of the 4<sup>th</sup> century. The earliest variant of Form 1 is attested in Dobrogea at Topraichioi<sup>35</sup> or Halmyris<sup>36</sup>. The second ceramic fragment also found in Basilica 2 is characteristic of Variant D, dated to the 5<sup>th</sup> century. Analogies for Variant D are known in Ibida<sup>37</sup>.

Of the 67 specimens falling in the Hayes Form 3, four belong to Variant B. Two of them were discovered in Basilica 1 while the other two were found in Basilica 2. Variant B is specific to the second half of the 5th century and is known in Dobrogea in many late Roman settlements such as Tropaeum Traiani<sup>38</sup>, Halmyris<sup>39</sup> or Capidava<sup>40</sup>.

Five specimens have the characteristics of Form 3, Variant C, two being discovered at Basilica 1, and the rest at Basilica 2. Chronologically, Variant C is dated to the second half of the 5<sup>th</sup> century, being one of the most widespread variants of Form 3 in the West of the Black Sea, with analogies at Histria<sup>41</sup> or Murighiol<sup>42</sup>.

Variant D is present in the studied sample trough six ceramic fragments, one found in Basilica 1, the rest in Basilica 2. Like the two previous variants, it dates back to the second half of the 5<sup>th</sup> century. Similar wares are known among others at Ibida<sup>43</sup>.

Nine ceramic fragments are framed in Form 3, E variant, specific to the end of the 5<sup>th</sup> century and the beginning of the 6<sup>th</sup> century. With the exception of two specimens from around Basilica 1, the remaining seven were found in Basilica 2. Just as in the case of Variant C, Variant E is well known in the west-Pontic area, with analogies at Halmyris<sup>44</sup>.



Graph 3. Phocaean Red Slip/LRC at Argamum

<sup>&</sup>lt;sup>35</sup> OPAIŢ 1996, 137, pl.56/11, 13.

<sup>&</sup>lt;sup>36</sup> TOPOLEANU 2000, 44-45, pl.1/8-9, pl.2/10-13.

<sup>&</sup>lt;sup>37</sup> MOCANU 2011, 232, pl.2/10.

<sup>38</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 187, fig.160/2.11.

<sup>&</sup>lt;sup>39</sup> TOPOLEANU 2000, 48-49, pl.3/23-26.

<sup>&</sup>lt;sup>40</sup> OPRIS 2003, 151.

<sup>&</sup>lt;sup>41</sup> SUCEVEANU 2007, 204, pl.74/2-3.

<sup>&</sup>lt;sup>42</sup> TOPOLEANU 2000, 49-50, pl.3/27-30, pl.4/31-34.

<sup>43</sup> MOCANU 2011, 235-236, pl.4/40-43.

<sup>&</sup>lt;sup>44</sup> TOPOLEANU 2000, 50-51, pl.4/39-14, pl.5/42-46.

Descending variant E, variant F was identified in the sample studied by no less than 20 ceramic fragments, 19 in Basilica 2 and only one around Basilica 1. This version dates back to the first half of the sixth century and is widely spread in Dobrogea, with analogies at Tropaeum Traiani<sup>45</sup>, Halmyris<sup>46</sup>, Capidava<sup>47</sup>, Histria<sup>48</sup> and Ibida<sup>49</sup>.

Fourteen specimens belong to the G Variant, four of which were discovered near Basilica 1, and ten were found in Basilica 2. Chronologically Variant G is dated to the first half of the G<sup>th</sup> century, besides Argamum being certified at Histria<sup>50</sup>, Murighiol<sup>51</sup> and Ibida<sup>52</sup>.

Variant H is present in the Argamum sample by seven ceramic fragments, all of which are found in Basilica 2. Like previous variants and Variant H is specific to the first half of the  $6^{th}$  century. The presence of the Variant H in the late Roman settlements in the Western Black Sea is less well known than E and F, analogies being known at Halmyris<sup>53</sup> and Ibida<sup>54</sup>.

