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## STAMPS ON MICA-DUSTED WARE

*A small number of stamps on Mica-dusted Ware were recorded from Gallia Belgica, Germania superior, Germania inferior and Britannia. Both anepigraphic stamps and name stamps appear on a small range of beakers, bowls and dishes. Certain fabrics and chemical groups were distinguished, but only one workshop producing stamped vessels is known. The majority of the stamped vessels were in use from Flavian times to the early 2<sup>nd</sup> century. Some of the workshops were involved in organized long distance trade, while others only supplied locally.*

### Introduction

Mica-dusted Ware is widely distributed throughout the North-Western part of the Empire. A small quantity of stamped vessels is known from *Gallia Belgica*, *Germania superior*, *Germania inferior* and *Britannia*. The stamps have never been studied in detail<sup>1</sup>. This paper comprises a first approach to a classification of these stamps according to typology, chronology, epigraphy and source, in order to analyze them in their economic setting. All the stamps which became apparent to us are listed in a catalogue.

### Workshops and Distribution of stamped Vessels

There were workshops producing Mica-dusted Ware in *Gallia Belgica*, *Germania superior*, *Germania inferior* and *Britannia* (fig. 1). The distribution of stamped vessels is restricted to this area (fig. 2). It is only in Les-Rues-de-Vignes (France) that the production of stamped vessels was ascertained by archaeological excavations<sup>2</sup>.

### Vessel Types and Chronology

Potters' stamps are recorded on a few vessel types (table 1; fig. 3). The earliest stamped vessels are a set of flagon (DOR 1, 1) and patera (DOR 1, 2), dated to the first half of the 1<sup>st</sup> century. Most types belong to the 'second generation' of mica-dusted Ware according to the classification of X. Deru<sup>3</sup>. The majority of these types are not as early as Flavian and

went out of use in the first decades of the 2<sup>nd</sup> century. A dish (DOR 2, 6.5), probably an imitation of a Terra Sigillata dish Curle 23, from Wederath-*Belginum* (Germany) comes from a burial dated to the second half of the 2<sup>nd</sup> century. Stamps are frequent on beakers with an oblique rim (types 18, 20, 22) and flanged bowls (type 14). Only a few stamps were recorded on other vessel types.

### Stamps

134 stamped vessels are known (table 2; figs. 4–7)<sup>4</sup>. The stamps are almost always located at the edge of the exterior base of the vessel, apart from a few stamps on vessels identified as imitations of Terra Sigillata types, which are stamped in the interior bottom. By far the most stamps are either rectangular or curved. Other forms, such as rounded stamps (no. 47) or stamps in *tabula ansata* (no. 133), are very rare. Some rectangular stamps have a frame (nos. 60, 103–104) or lines of dots beside the rim (no. 1). Exscingius (nos. 27–30) and Vererius (nos. 65–68) are the only potters which used both rectangular and curved stamps. They used at least three dies, which outnumber every other potter. In relation to the position of the writing, curved stamps can be directed both upwards and downwards. The vast majority of the vessels have just one stamp. Just one flanged bowl DOR 2, 14 from Wederath has four stamps from two different dies of the potter VIRIA (nos. 74–75). One vessel is stamped by a gemstone with an unidentified image (no. 134). One can assume that this vessel was stamped with both a potter's stamp and a gemstone, because certain Gallo-Belgic vessels are stamped in this way<sup>5</sup>. Many stamps are difficult to read or clearly 'anepigraphic'. These stamps are in most cases composed of the letters I, V or X, but other letters such as C or O were also in use. Certain

