

## Amphora types of Magdalensberg\*

Tamás BEZECZKY

### Abstract

The economic and political role of the Magdalensberg settlement is well-known. The Mediterranean food products transported and stored in the amphorae were primarily consumed by the Italian merchants. The stamps and inscriptions of the amphorae refer to Italian, Istrian, Spanish, southern France and Greek centres of the production. However, in order to have a more balanced view, the amphorae without inscriptions also have to be considered. This paper is primarily concerned with the typology of the Magdalensberg amphorae.

The amphorae from Magdalensberg offer an insight into the political and economic history of Noricum from the late Republican to the early Claudian period. The Mediterranean products (wine, olives, olive-oil, fish products, fruits) transported and stored in the amphorae were primarily consumed by the Italian merchants and soldiers. The Italian merchants families (Barbii, Fundanii, Publicii, Postumii, etc.) had offices in Magdalensberg<sup>1</sup> (Fig. 1) and played an important role in the commerce of metals (iron, copper, zinc). The stamps and the inscriptions of the Magda-

### Izvešček

Ekonomska in politična vloga naselbine na Magdalensbergu je dobro znana. S sredozemskimi prehrabnenimi izdelki, ki so jih prevažali in shranjevali v amforah, so zvečine trgovali italjski trgovci. Amfore, glede na žige in napise, izvirajo iz italijanskih, istrskih, španskih, južnofrancoskih in grških proizvodnih središč. Za vpogled v realnejšo podobo pa je potrebno upoštevati tudi amfore, ki nimajo tovrstnih oznak. V tej študiji se avtor ukvarja predvsem s tipologijo amfor s Štalenskega vrha.

lensberg amphorae were published<sup>2</sup> in the *Journal Carinthia*. However, during the 50's and 60's the amphora types bearing stamps and inscriptions were not always mentioned. This led to difficulties and occasional misunderstandings.<sup>3</sup> At the same time, some of the inscriptions<sup>4</sup> published from this site contributed to the clarification of the origin and contents of the individual types. The classification for the Magdalensberg amphorae was proposed by Manfred Fuchs<sup>5</sup> and Verena Maier-Maidl.<sup>6</sup> This paper is primarily concerned with the typology of the Magdalensberg amphorae, (Fig.

\* An earlier version of this paper was prepared for the conference organized by University of Ljubljana in november 1995. I am grateful for G. Piccottini, E. Kaudelka Schindler and S. Zabehlicky Scheffenecker, V. Vidrih Perko and D. P. S. Peacock without whom this article would not be possible. The drawings were prepared for publication by Ágnes Vári and the author.

<sup>1</sup> The important publications about the settlement are in: Bericht 1(1949) - 15(1986); Piccottini and Veters 1990; Piccottini 1977; Alföldy 1974; Dobesh 1980; Piccottini 1989.

<sup>2</sup> Bericht 2 - 15, Die Inschriften.

<sup>3</sup> Zaccaria 1989, 471; Bezczy 1991, 178,179.

<sup>4</sup> Compare the tituli picti of the Dressel 6A and 6B amphorae, e.g. footnotes 25, 27, 72.

<sup>5</sup> Fuchs 1978, 4-18. He distinguished six main groups (I - Dressel 1, II - Dressel 2-5, III - Dressel 6, IV - Dressel 7-13 (five subgroups), V - Camulodunum 189, VI - Miscellaneous).

<sup>6</sup> Maier-Maidl 1992, 13-23. She, although including considerably more types in her system (Dressel 1, Lamboglia 2, Dressel 2-4, Dressel 5, Dressel 6A, Dressel 6B, Dressel 7-11, Rhodian, Camulodunum 189, Schörgendorfer 558, Pelichet 46, Portorecanati), discussed only the stamps and the inscriptions of six groups.

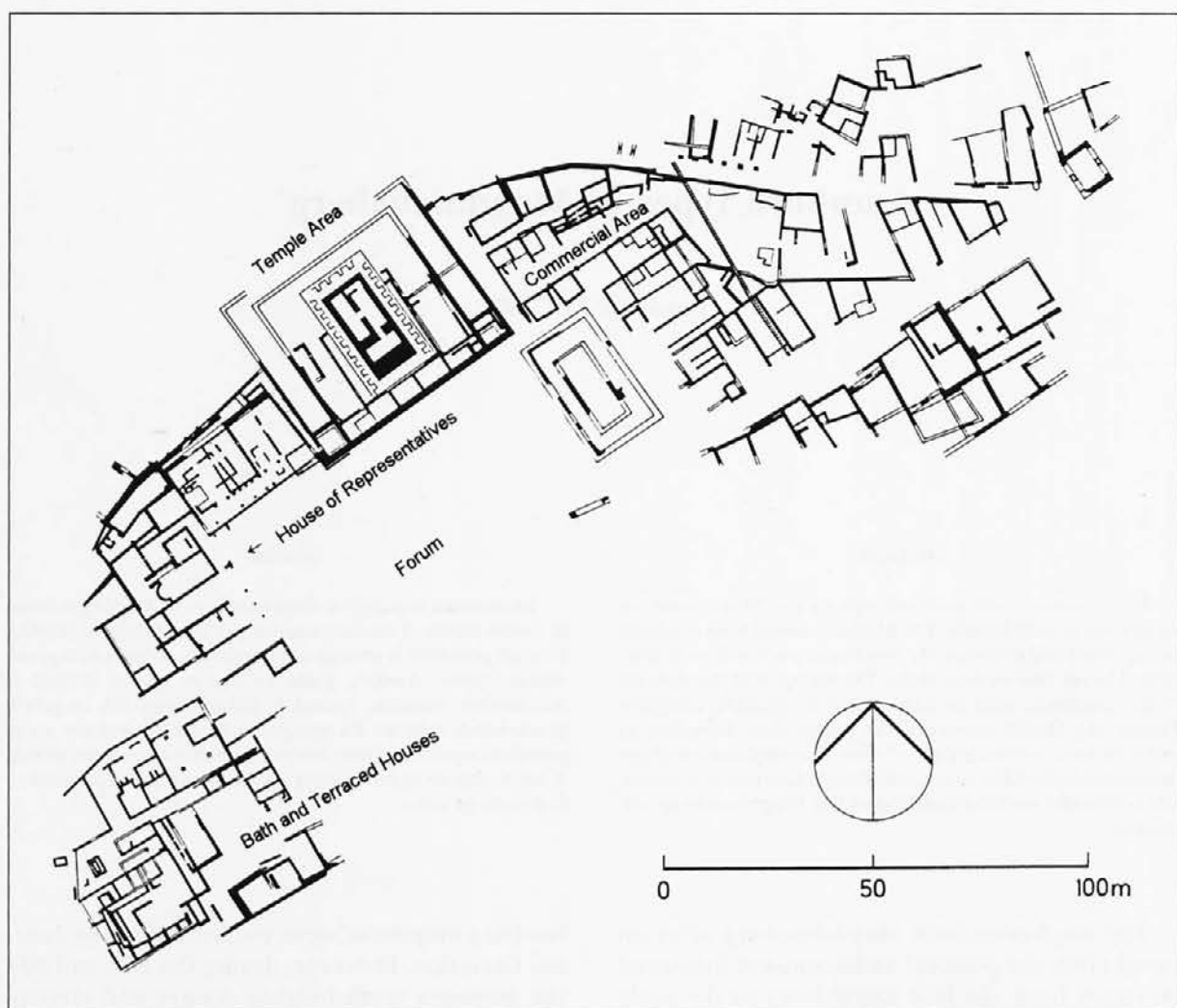


Fig. 1: The Roman settlement on the Magdalensberg.  
Sl. 1: Rimsko naselje na Štalenskem vrhu.

2) when describing the various types, I shall refer to the stamps and the inscriptions.<sup>7</sup>

The Magdalensberg settlement had three major periods:<sup>8</sup> the timber period (from the middle of the first century B.C. to 15/10 B.C.), the stone house period (from 15/10 B.C. to 15 A.D.), the period of the "feverish construction" during Tiberius and Claudius.

1. The timber period: The merchants who settled during the late republican period consumed primarily wines from Campania, Latium and Adria, olive-oil from Apulia. This is shown by the Dressel 1B, Brindisi (ovoid) and Lamboglia 2 amphorae.

2. The stone house period: The peaceful annexation<sup>9</sup> of Noricum (15 A.D.) initiated fundamental changes in Magdalensberg: the "Imperial administration", as well as new settlers, moved in. As shown by the number of amphorae, the consumption of the settlement must have increased. Adriatic wine was imported, during the early stages, in Dressel 6A amphorae from Picenum. The known producers of wine were L. Tarius Rufus, L. Rubrius Barbarus and the members of the Herennius workshop. Italian wine was imported in Dressel 2-4 amphorae. The wine from Gallia came in the Gauloise 7 type. Greek wine arrived in Rhodian

<sup>7</sup> The whole material will be revised by M. Hainzmann for *CIL*. On the stamps see the remarks of Zaccaria 1989, 469-488.

<sup>8</sup> Schindler-Kaudelka 1989, 23-29.

<sup>9</sup> Alföldy 1974, 52; Piccottini 1977, 270.