Argamum's fine pottery sample is broadly in line with the known pattern for the late Roman settlements in the Western Black Sea. However, a number of peculiarities are derived from the fact that the studied ceramic group is certainly incomplete. In the case of the pottery imported from Asia Minor, the presence of only two shapes produced in the Phocaean workshops (Hayes Form 1 and 3) is totally atypical. Also, the lack of Light Coloured ceramics is noticeable. The African Red Slip ware and the Pontic Red Slip ware fall within the limits known for this geographic area.

Compared to other late Roman settlements in Dobrogea, the ceramics produced in Phocaean workshops represent 80 percentages of the total finds, while at Halmyris it occurs at 90%, and in the sector Extramuros West 3 from Ibida is registered with 87%. In second place is the fine pottery imported from North Africa, with 12 percentages of the total. This value is significantly higher than the situation known at Ibida and Halmyris. The fine pottery produced in the Black Sea basin is in last place with 8 percentages of the total and being recorded at Ibida with a value of 4 percentages<sup>55</sup>, and at Halmyris with only 2%<sup>56</sup>.

<sup>&</sup>lt;sup>45</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 189, fig.167/2.6.

<sup>&</sup>lt;sup>46</sup> TOPOLEANU 2000, 51-52, pl.5/47-52, pl.6/53-56.

<sup>&</sup>lt;sup>47</sup> OPRIŞ 2003, 151, pl.54/363.

<sup>&</sup>lt;sup>48</sup> SUCEVEANU 2007, 205-206, pl.74/4-13.

<sup>&</sup>lt;sup>49</sup> MOCANU 2011, 238-239, pl.6-7/67-74.

<sup>&</sup>lt;sup>50</sup> SUCEVEANU 2007, 206, pl.74/15-16.

<sup>&</sup>lt;sup>51</sup> TOPOLEANU 2000, 53, pl.6/57-61, pl.7/62.

<sup>&</sup>lt;sup>52</sup> MOCANU 2011, 239-240, pl.7/81-84.

<sup>&</sup>lt;sup>53</sup> TOPOLEANU 2000, 53-54, pl.7/63.

<sup>&</sup>lt;sup>54</sup> MOCANU 2011, 240, pl.7/88.

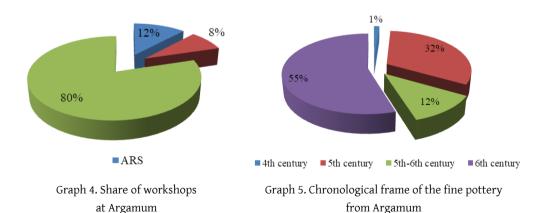
<sup>&</sup>lt;sup>55</sup> MOCANU 2011, 242, graphic 4.

<sup>&</sup>lt;sup>56</sup> TOPOLEANU 2000, 87, graphic 4.

From a chronological perspective, the ceramic sample from Argamum is unitary and this fact is due to the method of archaeological research. The archaeological excavation aimed to investigate the late Roman habitation levels contemporary with the two basilicas. This fact is conditioned at Argamum, especially in the case of the Central Sector, by the fact that the rock of the promontory on which the fortification was built is on the surface, and the anthropic levels preserved are relatively thin. This explains the lack of earlier habitation levels, because with the reconstruction process of the fortification which probably occurred in the second half of the 5<sup>th</sup> century, earlier levels were removed.

Referring strictly to the studied ceramic sample we find that a single ceramic fragment (Hayes Form 1, Variant A) is specific to the second half of the 4<sup>th</sup> century. 32 percentages of the total studied shards are dated to the 5<sup>th</sup> century, while 12 percentages are framed chronologically between the last decades of the 5<sup>th</sup> and the first part of the next century. The tableware specific to the sixth century are most prevalent with 55 percentages. We note the lack of forms dated at the end of the 6<sup>th</sup> and the beginning of the 7<sup>th</sup> century (especially the Hayes Form 10), but at the current stage of research it is preferable not correlate this reality that can be misleading with certain historical events.

The present article represents a first step in the knowledge of Argamum's archaeological realities, both from the perspective of tableware and the historical evolution of the site, especially during the last two centuries of its existence. Reconstitution of the entire ceramic sample discovered in the Central Sector and in the area of Basilica 1, along with the publication of archaeological material discovered in other fortification sectors, will further expand the area of knowledge about the archaeological site of Cape Dolojman.