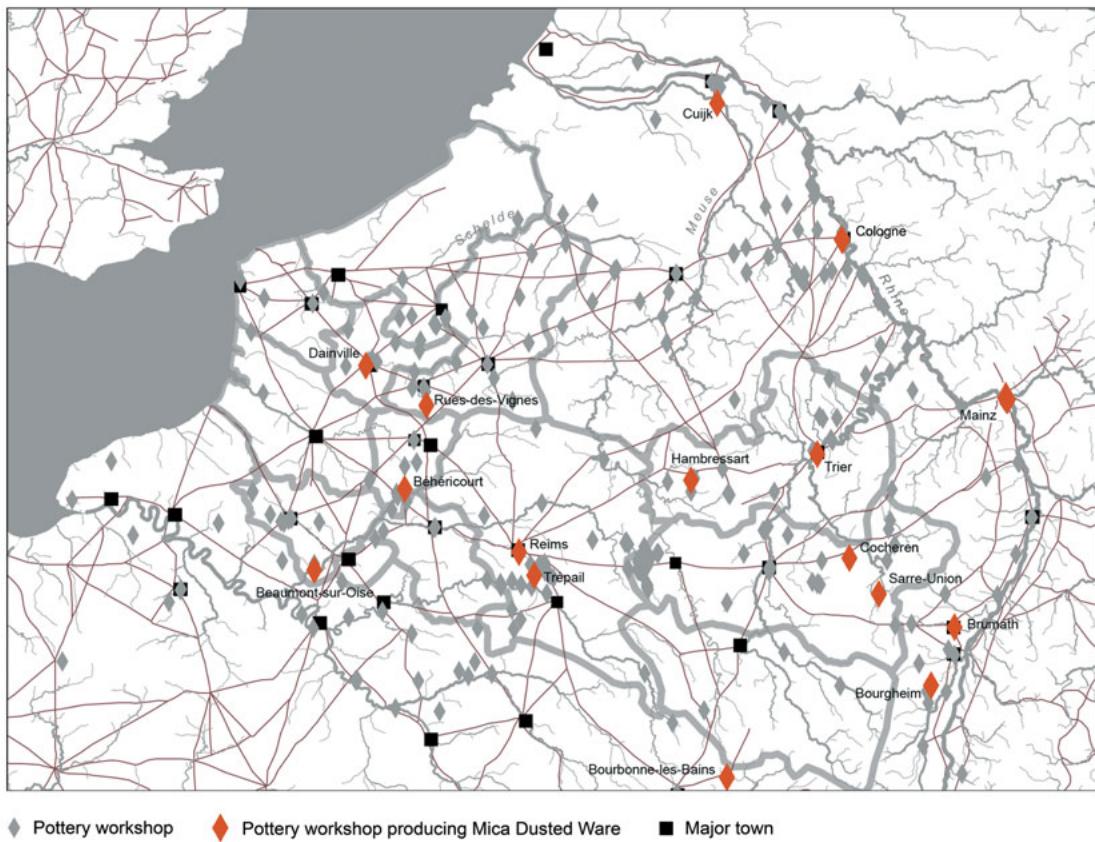
<sup>1</sup> Cf. DERU 1994, 89–90, who listed 16 stamps.

<sup>2</sup> Les-Rues-de-Vignes: DERU 2005, 272–273. – MARSH 1978, 193 suggested a local origin for a stamp found in London (no. 46), but this was not confirmed by chemical or mineralogical analysis. – GUSTIN 1985, 74 proposed a local origin for a group of stamped vessels found in Braives, but according to the fabric these vessels are imported from Les-Rues-de-Vignes: DERU 2005, 469.