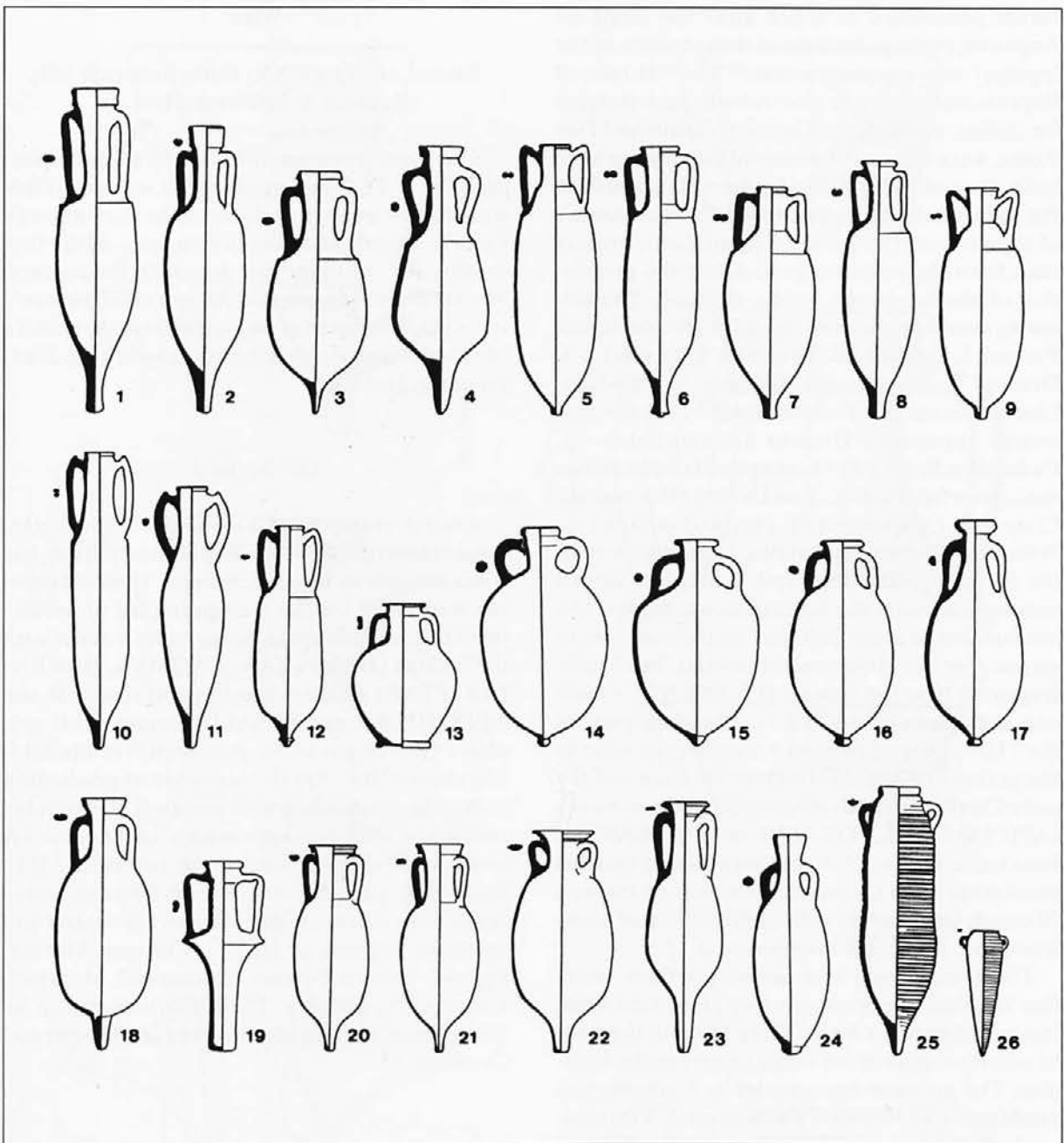


Fig. / Sl. 2: Types of amphora mentioned in the text. / Tipi amfor omenjeni v besedilu. 1 Dressel 1B; 2 Dressel 1 - Pascual 1; 3 Lamboglia 2; 4 Dressel 6A; 5 Dressel 2-4 (Koan); 6 Dressel 2-4 (Falernian); 7 Dressel 2-4 (Pompeii); 8 Dressel 2-4 (Tarraconensis); 9 Dressel 2-4 (Gaulish); 10 Dressel 5; 11 Rhodian; 12 Knidian; 13 Gauloise 7; 14 Dressel 25; 15 Brindisi Type; 16 ante 6B; 17 Dressel 6B; 18 Haltern 70; 19 Schörgendorfer 558; 20 Dressel 10; 21 Dressel 7; 22 Dressel 9; 23 Dressel 8; 24 Portorecanati; 25 Richborough 527; 26 Camulodunum 189.

and Knidian jars. The amphorae “the so called ante 6B” also belong to this period. One Dressel 10 (Beltran I) amphora from Spain and the Dressel 6B vessels from Istria (with the APIC, COSAE and C.LAEC.BASSI-FELIX.SER stamps) were also found in these layers. Although the types of amphorae did not change during the late Augustan period, new producers with new stamps emerged.

In addition to these, there are a number of Rhodian, Italian wine (Dressel 2-4) and fish sauce (Beltran I) amphorae without stamps.

3. The period of the “feverish construction”: When news came about the death of Augustus (14 A.D.), a rebellion broke out among three legions stationed (in a summer fort near Nauportus, e.g. Tacitus Ann. 16-29) in Illyricum. The Magdalensberg

forum (destroyed in a fire after the death of Augustus, perhaps because of the rebellion of the legions) was re-constructed.<sup>10</sup> The "House of Representatives" was also rebuilt, and temples for deities, probably for Divius Augustus and Dea Roma, were begun. A number of rich houses were built. One of them is the "great villa", south of the "House of Representatives". The number of objects from this period is significantly greater than from the previous period, but the proportion of the foodstuffs hardly changed. The following amphora types were found in Tiberian layers: Pascual 1, Dressel 25, Dressel 6A, Dressel 2-4, Dressel 5, Dressel 6B, Dressel 8, Rhodian, Camulodunum 189, Richborough 527. A few new names appear on Dressel 6A amphorae (C. Caristianus Fronto, S†S stamps and titulus pictus: *mod./preat(utanius)/of...*), on Dressel 6B (Costinus, Crispinus, Crispinilius(?), Flavius Fontanus, L. Trebius (or Trebonius) Optatus, L. Iunius Paetinus (or Patientis), Sepullius and T. Statilius Taurus Sisenna and from the Laecanius workshop. The inscriptions of some Beltran I amphorae refer to *garum: g(ari) f(los)/hisp(anicii); mur(ia)*. Two handle fragments bear the stamps: (CLANI.AVC+) and one neck has (T.GAVI.PRI). The tituli picti of the THB-stamped Dressel 6A amphorae refer to the period of Caligula. The late Tiberian and the early Claudian periods witnessed a few new names (APICI and MAL.TITI.ASVL or MATTI.ASVL). Besides, a Dressel 2-4 amphora with a painted inscription from Calenum, a number of Haltern 70 vessels from Baetica and the Portorecanati forms from Italy are worth mentioning.

The composition and age of the finds verify that Magdalensberg was given up at the time when important changes were taking place in the public administration of the whole empire under Claudius. The province known later as Pannonia was established, in Noricum a new capital, Virunum, was built (45/50 A.D.). The "administration" moved from the Magdalensberg to the foot of the mountain. The system of tariff stations was organised and the new public administration system was established.

## Wine

### *Dressel 1B* (Ostia XX; Camulodunum 181; Peacock & Williams Class 4)

This form is represented only by a few amphorae (Fig. 3: 1). It was produced in several Italian workshops, mostly in Campania, Latium and Etruria, shortly after the first quarter of the first century B.C. until the last decade of the century. The tituli picti suggest that the principal content<sup>11</sup> was wine. This type was very common in the western Mediterranean and reached the eastern Mediterranean region.<sup>12</sup>

### *Lamboglia 2*

Several examples of Lamboglia 2 amphorae, the distinctive type of the Republican period, has come to light in Magdalensberg. These amphorae were used for the transportation of wines<sup>13</sup> from the Adriatic coast. Some vessels occur with the stamps (DAM, LTAR, CADMVS, HERENNIA, PTAE) on their handles and rims with the APPI, HILAR and L. SALVI stamps. This amphora type began to be produced<sup>14</sup> in the mid-2nd century B.C. but the cessation of production cannot be established with certainty. It probably coincided with the appearance of Dressel 6A amphora in the last third of the 1st century B.C. Besides the production centres in Brindisi, workshops have also been identified in the central and northern regions of Italy<sup>15</sup> (Cologna Marina, Fermo?, Potenza Picena?, Cesenatico?, Modena?, Locavaz [Aquileia]?). Their distribution can be traced from western Mediterranean, Aegean and Carthage.<sup>16</sup>

### *Dressel 6A*

The Lamboglia 2 form served as a model for the Dressel 6A amphora. It is often difficult to distinguish the two types<sup>17</sup> from one another. They

<sup>10</sup> Schindler-Kaudelka 1989, 24; Piccottini 1977, 283; Alföldy 1974, 70.

<sup>11</sup> Zevi 1966, 214; Beltran 1970, 316; Peacock, Williams 1986, 90.

<sup>12</sup> Peacock, Williams 1986, 90; Riley 1979, 135.

<sup>13</sup> Formenti et al. 1978, 95-100.

<sup>14</sup> Cipriano 1994, 207; Tchernia 1986, 54,55, 126,127.

<sup>15</sup> Cipriano 1994, 207, Fig. 3; Cipriano, Carre 1989, 80-85, 97-99; Werff 1986, 103-106.

<sup>16</sup> Riley 1979, 152; Martin-Kilcher 1993, 307, she mentioned Lamboglia 2/Dressel 6A.

<sup>17</sup> Carre 1985, 209-211.

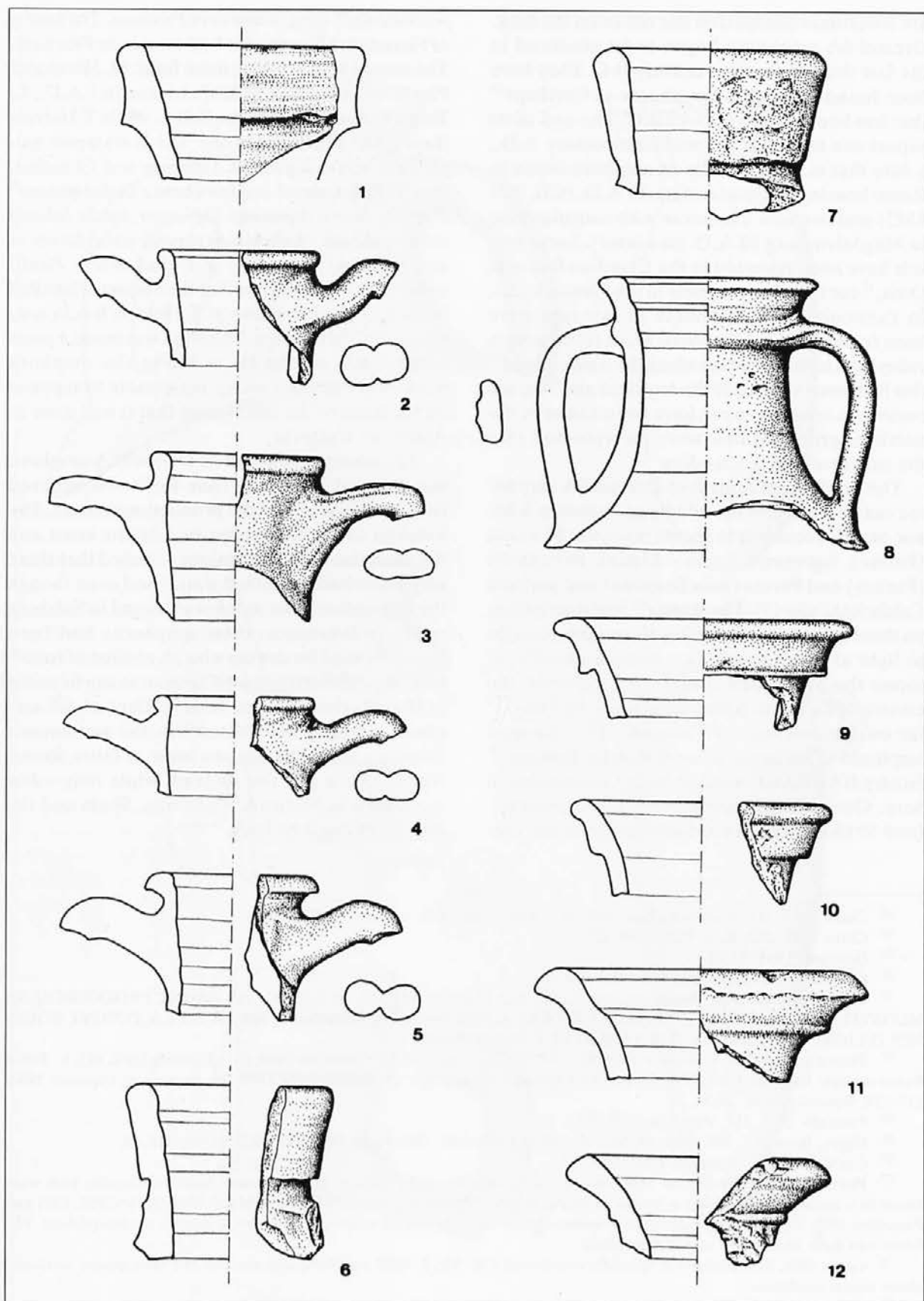


Fig. / Sl. 3: 1 Dressel 1B; 2-5 Dressel 2-4; 6-7 Dressel 1 - Pascual 1; 8 Gauloise 7; 9-12 Beltran I/Dressel 7-11. Scale / M. = 1:4.



are sometimes stamped on the rim or on the neck. Dressel 6A amphorae began to be produced in the last third of the first century B.C. They have been found in a wall of amphorae at Carthage<sup>18</sup> that has been dated to 43-15 B.C. The end of its export can be put at the mid-first century A.D., a date that is supported by an amphora found in Rome bearing a consular date 36 A.D. (CIL XV. 4582) and two new amphorae with consular date in Magdalensberg 38 A.D. (see later). Some vessels have been reported in the Claudian layers at Ostia,<sup>19</sup> but they do not appear in the Flavian layers. In Pannonia a few amphorae of this type have been found from the southern areas (Drava-Sava valley) and in the sites lying along the Amber Road<sup>20</sup> that had been occupied in the Augustan and Tiberian period. In contrast, none have been found in the northeastern areas that were incorporated into the province under Claudius.