## Catalogue

#### African Red Slip

- Hayes Form 87, Variant C
- 1. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 1.15 m. Hp: 2.2.

Pale reddish orange clay (2.5 YR 7/4) with granular aspect and few impurities, orange slip (5 YR 7/6).

The exterior of the rim is covered with dark paint.

- Hayes Form 91, Variant B
- 2. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 2, passim. Hp: 2.

Bright brown clay (2.5 YR 5/8) with particles of limestone and granular aspect, orange slip (5 YR 7/8).

- Hayes Form 99, Variant B
- 3. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼0.60 m. Hp: 1.9.

Bright brown clay (2.5 YR 5/6) with granular aspect and particles of limestone, orange slip (5 YR 8/8).

4. Fragment of rim and part of the body.

Argamum 1999, Basilica 2, southern annexes. D: 18.2, Hp: 4.

Reddish brown clay (2.5 YR 4/6) with granular aspect, orange slip (5 YR 8/8).

- Hayes Form 99, Variant C
- 5. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Square C ▼1.90-2.30 m. Hp: 4.

Bright brown clay (2.5 YR 5/8) with particles of limestone and silvery mica, orange slip (5 YR 8/8).

6. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.40 m. Hp: 2.4.

Bright brown clay (2.5 YR 5/6) with particles of limestone, orange slip (5 YR 6/8).

- Hayes Form 103, Variant A
- 7. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Square α, ▼1 m. Hp: 3.4.

Dull reddish brown clay (2.5 YR 4/4) with limestone and other impurities, bright brown slip (2.5 YR 5/8).

8. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, Square α, ▼0.7 m. Hp: 2.4.

Dull reddish brown clay (2.5 YR 5/4) with impurities, bright reddish brown slip (5 YR 5/8).

- Hayes Form 104, Variant A
- 9. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, passim. Hp: 3.3.

Reddish brown clay (2.5 YR 4/6) with limestone and insufficiently fired,

bright reddish brown slip (5 YR 5/8).

10. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 1, ▼0.80 m.

Reddish brown clay (2.5 YR 4/6) with particles of limestone and insufficiently fired,

reddish brown slip (5 YR 4/8).

### Pontic Red Slip

- Form 4
- 11. Fragment of rim and upper part of the body.

Argamum 1999, Trench α, **▼** 0.4 m. D: 15.2, Hp: 5.1.

Bright brown clay (2.5 YR 5/6) with limestone and other impurities, reddish brown slip (2.5 YR 4/8).

- Form 7
- 12. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 1, Square 5. D: 31, Hp: 3.4.

Reddish brown clay (2.5 YR 4/6) with particles of limestone, bright brown slip (2.5 YR 5/8).

13. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 1, Square 5. Hp: 2.9.

Reddish brown clay (2.5 YR 4/6) with impurities and particles of limestone,

bright brown slip (2.5 YR 5/8).

14. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 2, Square 1. Hp: 4.4.

Bright reddish brown clay (5 YR 5/8) with some impurities, bright brown slip (2.5 YR 5/8).

15. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 2, Square 1, ▼0.5 m. Hp: 3.9.

Bright reddish brown clay (5 YR 5/8), bright brown slip (2.5 YR 5/8).

16. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench α, ▼1.1–1.4 m. D: 20.1, Hp: 3.4.

Reddish brown slip (5 YR 4/6) with particles of limestone and silvery mica,

bright brown slip (2.5 YR 5/6) on the interior surface.

17. Fragment of rim and upper part of the body

Argamum 1998, Basilica 2, Trench C, ▼1.80 m. Hp: 2.9.

Bright brown slip (2.5 YR 5/8) with particles of limestone and silvery mica, orange slip (5 YR 6/6).

## Phocaean Red Slip / Late Roman C

- Hayes Form 1, Variant A
- 18. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 2, Trench α ▼1,20–1,30, D: 25.7, Hp: 3.4

Dark reddish brown clay (2.5 YR 3/6) with impurities, dark reddish brown slip (5 YR 3/4).