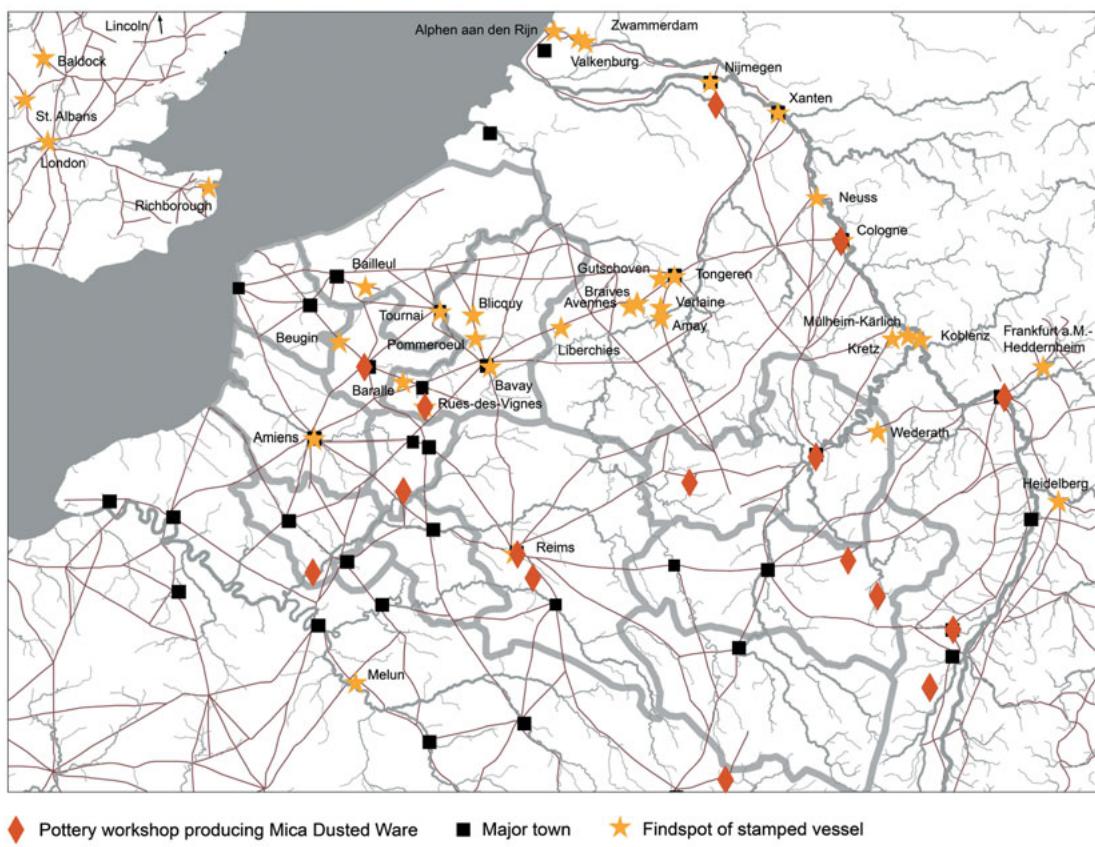
<sup>3</sup> DERU 1994.

<sup>4</sup> Some doubtful stamps are not included in the catalogue: HAALEBOS/GIELEN 1975, 149 no. 10 pl. 49B, 10 (VIDACOS); BOELICKE ET AL. 2000, 114 no. B/1027 pl. 46, B/1027 (IXABINIS).

<sup>5</sup> DERU 2004, 142.



**Fig. 1.** Workshops producing Mica-dusted Ware in *Gallia Belgica*, *Germania superior* and *Germania inferior*.



**Fig. 2.** Distribution of stamped vessels.

Type	Description	Date range	References
DOR 1,1	Spouted flagon	1–50	MARSH 1978, 137; TUFFREAU-LIBRE 1978, 117–119
DOR 1,2	Patera	1–50	MARSH 1978, 165–166; TUFFREAU-LIBRE 1978, 108–111
DOR 2,6,2	Dish with vertical rim	70–100 ?	cf. DERU 1996, 57 (A55.1)
DOR 2,6,5	Dish with narrow horizontal rim	100–200 ?	cf. BET/DELOR 2000, 470 (43A)
DOR 2,14	Flanged bowl	70–120/130	DERU 1994, 82
DOR 2,15	Bowl with horizontal rim	70–120/130	DERU 1994, 82
DOR 2,18	Globular beaker with oblique rim	50–120/130	DERU 1994, 82
DOR 2,20	Folded beaker with oblique rim	70–120/130	DERU 1994, 82
DOR 2,21	Beaker with thickened oblique rim	50–120/130 ?	DERU 1994, 82
DOR 2,22	Beaker with oblique rim	50–120/130	DERU 1994, 82

**Table 1.** Stamped vessel types.

anepigraphic stamps are very well cut. In Les-Rues-de-Vignes, both name stamps and anepigraphic stamps were in use. The potters' names are almost always Celtic. In some cases the potters' names are written in different ways, such as IARVS (**nos. 38–42**), who is very probably the same person as IAAVS (**nos. 32–34**) and VIIRIIRIVS (**nos. 65–67**), who is probably the same potter as VARIIRVS (**no. 61**). There are no stamps with more than one name. The potters' names are either written in the nominative, some of them with a *f*(*f*ecit), or in the genitive. One stamp is recorded on more than one vessel type: ESOCRI (**nos. 22–23**) on a spouted flagon (DOR 1, 1) and a patera (DOR 1, 2). Furthermore there are some cases where the same name is represented on more than one vessel type. The stamps of some potters have also been recorded on Gallo-Belgic Ware, some of them by the same die<sup>6</sup>.