The production centres of Dressel 6A amphorae can be located to the middle and northern Adriatic coast<sup>21</sup> according to recent research: Picenum (Ferme), between Cesena - Rimini, Brisighella (Faenza) and Parma (Sala Baganza) and perhaps Calabria/Apulia (?). The stamps<sup>22</sup> and inscriptions on these amphorae - including the vessels brought to light at Magdalensberg - make it possible to locate the production centres: for example, the estates of L. Tarius Rufus mentioned by Pliny,<sup>23</sup> lay on the territory of Picenum. The stamped amphorae of his father-in-law P. Rubrius Barbarus<sup>24</sup> (stamp BARBARI) were probably also produced here. One painted inscription:<sup>25</sup> *mod./praet/of.* (and S††S stamp), presumably refers to the *ager*

*praetutianus*<sup>26</sup> lying in southern Picenum. The family of Herennius Picens also had estates in Picenum. The stamps help in dating these finds: M. Herennius Picens was consul in 34 B.C., his son in 1 A.D., L. Tarius Rufus was consul in 16 B.C. while T. Helvius Basila, the producer of the T.H.B stamped amphorae, was a legate of Tiberius and Claudius. One TH[B] stamped amphora bear a titulus pictus:<sup>27</sup> *P(ublio) Nonio Asperante / M(arco) Aquila Iuliano co(n)s(ulibus) / Kalab(rum vinum) co(n)fusum in amp(horam) (congios) X / vindemia / Paulli co(n)s(ulis)*. This means that the amphora labelled in 38 A.D. the workshop of T. Helvius Basila contained Calabrian wine. The wine was made 4 years earlier. We do not know where the amphora workshop was but it seems reasonable to suppose on the basis of the inscription that it was close to Apulia or Calabria.

The possible contents of Dressel 6A amphora was debated for a long time for it was believed that Istria was one of the production centres. The location of the workshops in Adriatic coast and the analysis of the inscriptions revealed that these amphorae had contained wine<sup>28</sup> and even though the inscription of an amphora<sup>29</sup> found in Salzburg refers to fish sauce, these amphorae had been generally used for storing wine. A residue of resin<sup>30</sup> that only characterises wine amphorae can be noted in the interior of these vessels. Dressel 6A amphora is widely distributed<sup>31</sup> in the settlements Cisalpina, along the Adriatic coast, in Ostia, Rome, North Africa and the Aegean, while only a few are known in Noricum, Pannonia, Spain and the Tyrrhenian coast of Italy.

<sup>18</sup> Carre 1985, 211; Martin-Kilcher 1993, 317, Abb. 1, No. 122, Stamp: Q NVMERI.

<sup>19</sup> Carre 1985, 213; Zevi, Pohl 1970, 127.

<sup>20</sup> Bezeczy 1994, 22-34.

<sup>21</sup> Carre 1985, 214, 215; Zaccaria 1989, 474-481.

<sup>22</sup> Dressel 6A stamps in Magdalensberg: A, AC, ALLIARI(?), APPI(?), AVTRO, C.CAR.FRONT, PRIMVEBIDIENI, MCORVIT, CORETI VITVLI, T.H.B, M.HER.PICENT, M.HER.PHAE, M.HER.PRISC, HILAR, A.PLA, POMPEI, RODO, SEX IVLIORP, P-SVTORI, ? S††S, L.TARI RVFI, L.CORHER, L.N.F.

<sup>23</sup> Pliny n.h. XVIII 37; Callender 1965, No. 947; Alföldy 1968, 100-107; Tchernia 1986, 131; Zaccaria 1989, 481; L. Tarius Rufus stamps: Baldacci 1967-1968, 27 No. 35; Cipriano, Carre 1989, 99; Maier-Maidl 1992, 90; Pesavento, Cipriano 1994, 517-520; Bezeczy 1994, 28-34.

<sup>24</sup> Paterson 1982, 153; Zaccaria 1989, 475.

<sup>25</sup> Egger, Bericht 9, 180, Abb. 99, No. 33, 182, No. 67, Abb. 100; Fuchs 1978, No. 1078=1110, Taf. 80.

<sup>26</sup> Carre 1985, 217; Tchernia 1986, 131.

<sup>27</sup> Piccottini 1997, 204-205, an other inscription: ... *amp(horam) (congios) XI / vindemia / Paulli co(n)s(ulis)* both were found in a house AA/37. About a *fundus* of Helvii Basilaie Manacorda 1990, 402; Maier-Maidl 1990, 87 (=1992, 122) and Piccottini 1997, 203, mentioned an other consular dipinto on a Dressel 6A amphora: *[Vol]eso / [C]ornelio / co(n)s(ulibus)*. The fabric and form Dressel 6B seems more likely.

<sup>28</sup> Carre 1985, 218; *mulsum* is specially mentioned CIL XV, 2. 4653 and 4682 and see also the inscriptions mentioned above *vinum confusum*.

<sup>29</sup> Heger 1986, 132-135, Abb. 1.

<sup>30</sup> Carre 1985, 218.

<sup>31</sup> Carre 1985 212; Cipriano, Carre 1989, 99, 100.

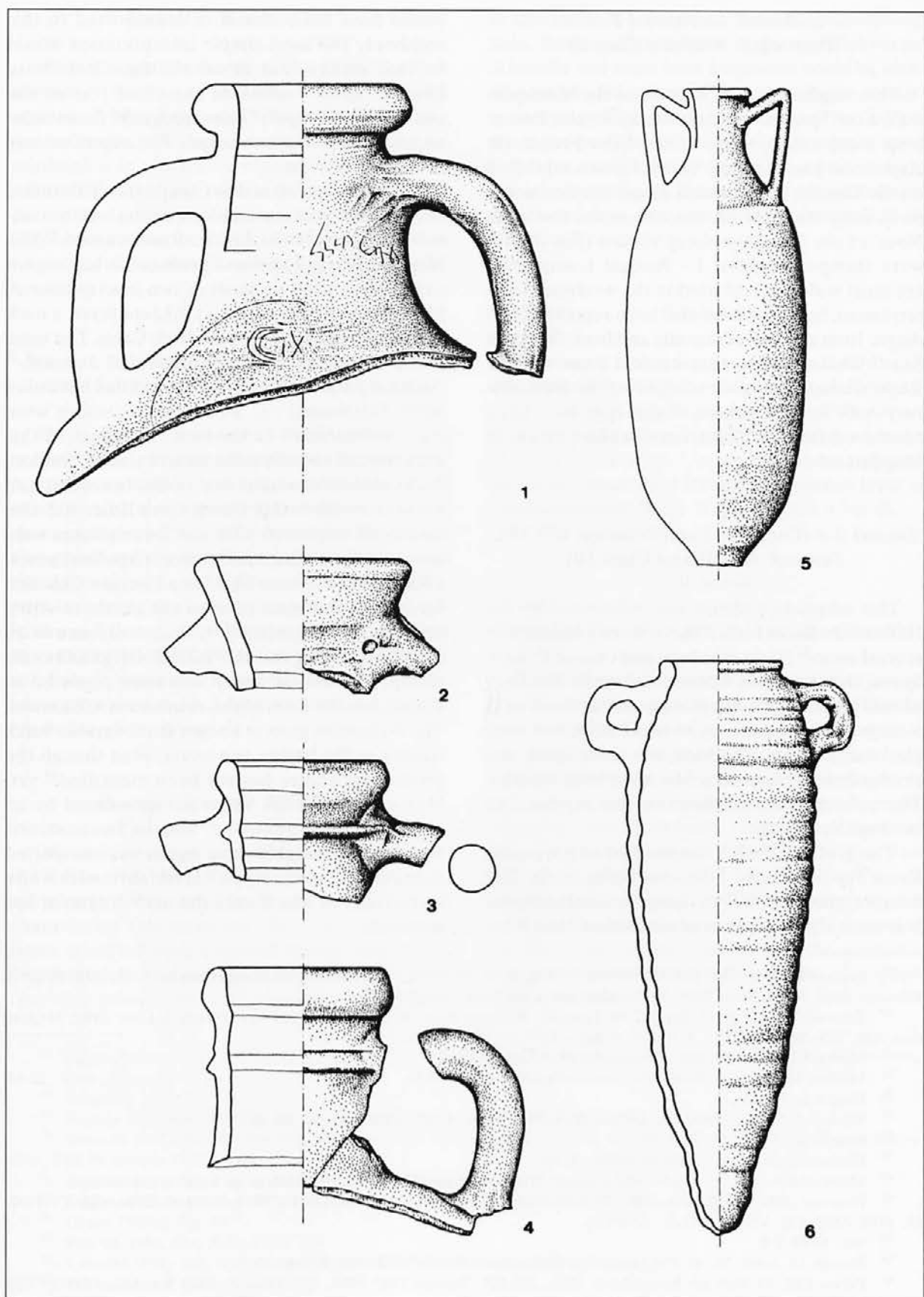


Fig. / Sl. 4: 1 Brindisi Type; 2 Haltern 70; 3 Dressel 25; 4 Dressel 25; 5 Dressel 2-4 (Gauloise); 6 Camulodunum 189. Scale / M. 1-4,6 = 1:4; 5 = 1:10.

*Dressel 1 - Pascual 1*  
(Peacock & Williams Class 6)

This amphora type<sup>32</sup> contained the wine produced on Spanish coast (primary in the Barcelona area) and perhaps in southern France (at Aspiran in Languedoc). This form was modelled on the Dressel 1B amphora. These amphorae are frequently stamped on the rim or on the base. None of the Magdalensberg vessels (*Fig. 3: 6,7*) were stamped. Dressel 1 - Pascual 1 amphorae are most widely distributed in the western Mediterranean, but some have also been reported from Augst, from southern Pannonia and from the Black Sea.<sup>33</sup> These vessels were current from the late Republican to the second third of the first century A.D. Rim fragments of this type have been recovered from the Tiberian-Claudian layers in Magdalensberg.