- Hayes Form 1, Variant D
- 19. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench 8, ▼0.85 m. Hp: 2.8.

Bright reddish brown (5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8).

- Hayes Form 3, Variant B
- 20. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 2, Square 2. D: 36, Hp: 4.

Reddish brown slip (2.5 YR 4/6) with particles of limestone, dark reddish brown slip (2.5 YR 3/6).

The exterior part of the rim is decorated with toothed wheel in three register.

21. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, annex north-west. Hp: 3.

Bright reddish brown slip (5 YR 5/8) with impurities, reddish brown slip (2.5 YR 4/8).

22. Fragment of rim

Argamum 1998, Basilica 2, Trench 8, ▼0.35-0.45 m. Hp: 2.6.

Orange clay (5 YR 6/8), bright brown slip (2.5 YR 5/8).

23. Fragment of rim.

Argamum 2000, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 2.4.

Bright brown clay (2.5 YR 5/8) with particles of limestone, orange slip (5 YR 7/8).

The exterior of the rim is decorated with toothed wheel in tow registers and painted in black.

- Hayes Form 3, Variant C
- 24. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 2, ▼ 0.90-1.40 m. D:26.4, Hp: 4.3.

Bright brown clay (2.5 YR 5/8) with particles of limestone, bright reddish brown slip (5 YR 5/8).

25. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 1, Square 5. D: 27.5. Hp: 4.7.

Reddish brown clay (2.5 YR 4/6), bright brown slip (2.5 YR 5/6).

26. Fragment of rim and the upper part of the body.

Argamum 1999, Basilica 2, Square T1, ▼0.2 m. Hp: 3.8.

Reddish brown clay (2.5 YR 4/6) with impurities, bright reddish brown slip (5 YR 5/6).

## 27. Fragment of rim.

Argamum 2001, Basilica 2, Square 2, ▼0.90-0.40 m.

Reddish brown clay (2.5 YR 4/8) with limestone and impurities, dark reddish brown slip (2.5 YR 3/6).

## 28. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 3.1.

Bright reddish brown clay (2.5 YR 5/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

#### - Hayes Form 3, Varian D

## 29. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra Muros, ▼0.20-0.85 m. D: 22.7, Hp: 4.1.

Dark reddish brown clay (2.5 YR 3/6) with limestone, reddish brown slip (2.5 YR 4/6).

The exterior of the rim is decorated whit toothed wheel in a single register.

## 30. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 1, Square 1. D: 20.4, Hp: 4.1.

Dark reddish brown clay (2.5 YR 3/6), reddish brown slip (2.5 YR 4/6).

### 31. Fragment of rim.

Argamum 2001, Basilica 2, Square 8, ▼0.80 m. Hp: 2.1.

Orange clay (5 YR 6/6) with silvery mica, pale orange slip (5 YR 8/4).

The exterior surface of the rim is covered whit white paint.

#### 32. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra Muros α, ▼0.70-0.85 m. Hp: 2.5.

Bright reddish brown clay (5 YR 5/8), orange slip (5 YR 6/6).

The exterior of the rim is decorated with toothed wheel in a single register.

#### 33. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra Muros α, ▼0.60 m. Hp: 1.8.

Bright brown slip (2.5 YR 5/8) with some impurities, pale orange slip (5 YR 8/4).

### 34. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2 Trench Intra Muros C, ▼1.80 m. Hp: 2.3.

Bright reddish brown clay (5 YR 5/8) with limestone and silvery mica, pale orange slip (5 YR 8/4).

The exterior part of the rim is decorated with toothed wheel

in a single register and we observe traces of white paint.

## — Hayes Form 3, Variant E

## 35. Fragment of rim and upper part of the body.

Argamum 2000, Trench 2, Square 1, ▼ 0.6 m. D: 24.1, Hp: 4.

Bright brown clay (2.5 YR 5/6) with particles of limestone, bright brown slip (2.5 YR 5/8).

On the exterior the rim is decorated with toothed wheel in tow registers.

36. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Trench 2, Square 1, ▼ 0.6 m. D: 23.8. Hp: 3.

Dark reddish brown clay (2.5 YR 3/6), brownish black slip (5 YR 3/1).