Certain stamps are represented on more than one single vessel. The most frequent stamp is IARVS (**nos. 38–42**) on five vessels found in Xanten (Germany) and Nijmegen (The Netherlands).

## Fabrics and Chemical Composition

Some fabric groups can be identified macroscopically (Les-Rues-de-Vignes), but by no means all (**table 2**)<sup>7</sup>.

In order to attribute the stamps to different groups of potters and to determine the production sites, 39 samples, all found in *Germania inferior*, were subjected to wavelength X-

ray-fluorescence analysis (**table 3**). The chemical composition indicates that ten different groups can be distinguished e.g. as shown by principal component analysis (**fig. 8**). Single samples which cannot be attributed to a group are regarded as a group of their own which needs more samples to be analysed. Group 2 consists of two such samples which have been provisionally grouped together, mainly because of the high K content. Generally K is the main distinguishing element. On the other hand, generally high P contents indicate large alteration effects which can influence the contents of K and other elements. Taking this into account, group 6 could be combined with group 7 and group 8 with group 9. The result of the analyses means that mica-dusted ware was produced in many different places. Looking at the most distinguishing elements Ti and K, the clay of five groups, not counting the single samples, is so different that the five groups must represent different workshops. There is no evidence that a single potter used different clays.

In order to attribute the groups to known reference groups, samples from Nijmegen, Xanten, Les-Rues-de-Vignes, and Cuijk were compared. Group 1 consists exclusively of stamps of the potter Iarus. It is similar to three local samples from Nijmegen with very characteristic Ti, Cr, and Ce contents, but differs significantly in higher Ni contents, so the attribution remains unclear in spite of the multivariate similarity. The potters Tanneci, Meddico and Exscingius belong to the same group and are probably of the same origin (group 7). Groups 8 and 9 can probably be attributed to the workshops at Les-Rues-de-Vignes. They are clearly distinguished, however, from grey pottery from Nijmegen (group Nijm 2). The origin of groups 3 and 4 and of the single samples still remains uncertain and the reference groups taken into account do not match.

## Discussion

The number of Mica-dusted vessels which are stamped seems to be relatively small. Whether it is different from the amount of stamped Gallo-Belgic beakers cannot be determined.

<sup>6</sup> Eburus: Nijmegen (HOLWERDA 1941 pl. 19,64a–b; pers. comm. H. van Enckevort [Nijmegen]); Velsen (pers. comm. A. Bosman); Bavay (CARMELEZ 1988). – Echobiniius: Nijmegen (HOLWERDA 1941, pl. 19,69); Xanten (HEIMBERG 1987, 438 fig. 10,6); Bavay (CARMELEZ 1988 nos. 137–139); Windisch (ETTLINGER/SIMONETT 1952, 20 fig. 5). – Exscingius: Xanten (HANEL 1995 pl. 98,1847); Bavay (CARMELEZ 1988). – Tanneci: Nijmegen (HOLWERDA 1941 pl. 20,136; same die as **no. 59**). – Vererius: Les-Rues-de-Vignes (DERU 2005, 472 fig. 3,10); Bavay (CARMELEZ 1988). – Anepigraphic: Bavay (DERU 2004, 140 fig. 76,57, same die as **no. 100**); Wederath (CORDIE-HACKENBERG/HAFFNER 1997 pl. 560 grave 2065,1; same die as **no. 117**).  
<sup>7</sup> DERU 1994, 90–92; DERU 2005, 469.

While the type series of the Mica-dusted Ware – apart from the flagon/patera set DOR 1, 1 and DOR 1, 2 – shows no significant influence of bronze vessels, the relatively high number of curved stamps – 20 different dies – indicates the impact of stamped metalwork. Curved stamps are very rare on Terra Sigillata and not common on Gallo-Belgic Wares<sup>8</sup>, but are characteristic for bronze vessels of Gaulish origin<sup>9</sup>. According to the distribution of the IAAVS F/IARVS F stamps it is certain that this kind of stamp was in use not just in Northern Gaul but also in the Lower Rhine region.

The fact that some names or even the same dies appear on both Gallo-Belgic and Mica-dusted Ware is clear evidence that these potters were involved in the production of both groups. As the purpose and the meaning of the stamps is not known, it must remain uncertain whether the anepigraphic stamps, which are in many cases well cut and somewhat ornamental, represent a lower level of literacy or if they are just another type of production mark.