*Dressel 2-4* (Ostia LI, Camolodunum 182-183,  
Peacock & Williams Class 10)

This amphora's shape was influenced by the Hellenistic Koan form. There were produced in several areas<sup>34</sup> (Italy, southern and central France, Spain, Greek islands, Britannia, Augst). The form of this vessel is of a fairly long narrow body with a carinated shoulder, cylindrical neck and simple rounded rim. The base is a solid spike and the outstanding characteristic is the bifid handles. The variants of this amphora are also represented in Magdalensberg.

The graffiti CTAXY can be seen on a typically Koan Type (Pompeii 5-6) vessel (*Fig. 5: 5*). The interpretation<sup>35</sup> of the inscription is uncertain since it is unlikely that a commodity other than wine

would have been stored or transported in this amphora. The most simple interpretation would be that means "ear of corn", the other "base horehound";<sup>36</sup> "name of the chief star in the constellation Virgo"; "scion, progeny" do not take us much closer to a solution. The adjective may refer to new wine.

The wines produced in Campania - Falernian, Calenian, Statanian and Surrentine - were considered among the best in the Roman world.<sup>37</sup> The Magdalensberg amphorae produced in this region can be identified on basis of two inscriptions: A black-painted titulus pictus CAL(enum) on a neck fragment<sup>38</sup> refers to the wine from Cales. The same abbreviation is used by Horace and Juvenal.<sup>39</sup> Another painted inscription<sup>40</sup> mentions Falernian wine: *Fal(ernum) / (...r(...)) Prisc(...)*. This wine was considered to be the best. The name of this wine appears not only in the ancient sources Strabon, Pliny, and Falernian is one of the few wines (all Italian) mentioned in Diocletian's Edict, but also on several amphorae.<sup>41</sup> Dressel 2-4 amphorae were also used for storing south Adrian (Apulian) wines, a fragment<sup>42</sup> has been found in a Tiberian-Claudian layer. The transportation of the northern Adriatic wine is documented by the occurrence of an amphora bearing the M. PETRONI(i) SEC(undi) stamp.<sup>43</sup> A similar stamp has been reported in Parma, but the form of the amphora is not known. The Petronius gens is known from various brick stamps in the Istrian peninsula, even though the production centre has not been identified<sup>44</sup> yet. One of the Gaulish wines is represented by an almost complete amphora<sup>45</sup> and the Tarraconensis wine from the neighbouring region was transported in another amphora type<sup>46</sup> (red fabric with white inclusions) of which only the neck fragment has survived.

<sup>32</sup> Pascual Guasch 1962, 334-345; Tchernia 1971, 38-57; Tchernia 1986, 142-145; Laubenheimer 1985, 312-315; Peacock Williams 1986, 93-95; Miro 1988, 70-78; Martin-Kilcher 1994, 335-337.

<sup>33</sup> Tchernia 1971, *Fig. 14*, date 52-54; Peacock, Williams 1986, 94; Miro 1988, 123-144; Martin-Kilcher 1994, 335,336, date *Abb. 123*; Brukner 1981, T 160/52 = Bulat 1977, 35, No. 1, T 15/2.

<sup>34</sup> Martin-Kilcher 1994, 337-346 with detailed bibliography.

<sup>35</sup> Liddell, H.G. and R. Scott 1968, *Greek-English Lexicon*, 1635.

<sup>36</sup> Pliny n.h. 24, 136.

<sup>37</sup> Strabon V.3.6; 4.3; Pliny n.h. III, 60; XVI, 38; 62; 65; 95; 97; XXIII, 33; 34; 35; 36.

<sup>38</sup> Bericht 6, 71, No. 17, *Abb. 52*.

<sup>39</sup> Horace *Carm. I 20, 9*; Juvenal *Satires I. 69*.

<sup>40</sup> Maier-Maidl 1992, 121, publ: FAL(ernum) [HE]R(ennius) PRISC(us); the Herennius name is implausible.

<sup>41</sup> Paterson 1982, 151; Panella 1980, 251-259; Sealey Davies 1984, 250-254; *CIL* IV. 9313, 2565a-66, 5554, *CIL* XV 4552-64, 4532, 4565, *CIL* VIII. 22640.21, 22640.26.

<sup>42</sup> No.: M 88 T/5.

<sup>43</sup> Bericht 13, Jobst, W., G. Piccottini, *Die Inschriften 1969-1971*, 315 Nr. 9. *Tafel X. 9*.

<sup>44</sup> Parma *CIL* XI 6695.69; Boltin-Tome 1976, 226,227; Tassaux 1983-1984, 229; other Dressel 2-4 stamp TPALFVRI SVRAE, Panella 1970, 127-131, XXXV. No. 554.

<sup>45</sup> Bericht 9, *Abb. 56/1*, No.: OR/16.

<sup>46</sup> No.: M 87, *Abböschender N-Seite von T/3*, context dated Claudian period.



*Dressel 5 (Knossos 19)*

Even though the Greek *titulus pictus* on one amphora<sup>47</sup> (μ / εψε..., over which Latin letter LS were later inscribed) is of little help in defining its provenance, petrological analyses<sup>48</sup> would suggest production in a volcanic region. They were distributed<sup>49</sup> in Italy, in Crete, in Augst and Pannonia during the 1st century and early 2nd century A.D. Upper part of an amphora (Fig. 5: 6) have been recovered from the Claudian layer in Magdalensberg.

*Rhodian style amphorae (Camulodunum 184, Ostia LXV, Peacock & Williams Class 9)*

Rhodian wine was transported to Magdalensberg in horn-handled amphorae (Fig. 5: 7). The main production centre of these amphorae was the island of Rhodes, although petrological analyses and archaeological evidence have shown that they were also produced on neighbouring islands, as well as the Anatolian coast.<sup>50</sup> This wine was especially popular among the soldiers stationed Danubian-Rhine and Britannian<sup>51</sup> forts and fortresses, and its consumption has also been documented in Gaul and Italy.<sup>52</sup> Numerous fragments of this type have been recovered from Augustan to Claudian layers in Magdalensberg.

*Knidian (Pompeii XXXVIII)*

One unique Greek wine amphora produced in the Knidos<sup>53</sup> in the Datcha peninsula. A flat rim, cylindrical neck, ovoid body and a ringed base characterise this amphora; the handle is sometimes stamped with a figural stamp. They were distributed throughout the Mediterranean<sup>54</sup> whereas only a few vessels are known from the sites

of the northern provinces,<sup>55</sup> from Magdalensberg, Sala, Savaria, Carnuntum, Augst and Fishburne. A handle and some base fragments could be identified in Magdalensberg. The handle fragment bears a stamp: perceptible in the stamp (Fig. 5: 2) is the right profile of a bearded man representing a theatre mask. These amphorae come to light from Augustan layers. Similar stamped vessels found in Athens were dated to the 1st century B.C. by Virginia Grace.

*Gauloise 7*

Flat based Gallic (most probably Gauloise 7) amphorae (Fig. 3: 8) also occur in Magdalensberg, their exact typology is not known, but they seem to have a distribution<sup>56</sup> in Aspiran, Velaux-Moulin du Pont and Fréjus. Upper part of an amphora have been recovered from the Augustan layer in Magdalensberg (M55 W/1 Komplex 3 bis 0).

**Olive-oil***Brindisi Type (Peacock & Williams Class 1)*

Olive-oil was first imported from Apulia and later from the Istrian peninsula. Fragments of Brindisi type of amphorae were recovered from Augustan layers. The late Augustan - early Tiberian layer yielded an amphora (Fig. 4: 1) that is considered to be the very latest in the Brindisi typological<sup>57</sup> sequence and which bears the names of two consuls: *Largo et M(unatio) [consulibus]*. The date indicated by the consuls 13 A.D. (C. Silius Caecina Largus and L. Munatius Plancus) corresponds to the archaeological and typological evidence. Insofar as the above reading<sup>58</sup> of the graffiti is correct, it may define the last phase of production at Brindisi.

<sup>47</sup> Egger, Bericht 5, 33, Fuchs 1978, 190, No. 1244, Taf. 88; Maier-Maidl 1992, 122; Bezczky 1994, 21,22, Abb. 3/f. No.: M 52, AA/8.

<sup>48</sup> Bezczky 1994, 21.

<sup>49</sup> Panella 1986, 618,619, Fig. 15; Martin-Kilcher 1994, 344-346; Bezczky 1994, 21.

<sup>50</sup> Peacock 1977, 266-270; Peacock, Williams 1986, 102; Panella 1986, 615; Empereur, Picon 1989, 225; Martin-Kilcher 1994, 348; Pesavento 1992, 43,44.

<sup>51</sup> Peacock 1977, 269, Fig. 4; Bezczky 1995a, 171, note 15.

<sup>52</sup> Desbat, Martin-Kilcher 1989, Figs. 2,3,9,10, Pl. 3; Toniolo 1991, 34; Pesavento et al. 1992, 43,44.

<sup>53</sup> Grace 1979-2, Fig. 64.

<sup>54</sup> Panella 1986, 621; Riley 1979, 128.

<sup>55</sup> Cunliffe 1971, 208, 210; Martin-Kilcher 1994, 440; Bezczky 1993, 237-244.

<sup>56</sup> Laubenheimer 1985, 302-306.

<sup>57</sup> Manacorda 1995, 177.

<sup>58</sup> Bezczky, T., *Consular graffiti on a Brindisi amphora from Magdalensberg* (forthcoming); Egger (Bericht 12, 1969, 375, No. 62) published this graffiti as: "liq(u)id(um) gari", although this is very implausible.