The exterior of the rim is decorated with toothed wheel in a single register.

Also we observe traces of black paint on both surfaces.

37. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. D:25.2, Hp: 2.6.

Reddish brown slip (2.5 YR 4/6) with some impurities, bright brown slip (2.5 YR 5/6).

38. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, north-east corner, ▼0.50 m. Hp: 2.9.

Dull reddish brown clay (2.5 YR 5/4) with particles of limestone, reddish brown slip (2.5 YR 4/6).

39. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, east-shout-east corner, ▼1.50. Hp: 3.1.

Bright reddish brown clay (5 YR 5/8) with limestone, dull orange slip (5 YR 7/4).

40. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench B Intra Muros. Hp: 2.8.

Reddish brown clay (2.5 YR 4/8) with limestone and other impurities,

bright reddish brown slip (5 YR 5/8).

41. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, Trench α, ▼ 0.4 m. Hp: 3.7.

Bright brown clay (7.5 YR 5/6) with limestone, bright brown slip (2.5 YR 5/8).

The exterior of the rim is decorated with toothed wheel in a single register.

42. Fragment of rim.

Argamum 2001, Basilica 2, Square 1, ▼0.95 m. Hp: 2.5.

Bright reddish brown clay (2.5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8),

the exterior of the rim is decorated with toothed wheel in three registers.

43. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra muros β, ▼0.80–1.10 m. Hp: 2.1.

Reddish brown clay (5 YR 4/8), bright brown slip (2.5 YR 5.8).

The exterior of the rim is decorated with toothed wheel in tow registers and covered with black paint.

- Hayes Form 3, Variant F
- 44. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, north-eastern corner, ▼0.50 m. D: 26.1, Hp: 4.5.

Reddish brown clay (2.5 YR 4/8) with limestone and other impurities,

dull reddish brown slip (2.5 YR 4/4). On the exterior of the rim we observe traces of brown paint.

45. Fragment of rim and the upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼ 0.70–0.85. D: 20.4, Hp: 3.1.

Bright reddish brown clay (2.5 YR 5/8), reddish brown slip (5 YR 4/6).

46. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, east-south-east, ▼1.50 m. Hp: 2.6.

Reddish brown clay (5 YR 5/8) with particles of limestone, bright reddish brown slip (2.5 YR /8).

47. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 1.4 m. D: 24.8, Hp: 3.7.

Bright reddish brown clay (5 YR 5/8) with limestone, bright red brown slip (2.5 YR 5/8).

The exterior surface of the rim is decorated with toothed wheel in three registers.

48. Fragment of rim and upper part of the body.

Argamum 1997, Basilica 2, Square 7. D: 25.6, Hp: 2.4.

Reddish brown clay (2.5 YR 4/8), bright reddish brown slip (2.5 YR 5/8).

The exterior of the rim is decorated with toothed wheel in tow registers.

49. Fragment of rim and upper part of the body

Argamum 2000, Basilica 2, Square 1, ▼ 0.7 m. D: 26, Hp: 2.8.

Bright brown clay (2.5 YR 5/8) with limestone and silvery mica, reddish brown slip (2.5 YR 4.6).

50. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 6, ▼ 0.60 m. D: 26.7, Hp: 2.7.

Bright reddish brown clay (5 YR 4/6) with particles of limestone and other impurities, reddish brown slip (2.5 YR 4/8). The exterior of the rim is decorated with toothed wheel in three registers.

51. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.3.

Bright brown clay (2.5 YR 5/8) with several impurities in composition, dull reddish brown slip (2.5 YR 4/4). The exterior part of the rim is decorated with toothed wheel in a single register.

52. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 3.

Bright reddish brown (5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8).

On exterior of the rim we can see traces of black paint.

53. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, α Trench Extra muros, ▼0.85 m. Hp: 2.1.

Bright reddish brown (5 YR 5/6) with limestone in composition, dark reddish brown slip (2.5 YR 3/6).

54. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.6.

Reddish brown clay (5 YR 4/6) with some impurities in composition, reddish brown slip (2.5 YR 4/6).

55. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. Hp: 2.5.