The spatial distribution of the stamps and the results of chemical analysis seem to confirm that some of the workshops were involved in a well-organized supra-regional trade. So far only Les-Rues-de-Vignes could be identified as one of the major production sites. A large amount of the stamps can be attributed to this workshop.

<sup>8</sup> For the stamps on Gallo-Belgic Wares see DERU 2004. At Les-Rues-de-Vignes both rectangular and curved stamps were in use for Terra Nigra; DERU 2005, 473 fig. 3.

<sup>9</sup> PETROVSKY 1993, 182.

It supplied wider parts of *Gallia Belgica* and *Germania inferior*. The most frequent potter IARVS/IAAVS, on the other hand, is represented only in Xanten and Nijmegen.

It is necessary to point out that further research, based on a larger quantity of stamps, is an important precondition for any sufficient appraisal of this pottery within the setting of Imperial commerce.

### Acknowledgments

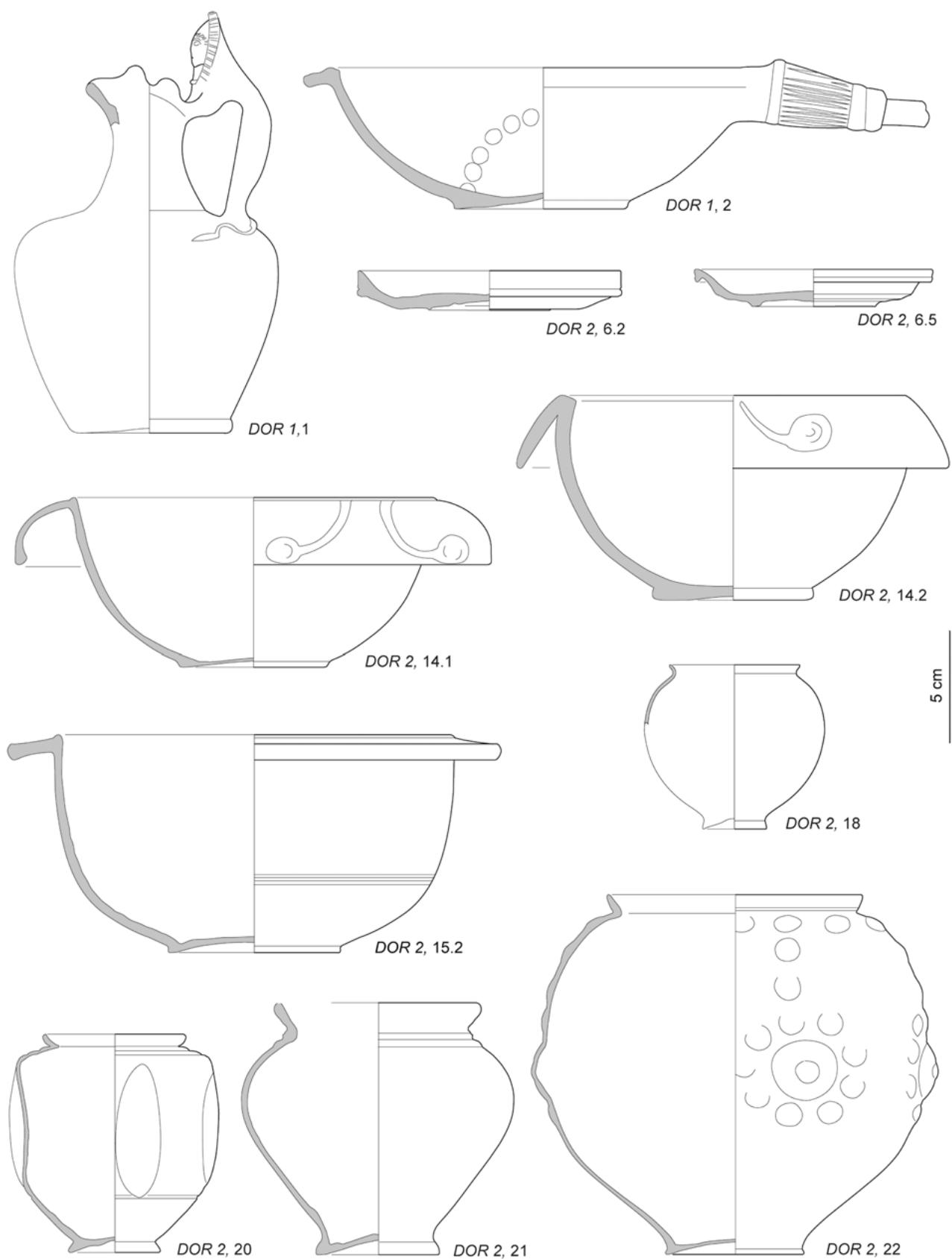
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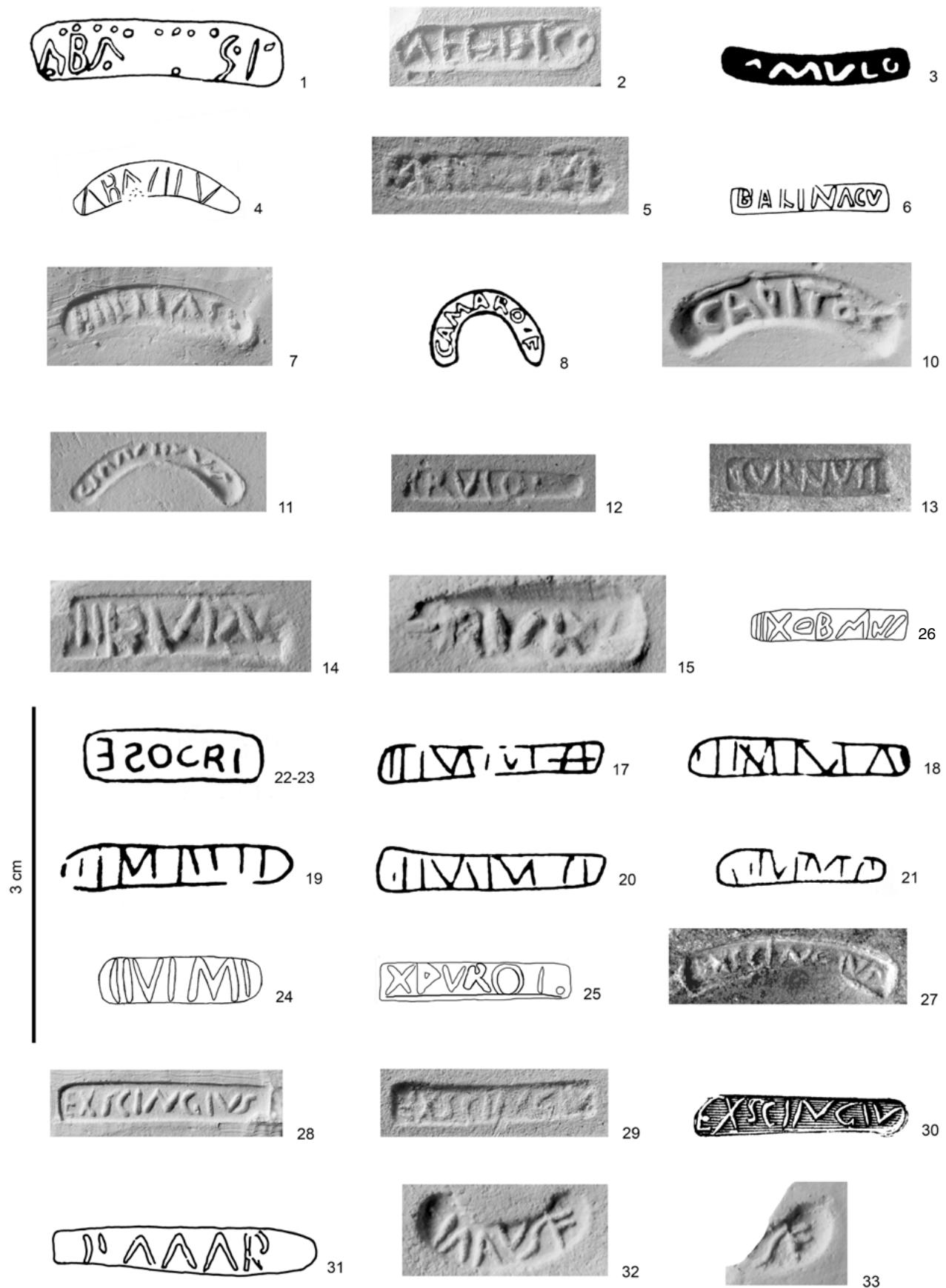
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**Fig. 3.** Vessel types.