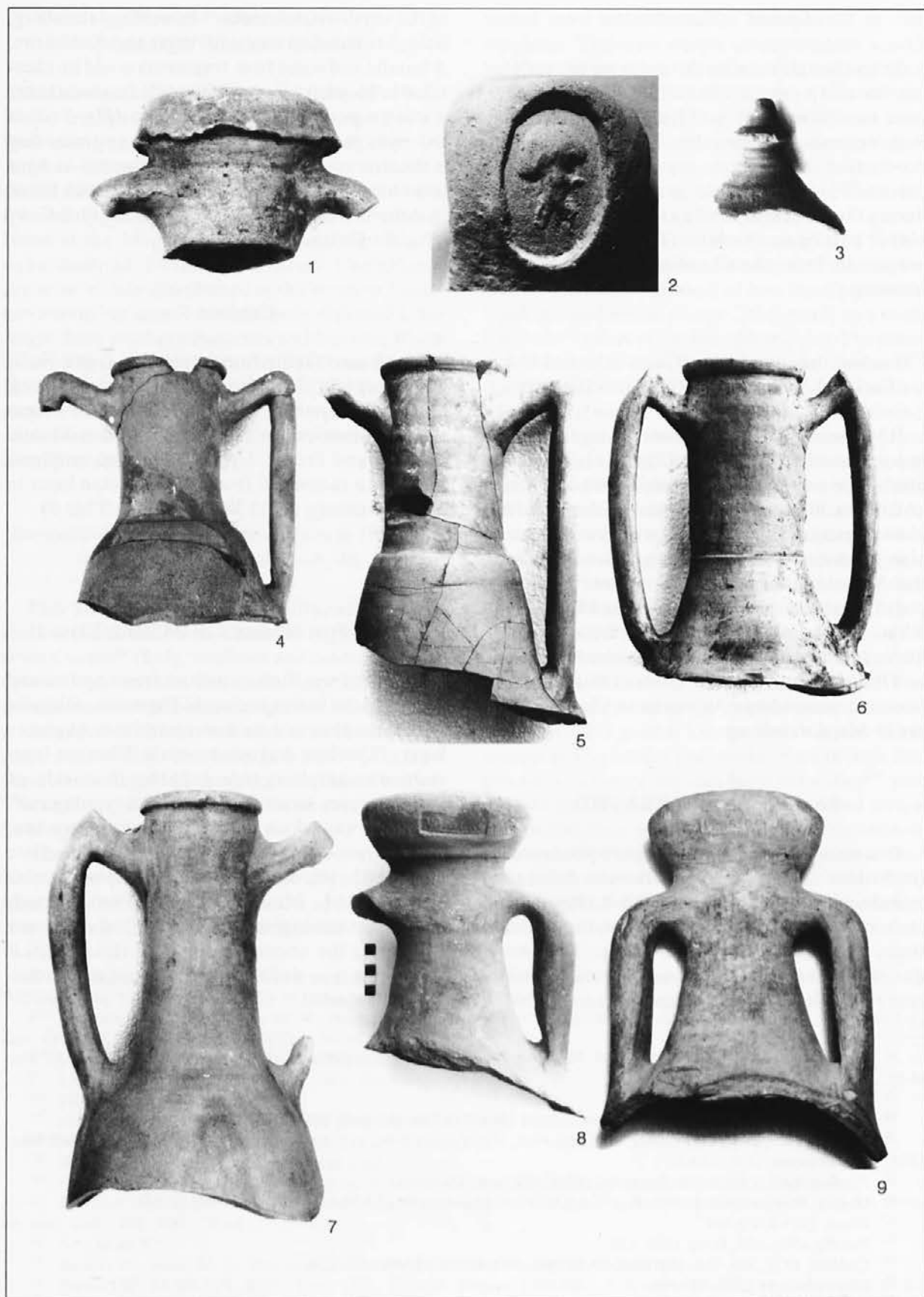


Fig. / Sl. 5: 1 Lamboglia 2; 2,3 Knidian Stamp and base; 4-5 Dressel 2-4; 6 Dressel 5; 7 Rhodian; 8,9 Dressel 6B. Scale / M. 1,3-9 = 1:5; 2 = 1:1.

*Ante 6B* (Anfore con orlo ad anello)

The amphora variant that has recently been labelled "*ante 6B*" probably represents a transitional form. The Brindisi (or Adriatic ovoid) amphorae were transformed, and Dressel 6B amphorae appeared after the "*ante 6B*" form. This type of amphorae have been identified<sup>59</sup> among the finds from Altino. The rims sometimes bear the following stamps: P.SEPVLLI P.F., APICI, APPVLCRI, P.Q.SCAPVLAE. In Altino the APICI stamp<sup>60</sup> occurs on both "*ante 6B*" and classical Dressel 6B amphorae. In Magdalensberg<sup>61</sup> the P.SEPVLLI P.F. stamp occurs on "*ante 6B*" vessels, while SEPVLLIVM stamps are on Dressel 6B amphorae. MESCAE stamps<sup>62</sup> that have been recovered in relatively high number in Magdalensberg occur both on "*ante 6B*" and classical Dressel 6B amphorae. Similar stamped amphorae were earlier assigned to Dressel 6B, while unstamped vessels were often simply labelled as "anfore affine alla brindisine". The names of these stamps appear in the sources in the mid-first century B.C.: Appius Claudius Pulcher was consul in 38 B.C., P. Q(uinctius) Scapula<sup>63</sup> is perhaps identical with the person who is mentioned by Cicero and Pliny as being engaged in trade with Gallia Narbonensis, and one member of the Sepullius<sup>64</sup> family is known from 44 B.C. The following layer yielded fragments of these amphorae at Magdalensberg:

P. SEPVLLI P. F. in period I. that lasted 10 B.C. (Komplex 2, M 82 SH/10 NS Schnitt).

P. Q. SCAPVLAE in period II. that lasted to the turn of the millennium (Komplex 3, M50 HD).

APPVLCRI also in period II. in a layer dated prior to 15 A.D. (M 59 OR/21).

APICI stamps are known only from Claudian layers, in Magdalensberg these occur exclusively on Dressel 6B forms.

Where were these amphorae produced and what was stored in them? The Sepullius family is known from Padova and P. Q. Scapula family is known from Verona stone inscriptions,<sup>65</sup> which suggests that the production centres lay somewhere in this region. The crisis of the Apulian oil production may have caused a temporary production in Veneto (lake Garda?); and the increasing familiarity with the Istrian territories and their subsequent annexation to Italy offered an excellent possibility for the large-scale production of olive-oil.

*Dressel 6B*

The production and export of the "Istrian" olive-oil started at the end of the first century B.C. Olive-oil was gradually introduced<sup>66</sup> into Cisalpina, Noricum and Pannonia. The production of Istrian oil and the manufacture of amphorae can be traced until the early-second century, after Hadrian period it catered to local demand only. The form<sup>67</sup> has curved a rim, oval shaped body, a short tub base. Dressel 6B amphorae often bear stamps on their rim. The stamps generally indicate the owner of the production site in which they were produced. Only one production centre has been excavated<sup>68</sup> so far, in Fažana near Pula, that had been owned by the senators C. Laecanius Bassus'. Another production centre has been identified in Loron<sup>69</sup> near Parentium. The investigation of this site, however, began a few years ago. It has been suggested that this production site<sup>70</sup> had been owned firstly T. Statilius T.F. Taurus Sisenna and later by the notorious Calvia Crispinilla. Little else is known about the other figlinae in Istria. In addition to the names of senators and well-known citizens, there are a number of names of which nothing or relatively little is known.

<sup>59</sup> Toniolo 1991, 21-23.

<sup>60</sup> Toniolo 1991, 202, Fig. 397-399.

<sup>61</sup> Bezczyk 1994, 94-96, Abb. 35.

<sup>62</sup> Fuchs 1978, Taf. 65.

<sup>63</sup> Buchi 1973, No. 96; Zaccaria 1989, 481.

<sup>64</sup> Buchi 1973, No. 97; Zaccaria 1989, 481.

<sup>65</sup> Carre 1985, 223; Zaccaria 1989, 483.

<sup>66</sup> Degrassi 1956, 104-112; Baldacci 1967-1968, 15; Buchi 1973, 550-553; Carre 1985, 219-225.

<sup>67</sup> Carre 1985, 219-220.

<sup>68</sup> Gnirs 1910, 79-88; Bezczyk 1995b, 41-64.

<sup>69</sup> Gregorutti 1886, 230; Gnirs 1914, 176.

<sup>70</sup> Tassaux 1996, 500.

Number of stamped<sup>71</sup> and unstamped amphorae of this type have been recovered from Augustan to Claudian layers in Magdalensberg (Fig. 5: 8,9). The *tituli picti* from Magdalensberg have greatly contributed to clarifying the provenance and contents of these amphorae since on two examples<sup>72</sup> these referred to Istria and to oil: *Olei Histrici* / *flos / p(ondo) V / ... Q(uinti) [L]usidi(i) Dex[tri]* and *L(ucii) Li... / Histrici olei flos p(ondo) / V...*

### Olives

#### Schörgendorfer 558 (Troncoconica da oliva)

Only handle fragments of these amphorae<sup>73</sup> have so far identified in Magdalensberg (Fig. 6: 7). This form had previously been thought to have had a fairly broad data range, but it has become clear that they were in use during the first and second centuries A.D. Schörgendorfer 558 amphorae were until recently thought<sup>74</sup> to have been produced on the Istrian peninsula. Petrological analyses<sup>75</sup> have, however, belied this assumption. A considerable difference exists in the inclusions, as well as in the manufacturing technology, between Dressel 6B and Schörgendorfer 558 amphorae, suggesting two different manufacturing procedures and, also, that the Schörgendorfer

558 amphorae were not produced on the Istrian peninsula.

### Defrutum and olives

#### Haltern 70 (Camulodunum 185A, Peacock & Williams Class 15, Augst 19-Oberaden 82)

The contents<sup>76</sup> of these amphorae was defrutum, a sweet liquid obtained by boiling down the must; olives were often preserved in this must. The fabric of these Baetican amphorae<sup>77</sup> stands close to Dressel 20 amphorae. The similar stamps on both forms<sup>78</sup> suggested that they may have been made in the same workshop. These amphorae widely distributed in the western Mediterranean and Britain to north Africa, from the middle of the first century B.C. to the middle of the first century A.D.<sup>79</sup> A few amphorae have been recovered from the Tiberian-Claudian layer<sup>80</sup> in Magdalensberg (Fig. 4: 2).

### Fish products

#### Beltran I (Dressel 7-11, Camulodunum 186A, Schöne-Mau VII)

Fish sauces and other spicy sauces were a much-appreciated part of the Roman cuisine. These fine

<sup>71</sup> The overwhelming majority of Dressel 6B amphorae (roughly 150) came from Laecanius' workshop and only a few vessels can be linked to other producers. The following stamps are known: C ALTEN, TCL?, APIC, APICI, P.C.QVIR, CAES..., CELER, COSAE, CORNELLATTI, CRISPIN, CRISPINILI, T.A.FCRISPINAE, DON, FLAV.FONTAN, L.G.H, O.IVLI, L.IVNI PAETIN, FEL.TVR, LICI, MAASVL, MES.CAE, LNF, SPD, P.Q.SCAPVLAE, SEPVLLIVM, SISENNAE, PSTATI.OP., THAL, L.TRE.OPTATI, L.VMBRICI, VARI PACCI, RVSO.COC, SABINAE, TITAC, TITAC.R., ... Laecanius workshop: LAEK.A, CLAEK - ADEL, C.AEK - BAR, C.LAEK - BARB, C.LAEK.BAS - CLARVS, LAE. - COM, CLAEK - COM, LAEK - COMI, CLAEKBAS - EVHAR, LAE - FA, C.LAEK - FELIX, CLAEK - FELIX.PET, CLAEK.BASSI - FELIX.SER, C.LAEK.BASSI - FELIX.SER (=FELIX.SCR, LAE - FV), LAEK.H, LAEK - H, LAEK - HER, [C.LAEKBAS] - HERME - HERME, LAEK - HOM, CLAEK - IALIS, [CLAEK] - IALI, LAEK - L, LAEK - OPTA, C.LAEK.BAS - SPERATVS, C.LAEK - SPERAT, C.LAEK - VRBA, LAEK - VIAT, LAEK - COMVS, CLAEK.