Reddish brown clay (2.5 YR 4/8), dark reddish brown slip (2.5 YR 3/6).

The exterior of rim is decorated with toothed wheel in tow registers and painted in black.

56. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 3.5.

Orange slip (2.5 YR 6/8) with particles of limestone, bright brown slip (2.5 YR 5/8).

57. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, passim, ▼0.80 m. Hp: 2.8.

Reddish brown clay (5 YR 4/6) with small particles of limestone, bright brown slip (2.5 YR 5/8).

58. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. Hp: 3.3.

Reddish brown clay (2.5 YR 4/6) with limestone, dark reddish brown slip (2.5 YR 3/6).

On the exterior and interior surfaces of the rim we observe traces of black paint.

59. Fragment of rim.

Argamum 2001, Basulica 2, Square 8, ▼0.80 m. Hp: 1.9.

Reddish brown clay (2.5 YR 4/8) with limestone and other impurities in composition, reddish brown slip (2.5 YR 4/6).

60. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.7.

Bright reddish brown clay (5 YR 5/8) with particles of limestone, reddish brown slip (2.5 YR 4.8).

The exterior of the rim is decorated with toothed wheel in three registers.

61. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, passim. Hp: 2.3.

Orange clay (5 YR 6/8) with some impurities in composition, bright reddish brown slip (2.5 YR 5/8).

The exterior surface of the rim is painted in black.

62. Fragment of rim and the upper part of the body.

Argamum 1999, Basilica 2, South, annex 3, ▼0.50 m. Hp: 2.5.

Bright reddish brown clay (5 YR 5/8), hardly fired, orange slip (5 YR 6/8).

The exterior of the rim is decorated with toothed wheel in three registers.

63. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. D: 29.2, Hp: 2.7.

Yellow orange clay (7.5 YR 8/8) with particles of limestone, bright brown slip (2.5 YR 5/8).

Hayes Form 3, Variant G

64. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, passim. D: 30, Hp: 2.8.

Bright brown clay (2.5 YR 5/8) with impurities in composition, orange slip (5 YR 7/6).

65. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. D: 28, Hp: 2.4.

Reddish brown clay (2.5 YR 4/8) with small particles of limestone, bright brown slip (2.5 YR 5/8).

The exterior of the rim is painted in black.

66. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼1.15 m. D: 20, Hp: 2.

Bright reddish brown clay (5 YR 5/8), hardly fired, bright brown slip (2.5 YR 5/8).

On the exterior of the rim we observe traces of black paint.

67. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.

Orange clay (5 YR 7/8) with small particles of limestone, bright reddish brown slip (5 YR 5/8).

68. Fragment of rim.

Argamum 2000, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 2.3.

Orange clay (5 YR 7/8) with limestone and other small impurities, reddish brown slip (2.5 YR 4/8).

The exterior of the rim is decorated with toothed wheel in three registers and painted in black.

69. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.4.

Orange clay (5 YR 7/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

70. Fragment of rim and upper part of the body.

Argamum 2000, Basilica 1, Tranche 1, Square 5, on the rock. Hp: 2.1.

Bright reddish brown clay (5 YR 5/8) with small particles of limestone

and other impurities, dark reddish brown slip (2.5 YR 3/6).

71. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. Hp: 2.5.

Bright brown clay (2.5 YR 5/8), dark reddish brown slip (2.5 YR 3/6).

72. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, passim. Hp: 2.1.

Reddish brown clay (2.5 YR 4/6), reddish brown slip (5 YR 4/6).

The exterior of the rim is decorated with toothed wheel

in three registers at the lower part was painted in white.

73. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼ 0.80 m. Hp: 3.5.

Dull reddish brown clay (2.5 YR 4/4) with small particles of limestone in composition,

dark reddish brown slip (2.5 YR 3/6). The exterior surface of the rim is painted in black.

74. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 5, ▼1.15 m. Hp: 3.5.

Bright brown clay (2.5 YR 5/8), bright reddish brown slip (5 YR 5/8).

75. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Tranche Extra muros α, ▼0.85 m. Hp: 2.6.

Reddish brown clay (2.5 YR 4/6) with some impurities, bright brown slip (2.5 YR 5/8).

The exterior of the rim is decorated with toothed wheel in three registers.

76. Fragment of rim.

Argamum 2000, Basilica 1, Trench 1, Square 5, on the rok. Hp: 1.8.

Bright reddish brown clay (5 YR 5/6) with some impurities in composition,

reddish brown slip (2.5 YR 4/6).

77. Fragment of rim and upper part of the body.

Argamum 1998, Trench γ, ▼ 0.80 m. Hp: 2.5.

Bright brown clay (2.5 YR 5/8) with very small particles of limestone, reddish brown slip (2.5 YR 4/6).

- Hayes Form 3, Variant H

78. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼1.15 m. Hp: 3.9.

Orange clay (5 YR 6/8) with some impurities in composition, yellow orange slip (7.5 YR 7/8).

79. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Intra muros. Hp: 2.6.

Orange clay (5 YR 6/6), reddish brown slip (5 YR 4/6). The inferior part of the rim was painted in white.

80. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, southern annexes, ▼0.50 m. Hp: 2.4.

Reddish brown clay (2.5 YR 4/8) with some impurities in composition,

bright reddish brown slip (2.5 YR 5/8). The exterior surface of the rim is covered with black paint.

81. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.4.

Orange slip (5 YR 6/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

82. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 2, ▼ 1.40 m. Hp: 2.4.

Dull reddish brown clay (4/3), bright brown slip (5/8).

83. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, south-eastern corner, ▼1.50 m. Hp: 2.2.

Reddish brown clay (2.5 YR 4/8) with small particles of limestone,

reddish brown slip (2.5 YR 4/6). The exterior part of the rim was painted in black.

84. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Trench 1, Square 1, ▼1 m. Hp: 2.3.

Dark reddish brown clay (2.5 YR 3/6) with lots of limestone particles in composition,

dark reddish brown slip (2.5 YR 3/6).

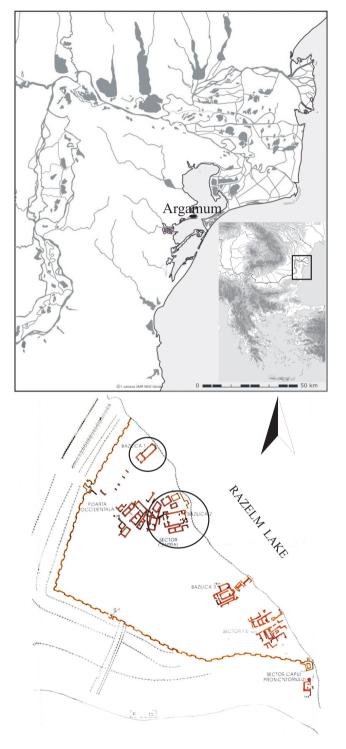


Figure 1. Map of Dobrudja (top) and plan of the settlement from Argamum in Late Antiquity (bottom)