<sup>72</sup> Egger, Bericht 2, 487, No. 8, Abb. 35; Bericht 10, 97, No. 34, Abb. 51; Fuchs 1978, 161, No. 1099, Taf. 81 and No. 1100, Taf. 85/2.

<sup>73</sup> The basic type of the distinctive Schörgendorfer 558 amphorae can be distinguished. Type "A" is different from Type "B" by its handles and the lower part of the body. Type "A" was mainly distributed in the western areas of Cisalpinia, while Aquileia region yielded both types "A" and "B". Only type "B" and its variants have been reported from Noricum and Pannonia. The inscriptions on these amphorae refer to the quality of the olives shipped: *ol(iva)/nig(ra)/exdul(ci)/excel(lens)* or *ol(iva)/alb(a)/exdul(ci)/excel(lens)*.

<sup>74</sup> Degrassi 1953, 60 = 1956, 108-109; Baldacci 1972, 28; Muffanti Musselli 1986, 201-206.

<sup>75</sup> Bezeczky 1987, 33; Bezeczky 1994, 112-117.

<sup>76</sup> Colls et al. 1977, 71-74, 89, footnote 222; Sealey 1985, 62-64; Martin-Kilcher 1994, 387-390.

<sup>77</sup> Colls et al. 1977, 33-38; Peacock Williams 1986, 115,116; Tchernia 1986, 140-142; Sealey 1985, 59-65; Martin-Kilcher 1994, 385-390.

<sup>78</sup> Mayet 1977, 141-143.

<sup>79</sup> Colls et al. 1977, 35-38, 89; Sealey 1985, 64; Peacock Williams 1986, 116; Martin-Kilcher 1994, 388,389, a few examples in Augst could date end of the second and the early third century A.D.

<sup>80</sup> Nos: M 69 NG Hang and M 72 NG/3.





Fig. / Sl. 6: 1 Dressel 6A; 3,6 Beltran I (Dressel 8); 4 Dressel 6A; 5 ante 6B; 6 Dressel 8; 7 Schörgendorfer 558; 8 Richborough 527; 9 Portorecanati. Scale / M. 1-3 = 1:10; 4-6,8,9 = 1:5.

and unique sauces, prepared on the southern and eastern Spain, as well as on the north African coast<sup>81</sup> were well known throughout the Roman empire. There is ample evidence for the activity of the Spanish production centres from the early first century to the mid-second century A.D.<sup>82</sup> These amphorae were current in most parts of the Roman Empire. The Spanish amphorae found in Magdalensberg (Fig. 3: 9-12 and 6: 3,6) can be distinguished from each other. Only two Dressel 10 and Dressel 7 amphorae, the earliest in the chronological sequence, have come to light. Dressel 9 and Dressel 8 amphorae are very common in the Tiberian and Claudian period. Even though these were stamped rarely, two CLANI.AVC+<sup>83</sup> and one T.GAVIPRI stamps<sup>84</sup> can be identified in Magdalensberg. These amphorae often bear inscriptions detailing the type and the quality of the sauce and, occasionally, also the owner of the recipe:<sup>85</sup> *G(ari) F(los)/Hispl...*, or just the quality:<sup>86</sup> *gari flos, garum secundarium, muria..*

### Fruits

#### *Camulodunum 189* (Pompeii XV, Peacock & Williams Class 12)

This "carrot amphorae" are characterized by a flat rim, small thick loop-handles and a body covered with horizontal rilling. These amphorae were produced from the early first century to the early second century A.D. Their exact provenance remains unknown, but the quartz in their fabric suggest an origin of desert environment.<sup>87</sup> A Greek incised vessel<sup>88</sup> points to a production centre in Egypt. Distributed in the northern part of the

empire, these amphorae were probably used for the transportation of dried fruits (dates, figs and perhaps olives). Aside from one complete vessel (Fig. 4: 6) the Magdalensberg finds include rim and handles fragments recovered from Tiberian and Claudian layers.<sup>89</sup>

#### *Richborough 527* (Peacock & Williams Class 13)

The amphora with wide thick rounded rim, short semi-circular ridged handles, long-ribbed body probably produced in southern Italy (bay of Naples) or on the Lipari island near Sicily.<sup>90</sup> The very rough fabric contain large rounded volcanic rock fragments, most often colourless volcanic glass and scoriaceous lava and fossil foraminifera. This suggests an origin in an area of both marine sedimentary rocks and, in view of the well-preserved volcanic glass, of recent vulcanism.<sup>91</sup> Its use can be demonstrated in Italy, France, southern British sites and Switzerland in the first century to late second/early third century A.D. Dried fruits and perhaps carpers are thought to have been transported in this amphora type. One vessel<sup>92</sup> from Magdalensberg (Fig. 6: 8) came to light in a Tiberian - Claudian layer.

### Amphorae with unknown contents

#### *Dressel 25*

A few Dressel 25 amphorae<sup>93</sup> can be identified among the Magdalensberg finds. This form has a curved rim, a short neck, round handles and a globular body. The Greek stamps and inscrip-

<sup>81</sup> Beltran 1970, 388-420; Ponsich, Tarradell 1965; Peacock, Williams 1986, 35-39; Ponsich 1988, 24-30; Curtis 1991, 38-111; Martin-Kilcher 1994, 393-409.

<sup>82</sup> Peacock, Williams 1986; Curtis 1991, 42; Martin-Kilcher 1994, 396.

<sup>83</sup> No.: M 76 NG/45 and M 89 WR/2.

<sup>84</sup> No.: M 80 SH/6.

<sup>85</sup> Bezczky 1993, 241-250, Nos: M 80 SH/6 and M 89 WR/1.

<sup>86</sup> *GARI FLOS*: Bericht 10, 97, No. 33, Abb. 51; Bericht 12, 375, No. 60, Abb. 53; *GAR(um).SEC(undarium)*: Bericht 12, 375, Abb. 53, *MVR(ia)*: Bericht 12, 375, No. 63, Abb. 53 (Egger red: *mulsum*).

<sup>87</sup> Shackley 1975, 57-59; Peacock, Williams 1986, 109-110; Tomlin 1992, 308; Martin-Kilcher 1994, 434.

<sup>88</sup> Tomlin 1992, 309,310, Fig. 1. dipinto in black Greek letters: KOYK, kouk(ion), Latin *cuci*, the fruit of the doum palm. This palm in antiquity was limited to the Nile valley, Upper Egypt and Sudan.

<sup>89</sup> Fuchs 1978, Taf. 102, No. M64 AA/32, Taf. 103/1. No. M70 NG/18; 103/2 NG/14; 103/3 M71 NG/31; other handles fr. M72 NG/33; M60 AA/15.

<sup>90</sup> Peacock 1977, 264,265; Peacock, Williams 1986, 111; Arthur 1989, 254; Williams, Arthur 1991, 389-398; Martin-Kilcher 1994, 432-434; Borgard et al. 1991, 311-328; in a paper proposed Lipari island: Borgard, P. and M. Cavalier (Recent research on "Richborough 527" amphorae), January 1994 in London.

<sup>91</sup> Peacock 1977, 264,265.

<sup>92</sup> No.: M 51 Hang.

<sup>93</sup> No.: M 81, Streufund and M 58, Nordterrasse in Tiberian-Claudian layer.

tions suggest that the amphora originated from a Romanized region southern Italy or in Greece.<sup>94</sup> This amphora was primary distributed in northern Italy (Aquila, Altino, Padova)<sup>95</sup> in the first century A.D.

*"Porto Recanati"* (Anfore con orlo ad imbuto)

The distinctive funnel shaped rim of "Porto Recanati" amphora<sup>96</sup> "le anfore con collo ad imbuto" were identified among the pottery finds<sup>97</sup> in Magdalensberg. There is no evidence, however, for the commodities contained in these amphorae. Neither has their provenance been established. The petrological analyses indicate several differing production centres.<sup>98</sup> Their distribution<sup>99</sup> is similar to that of Dressel 6B amphorae: Cisalpina, Noricum and Pannonia.

The excavations conducted on the sites of the Amber Road offer a secure basis for their dating: the finds from Salla were recovered from contexts<sup>100</sup> that have been dated between the mid-first century and the first quarter of the second century A.D. At the same time, the finds from Magdalensberg allow a date prior to the mid-first century. The amphorae found in the Portorecanati cemetery can be assigned to the period between the reign of Domitian and Antonius Pius.

Several marine shells and snails have come to light, but it is not entirely clear how and whence they were transported. A few wooden barrels<sup>101</sup> have also been identified, but little is known about their contents; they were probably used for transporting wine.

**Illustrated amphorae**

Abbreviations: LL - diameter of the rim, HL - height of the rim, LC - diameter of the neck, SH - section of the handle, H - height

*Fig. 3*

1. Dressel 1B, rim fr., No.: M 85 Strayfind, reddish brown (5 YR 5/3) to light red (2.5 YR 6/6), H = 10 cm.

2. Dressel 2-4 (Apulian), rim, neck, handle fr., No.: M 88 T/5, reddish yellow (5 YR 6/6), LL = 11.2 cm, HL = 1.1 cm, SH = 2.8 x 4.7 cm, H = 9.1 cm. Context dated Tiberian-Claudian period.

3. Dressel 2-4, rim, neck, handle fr., No.: M 82 SH/10, reddish yellow (5 YR 7/6), LL = 12 cm, HL = 1.3 cm, SH = 2 x 4.7 cm, H = 11.2 cm. Context dated Komplex 2, period I, before 10 B.C.

4. Dressel 2-4, rim, neck, handle fr., No.: M 88 S, under Floor 2, yellowish brown (10 YR 5/4), LL = 11 cm, HL = 0.8 cm, SH = 2 x 4.3 cm, H = 6.5 cm. Context dated Tiberian period.

5. Dressel 2-4, rim, neck, handle fr., No.: M 59 OR/16, reddish buff (7.5 YR 7/6), LL = 12.2 cm, HL = 1.2 cm, SH = 2.4 x 5.1 cm, H = 9.8 cm. Context dated Komplex 2, period I, before 10 B.C.

6. Pascual 1, rim, handle fr., No.: M 73, NG 19, reddish buff (7.5 YR 7/6), LL = 14.3 cm, HL = 6.5 cm, V = 2.1 cm, H = 11.3 cm. Context dated Tiberian-Claudian period.

7. Pascual 1, rim, handle fr., No.: M 75, SG II, NG/40, reddish buff (7.5 YR 7/6), LL = 16 cm, HL = 8.2 cm, V = 2.5 cm, H = 11.5 cm. Context dated Tiberian-Claudian period.

8. Gauloise 7, rim, neck, handles, No.: M55 W/1, creamy buff (10 YR 8/3-7/3), LL = 15 cm, LC = 11.2 cm, SH = 1.3 x 4.2 cm, H = 18.7 cm. Context dated Komplex 3, before 0.

9. Beltran I (Dressel 10), rim, neck fr. No.: M 58 OR/6, LL = 20.6 cm, HL = 3.7 cm, H = 7.4 cm. Context dated Komplex 2, period I, before 10 B.C.

10. Beltran I (Dressel 7-11), rim, neck fr. No.: M 86 Sondage 5, LL = 18 cm, HL = 3.7 cm, H = 6.9 cm. Context dated Claudian period.