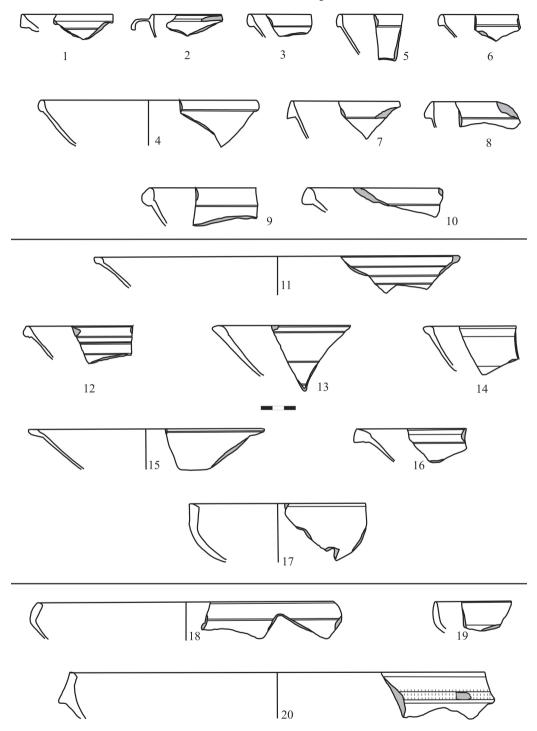


Figure 2. ARSW (1–10); PRSW (11–17); LRCW (18–20) from Argamum

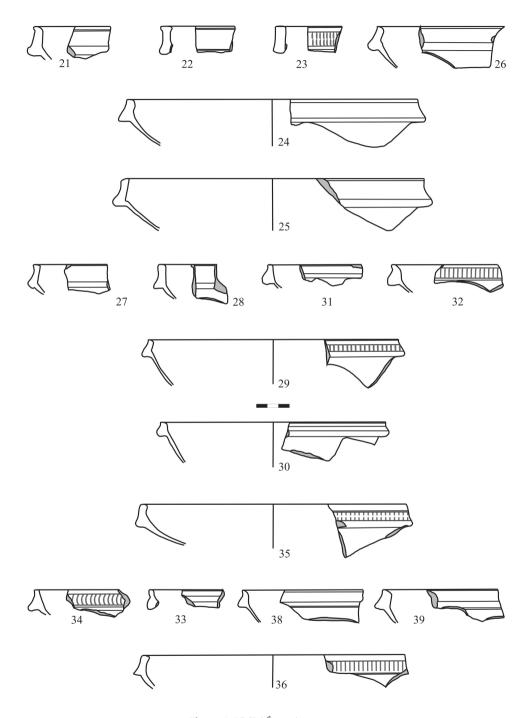


Figure 3. LRCW from Argamum

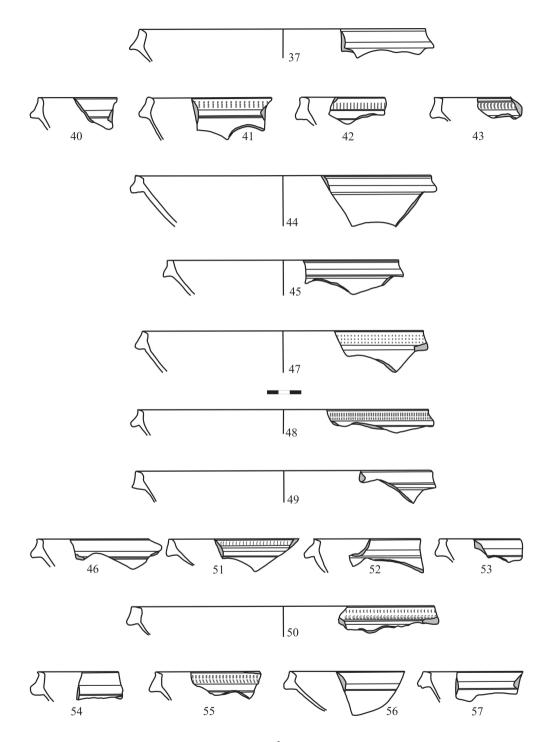


Figure 4. LRCW from Argamum

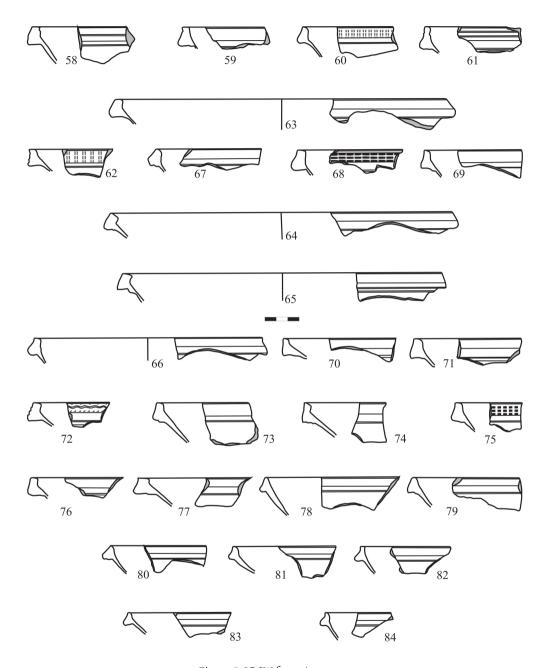


Figure 5. LRCW from Argamum

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