11. Beltran I (Dressel 9), rim, neck fr., No.: M 52 L, LL = 23 cm, HL = 4.1 cm, H = 7.6 cm. Context dated Komplex 4, period II, before 15 A.D.

12. Beltran I (Dressel 8), rim, neck sh, No.: M 59 OR/18, LL = 18 cm, HL = 4.8 cm, H = 8.1 cm. Context dated Augustan period.

*Fig. 4*

1. Brindisi Type, rim, neck, body fr., handles, No.: M 65, NG/4, S: NG/4, LL = 15.2 cm, HL = 3.3 cm, V = 2.4 cm, SH = 4 cm, H = 28.5 cm, reddish yellow (5 YR 7/6) Graffiti: "Largo et M" and CCCIX, perhaps "(C. Silio Caecina) Largo and (L.) M(unatio Planco) (consulibus), and 309 (pounds)" Egger, Bericht 12, 375, No. 62, Abb. 53, read: liq(u)id(um) gari. Context dated late Augustan/early Tiberian period.

2. Haltern 70, rim, neck fr., handle fr., No.: M 69, NG Hang, buff (7.5 YR 7/4), LL = 15 cm, HL = 4.7 cm, V = 1.7 cm, H = 9 cm. Context dated Claudian period.

3. Dressel 25, rim-, neck-, handle fr. No.: M 58, Nordterrasse, LL = 12 cm, H = 9.7 cm, SH = 3.3 cm. Context dated Tiberian-Claudian period.

4. Dressel 25, rim-, neck-, handle fr. No.: M 81, Streufund, red (10 R 4/8), LL = 12.5 cm, SH = 3.3 cm, H = 18.2 cm. Context dated Tiberian-Claudian period.

<sup>94</sup> Van der Werff 1986, 116; Cipriano, Carre 1987, 485; Peasvento et al. 1992, 50.

<sup>95</sup> Cipriano, Carre 1987, 485, Fig. 12; Toniolo 1991, Figs. 282,375-378; Peasvento et al. 1992, No. 285, Tav. 23.

<sup>96</sup> First mentioned this type Mercado 1974, in graves No. 21, 25, 46, 47, 49, 50, 58; later Carre 1985, 232-235; name of the type "Porto Recanati" used B. Bruno the conference in Siena (1986), published Bruno 1989, 644; recently Mazzocchin 1993, 148-155.

<sup>97</sup> Bezeczyk 1994, 112.

<sup>98</sup> Bezeczyk 1987, 35,36.

<sup>99</sup> Mazzocchin 1993, fig. 12.

<sup>100</sup> Bezeczyk 1987, 36.

<sup>101</sup> Piccotti 1987, Fig. 7.

5. Dressel 2-4 (Gauloise), complete, No.: M59, OR/16, LL = 12.5 cm, H = 87 cm, Egger, Bericht 9, Abb. 56. 1. Context dated Komplex 2, period I, before 10 B.C.

6. Camulodunum 189, complete, No.: M 64 AA/32, LL = 8.6 cm, H = 39.6 cm, Fuchs 1978, No. 819, Taf. 102; Bezeczky 1994, 111, Abb. 43/k.

Fig. 5

1. Lamboglia 2, rim, neck handles fr., No.: -, Bezeczky 1994, Abb. 1/f.

2. Knidian, handle fr., No.: M66, OR/19, red (2.5 YR 5/6), H = 7.5 cm, stamp on top of the handle, oval form 19 x 31 mm, theatre mask, bearded man, Bezeczky 1993, 237-244, No.1. Context dated Augustan period.

3. Knidian, base, No.: M69, I/48, western section of area NG/15 = NG/16, red (2.5 YR 5/6), H = 7 cm, HL = 5.4 cm, Bezeczky 1993, 237-244, No. 2. Context dated Augustan period.

4. Dressel 2-4 (Pompeii 5-6), rim, neck, body fr., handles, No.: -, Bezeczky 1994, Abb. 3/c.

5. Dressel 2-4, (Koan), rim, neck, body fr., handles, No.: M 85 PQ/3, LL = 12cm, HL = 1.3 cm, SH = 2.7 x 5.4 cm, H = 31.1 cm, graffiti cut after firing: CTAXY. Maier-Maidl 1992, 115; Bezeczky 1994, Abb. 3/d. Context dated Claudian period.

6. Dressel 5, rim, neck, body fr., handles, No.: M 52 AA/8, LL = 11.6 cm, HL = 1.2 cm, SH = 2.4 x 4.8 cm, H = 30.5 cm. Egger, Bericht 5, 33; Fuchs 1978, 190, No. 1244, Taf 88; Maier-Maidl 1992, 122; Bezeczky 1994, 21-22, Abb. 3/f. Context dated Claudian period.

7. Rhodian, rim, neck, body fr., handles, No.: M 51 Keller, LL = 12 cm, HL = 1.2 cm, SH = 3 cm, H = 39.3 cm. Fuchs 1978, 55, No. 319, Taf. 91; Bezeczky 1994, Abb. 41/a.

8. Dressel 6B, rim, neck, body fr., handles, No.: M 63, AA/27, reddish yellow (5 YR 6/6), LL = 15 cm, HL = 5.2 cm, SH

= 4.5 x 3.9 cm, H = 30 cm. Stamp: Vari Pace(ii), Fuchs 1978, 146, No. 1043, Taf 70/3; Bezeczky 1994, 83, No. 111, Abb. 37, No. 114(= 111) Context dated Claudian period.

9. Dressel 6B, rim, neck, body fr., handles, No.: M 49, G, light red - red (2.5 YR 6/6 - 5/6), LL = 15 cm, HL = 5.8 cm, LC = 9 cm, HC = 17.8 cm, LPO = 16.3 cm, HT = 29.7 cm, Stamp on the rim: C(ai) Laek(anii) B(assi), A-E-K in ligature, stamp on the rim: Euchar(...), E-V in ligature, E reverse, graffiti cut after firing on the upper part of the body: LXI (pounds = 19.97 kg), Fuchs 1978, 128, No. 969, Taf. 59; Maier-Maidl 1992, 51; Bezeczky 1994, 57, No. 17c, Fig. 12.

Fig. 6

1. Dressel 6A, complete, No.: -, LL = 13 cm, HL = 5 cm, SH = 3cm, H = 103.5 cm, Stamp on the neck: C.Car(istianus) Fron(to), Fuchs 1978, 106, No. 1064, Taf. 79; Maier-Maidl 1992, 82.

2. Ante 6B, complete, No.: -,

3. Beltran I (Dressel 8), No.: -, LL = 17 cm, H = 84 cm, titulus pictus in red ink: G(arum)/CT/PTC(?), under the handle XII, Maier-Maidl 1992, 123 (C/G(ari) F(los)/T(...)) P(...)

4. Dressel 6A, No.: -,

5. Ante 6B, rim, neck, body fr., handles, stamp on the rim: P. Sepulli P.F. Maier-Maidl 1992, 64; Bezeczky 1994, 94, Abb. 35, No. 145a. Context dated Komplex 2, period I, before 10 BC.

6. Beltran I (Dressel 8), No.: M 1948; Fuchs 1978, No. 759, Taf. 99/1.

7. Schörgendorfer 558, handle fr. No.: M80, SH/6. Context dated Tiberian period.

8. Richborough 527, No.: M51, Hang. Context dated Tiberian-Claudian period.

9. Portorecanati, No. 2925, Fuchs 1978, No. 828, Taf. 104/2; Bezeczky 1994, 112, Abb. 42/b.

ALFÖLDY, G. 1968, *Senatoren in der römischen Provinz Dalmatia*. - Epigr. Studien. 5.

ALFÖLDY, G. 1974, *Noricum*. - London, Boston.

ARTHUR, P. 1989, On the Origins of Richborough Form 527. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 249-256.

BALDACCI, P. 1967-1968, Alcuni aspetti dei commerci nei territori cisalpini. - In: *Atti del Centro studi e documentazione sull'Italia romana* 1, 7-50. Milano, Varese.

BALDACCI, P. 1972, Importazioni Cisalpine e produzione Apula. - In: *Recherches sur les Amphores Romaines*, Coll. de l'Éc. franç. de Rome 10, 7-28.

BELTRAN LLORIS, M. 1970, *Las anforas romanas en España*. - Zaragoza.

BERICHT 1 (1949) - 15 (1986). Praschniker, C., R. Egger, H. Vettors, G. Piccotti, Magdalensberg - Grabungsberichte. - Klagenfurt.

BEZECZKY, T. 1987, *Roman amphorae from the Amber Route in Western Pannonia*. - BAR Int. Ser. 386.

BEZECZKY, T. 1991, Stamps and Inscriptions: The Case of the Pannonian Amphorae. - In: *Instrumenta Inscripta Latina Kolloquium (11.-14. September 1991, Pécs)*, Specimina Nova 7, 177-190.

BEZECZKY, T. 1993, Knidische Amphoren in der nördlichen Provinzen des römischen Reiches. - *Carinthia* I 183, 237-244.

BEZECZKY, T. 1994, *Amphorenfunde vom Magdalensberg und aus Pannonien. Ein Vergleich*. - Archäologische Forschungen zu den Grabungen auf dem Magdalensberg 12.

BEZECZKY, T. 1995a, Roman Amphora Trade in Pannonia. - In: *La Pannonia e l'Imperio Romano*, Annuario dell'Accademia d'Ungheria 1994, 155-175, Roma.

BEZECZKY, T. 1995b, Amphorae and Amphorae Stamps from the Laecanius workshop. - *Journal of Roman Archaeology* 8, 41-64.

BOLTIN-TOME, E. 1976, Žigi na rimskih opekah iz depoja Pomorskega muzeja "Sergej Mašera" v Piranu. - *Arh. vest.* 25, 225-232.

BORGARD, P., F. GATEAU, B. CHEDRU and K. KNOWLES 1991, *Des amphores cannelées a Cavailon (Vaucluse) a la fin du Ier siècle avant notre ère. Nouveaux éléments pour l'étude des "Richborough 527"*. - S.F.F.C.A.G. Actes du Congrès de Cognac, 1991.

BRUKNER, O. 1981, *Rimska keramika u Jugoslavenskom delu provincije donje Panonije*. - Diss. et monogr. 24.

BRUNO, B. 1989, Lombardia: recherche in corso. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 642-644.

BUCHI, E. 1973, Banchi di anfore romane a Verona. Note sui commerci cisalpini. - In: *Il territorio veronese in età romana*, Atti del convegno tenuto a Verona, 22-24 ott. 1971, 531-637, Verona.

BULAT, M. 1977, Nalazi s donjogradskog pristaništa u Osijeku. - *Osj. zbor.* 16, 11-77.

CARRE, M. B. 1985, Les amphores de la Cisalpine et de l'Adriatique au debut de l'Empire. - *Mél. Éc. franç. Rome* 97, 207-245.

CALLENDER, M. H. 1965, *Roman amphorae*. - London.



- CIPRIANO, M. T. 1994, La raccolta dei bolli sulle anfore italiche trovate in Italia. - In: *Epigrafia della produzione e della distribuzione*, Coll. de l'Éc. franç. de Rome 193, 205-218.
- CIPRIANO, M. T. and M. B. CARRE 1987, Note sulle anfore conservate nel Museo di Aquileia. - *Ant. Altoadr.* 29, 479-494.
- CIPRIANO, M. T. and M. B. CARRE 1989, Production et typologie des amphores sur la Côte Adriatique de l'Italie. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 67-104.
- COLLS, D., R. ÉTIENNE, R. LEQUÉMENT, B. LIOU and F. MAYET 1977, L'épave Port-Venderes II et le commerce de la Bétique a l'époque de Claude. - *Archaeonautica* 1.
- CUNLIFFE, B. W. 1971, *Excavations at Fishbourne 1961-1969*. II: *The Finds*. - Rep. Res. Com. Soc. Ant. Lond. 27.
- CURTIS, R. I. 1991, *Garum and Salsamenta: production and commerce in materia medica*. - Leiden, New York.
- DEGRASSI, A. 1953, Aquileia e l'Istria in età romana. - In: *Studi Aquileiesi offerti a G. Brusin*, 51-65, Aquileia.
- DEGRASSI, A. 1956, L'esportazione di olio e di olive istriane nell'età romana. - *Atti Mem. Soc. Istr. Arch. St. Pat.* 4, 104-112.
- DESBAT, A. and S. MARTIN-KILCHER 1989, Les amphores sur l'axe Rhône-Rhin à l'époque d'Auguste. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 339-365.
- DOBESH, G. 1980, *Die Kelten in Österreich nach den ältesten Berichten der Antike*. - Wien.
- EMPEREUR, J.-Y. and M. PICON 1989, Les régions de production d'amphores impériales en Méditerranée orientale. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 223-248.
- FORMENTI, F., A. HESNARD and A. TCHERNIA 1978, Note sur le contenu d'une amphore Lamboglia 2 de l'épave de la Madrague de Giens. - *Archaeonautica* 2, 95-100.
- FUCHS, M. 1978, *Die römischen Amphoren vom Magdalensberg*. - Dissertation, Band I-III. - Innsbruck.
- GNIRS, A. 1910, Eine Römische Tonwarenfabrik in Fasana bei Pola. - *Jb. Altkd.* 4, 79a-88b.
- GNIRS, A. 1914, Forschungen in Pola und in der Polesana. - *Jh. Österr. Arch. Inst.* 17, 161-184.
- GRACE, V. R. 1979, *Amphoras and the ancient wine trade*. - Excavations of the Athenian Agora, Picture Book No. 6. Second edition, Athen.
- GREGORUTTI, C. 1886, La figulina imperiale Pansiana di Aquileja, ed i prodotti fittili dell'Istria. - *Atti Mem. Soc. Istr. Arch. St. Pat.* 2, 219-253.
- HEGER, N. 1986, Frühromische Amphoren aus der Stadt Salzburg (Mozartplatz 4). - *Bay. Vorgeschbl.* 51, 131-161.
- LAUBENHEIMER, F. 1985, La production des amphores en Gaule Narbonnaise. - Paris.
- MAIDL, V. 1990, Ein Amphorenfragment vom Magdalensberg mit Konsuldatering. - *Carinthia* I 180, 85-88.
- MAIER-MAIDL, V. 1992, *Stempel und Inschriften auf Amphoren vom Magdalensberg*. - Archäologische Forschungen zu den Grabungen auf dem Magdalensberg 11.
- MANACORDA, D. 1995, A proposito delle anfore della Pannonia romana: appunti e riflessioni. - In: *La Pannonia e l'Impero Romano*, Annuario dell'Accademia d'Ungheria 1994, 177-191, Roma.
- MARTIN-KILCHER, S. 1993, Amphoren der späten Republik und der frühen Kaiserzeit in Karthago. - *Mitt. Deutsch. Arch. Inst.* 100, 269-320.
- MARTIN-KILCHER, S. 1994, *Die Römischen Amphoren aus Augst und Kaieraugst*. - Forsch. in Augst 7/2,3.
- MAYET, F. 1977, Deux amphores Haltern 70 estampillées du musée de Séville. - In: Colls et al., *Archaeonautica* 1, 141-143.
- MAZZOCCHIN, S. 1993, Proposta per una definizione tipologica delle anfore "collo ad imbuto". - *Quad. Arch. Ven.* 9, 148-157.
- MERCANDO, L. 1974, La necropoli romana di Portorecanati. - *Not. sc. ant.* 28, 142-445.
- MIRO, J. 1988, *La producción de ánforas romanas en Catalunya*. - BAR Int. Ser. 473.
- MUFFANTI MUSSELLI, G. 1986, Diffusione dell'anfora tronco-conica da olive nel I sec. d.C. - *Rev. arch. Como* 168, 187-215.
- PANELLA, C. 1970, Le Anfore. - In: *Ostia II*, Studi Miscellanei 16, 102-156, Roma.
- PANELLA, C. 1980, Retroterra, porti, e mercati: l'esempio dell'ager Falernus. - In: *The Seabone Commerce of Ancient Rome*, Mem. Amer. Acad. Rome, 251-259.
- PANELLA, C. 1986, Oriente ed Occidente: Considerazioni su alcune anfore "Egee" di età Imperiale a Ostia. - In: *Recherches sur les Amphores Grecques*, Bull. corr. hell. Suppl. 13, 609-636.
- PASCUAL GUASCH, R. 1962, Centros de producción y difusión geográfica de un tipo de ánfora. - In: *Actas del VII Congreso Nacional de Arqueología*, 334-345, Zaragoza.
- PATERSON, J. 1982, Salvation from the sea: amphorae and trade in the Roman West. - *Jour. Rom. St.* 72, 146-157.
- PEACOCK, D. P. S. 1977, Roman amphorae: typology, fabric and origins. - In: *Méthodes classiques et méthodes formelles dans l'étude des amphores*, Coll. de l'Éc. franç. de Rome 32, 261-278.
- PEACOCK, D. P. S. and D. F. WILLIAMS 1986, *Amphorae and the Roman economy, an introductory guide*. - London, New York.
- PESAVENTO MATTIOLI, S., S. CIPRIANO, P. PASTORE and S. MAZZOCCHIN 1992, *Anfore romane a Padova: ritrovamenti dalla città*. - Materiali d'archeologia 1.
- PICCOTTINI, G. 1977, Die Stadt auf dem Magdalensberg - ein spätkeltisches und frühromisches Zentrum im südlichen Noricum. - In: *Aufstieg und Niedergang der Römischen Welt* II/6, 263-301.
- PICCOTTINI, G. 1987, Scambi commerciali fra l'Italia e il Norico. - *Ant. Altoadr.* 2, 291-304.
- PICCOTTINI, G. 1989, *Die Römer in Kärnten*. - Klagenfurt.
- PICCOTTINI, G. and H. VETTERS 1990, *Führer durch die Ausgrabungen auf dem Magdalensberg*. - Klagenfurt.
- PICCOTTINI, G. 1997, Amphorae litteratae vom Magdalensberg. - In: *Komos*, Festschrift für Thuri Lorenz zum 65. Geburtstag, 203-206.
- PONSICH, M. and M. TARADELL 1965, *Garum and industries de salaison dans la Méditerranée Occidentale*. - Paris.
- PONSICH, M. 1988, *Aceite de oliva y salazones de pescado, factores geo-economicos de Bética y Tingitania*. - Madrid.
- RILEY, J. A. 1979, Coarse Pottery. - In: *Excavations at Sidi Khebish / Benghazi (Berenice)*, Lybia Antiqua, Suppl. 5, II, 91-446.
- SEALEY, P. R. 1985, *Amphoras from the 1970 Excavations at Colchester Sheepen*. - BAR Brit. Ser. 142. Oxford.
- SEALEY, P. R. and G. M. R. DAVIES 1984, Falernian Wine at Roman Colchester. - *Britannia* 15, 250-254.
- SHACKLEY, M. 1975, *Archaeological Sediments*. - London.
- SCHINDLER-KAUDELKA, E. 1989, *Die Gewöhnliche Gebrauchskeramik vom Magdalensberg*. - Archäologische Forschungen zu den Grabungen auf dem Magdalensberg 10.
- TASSAUX, F. 1983-1984, L'implantation territoriale des grandes familles d'Istrie sous le Haut-Empire romain. - In: *Problemi storici ed archeologici dell'Italia nordorientale e delle regioni limitrofe dalla preistoria al medioevo*, Atti Civ. Mus. St. Arte 13, 193-229.
- TASSAUX, F. 1996, Loron (Poreč): villa maritime. - *Mél. Éc. franç. Rome* 108, 500-501.

- TCHERNIA, A. 1971, Les amphores vinaires de Tarraconaise et leur exportation au debut de l'Empire. - *Arch. Esp. Arq.* 44, 38-85.
- TCHERNIA, A. 1986, *Le vin de l'Italie romaine*. - Bibl. d. Ét. franç. d'Ath. et de Rome 261.
- TOMLIN, R. S. O. 1992, The Roman "carrot" amphora and its Egyptian provenance. - *Jour. Egypt. Arch.* 78, 307-312.
- TONIOLO, A. 1991, *Le Anfore di Altino*. - Ach. Ven. 15.
- WERFF, J. H. VAN DER 1986, The Amphora wall in the house of the Porch, Ostia. - *Bull. Ant. Besch.* 61, 96-137.
- WILLIAMS, D. and P. ARTHUR 1991, Roman amphora from Richborough 527: a continuing petrological study. - In: *Recent Developments in Ceramic Petrology*, Brit. Mus. Occ. Paper 81, 389-398.
- ZACCARIA, C. 1989, Per una prosopografia dei personaggi menzionati sui bolli delle anfore romane dell'Italia nord-orientale. - In: *Amphores romaines et histoire économique: dix ans de recherche*, Coll. de l'Éc. franç. de Rome 114, 469-488.
- ZEVI, F. 1966, Appunti sulle anfore romane. - *Archeologia Classica* 18, 208-247.
- ZEVI, F. and I. POHL 1970, Ostia. Casa delle pareti Gialle, salone centrale. Scavo sotto il pavimento a mosaico. - *Not. sc. ant.* 24. Suppl. 1, 43-234.

## Tipi amfor s Štalenskega vrha

### Povzetek

V času svojega kratkega obstoja je naselbina na Štalenskem vrhu uvozila izredno veliko število predmetov. Italški trgovci, ki so tam živeli, so si ustvarili življenjske pogoje, ki so jih bili vajeni od doma. Tudi svojih prehrabnenih navad niso spreminjali: uživali so vino, olivno olje, olive in ribje omake. Kupovali so jih v najboljših proizvodnih središčih.

Njihov izvor lahko določamo po določeni vrsti amfor. Vino je bilo iz Italije, Španije, južne Francije in Grčije, olivno olje iz Italije in Istre, ribje omake pa so bile španske. Suho sadje so uvažali iz Španije. Od kod so uvažali olive, pa še vedno ni znano. Proizvodnja nekaterih amfor, ki so brez žigov in napisov, ni locirana.

Dr. Tamás Bezczy  
Karmarschgasse 72/23  
A-1100 Wien