**Fig. 4.** Stamps nos. 1–33. – Scale: 2 : 1.

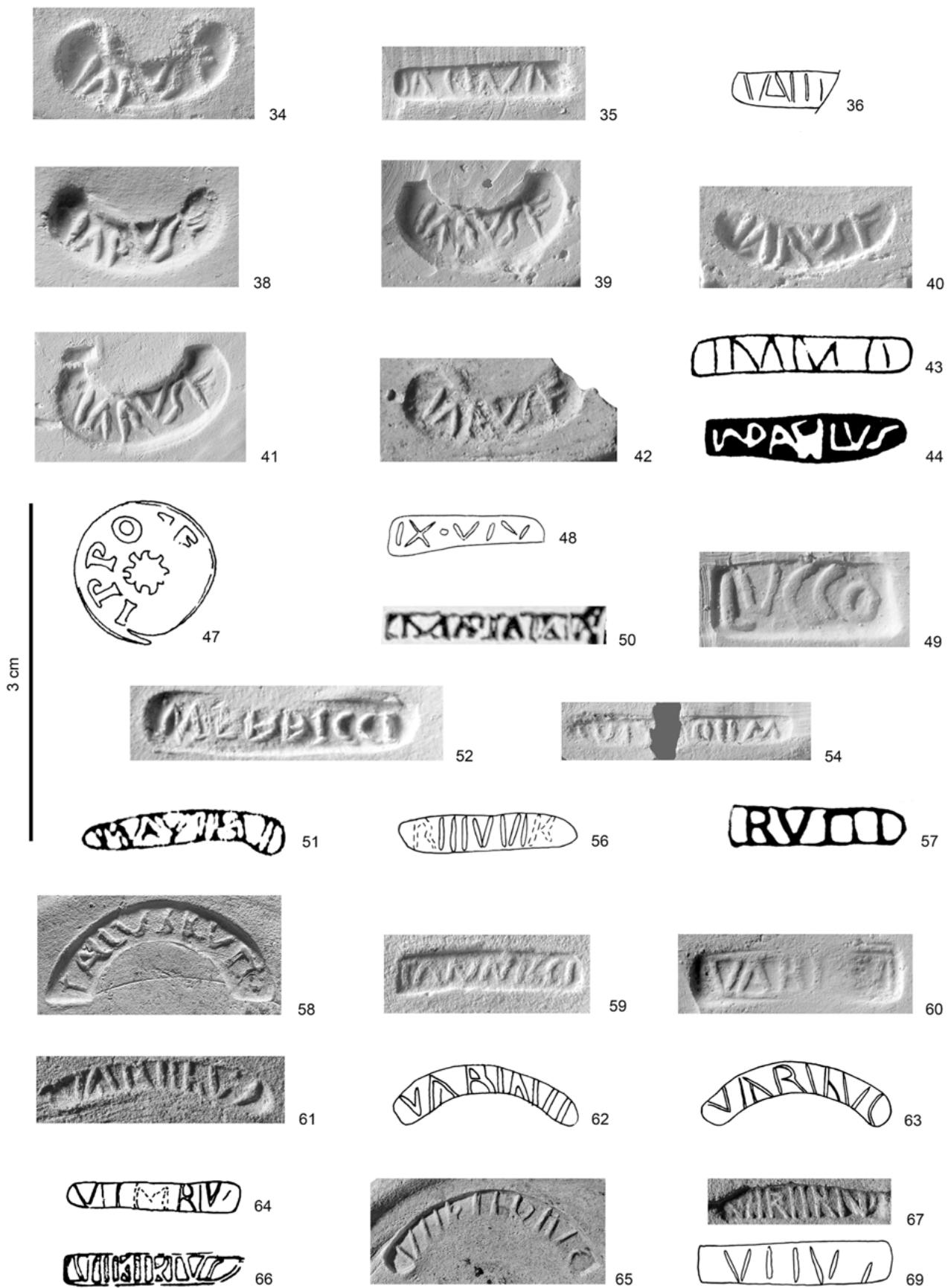
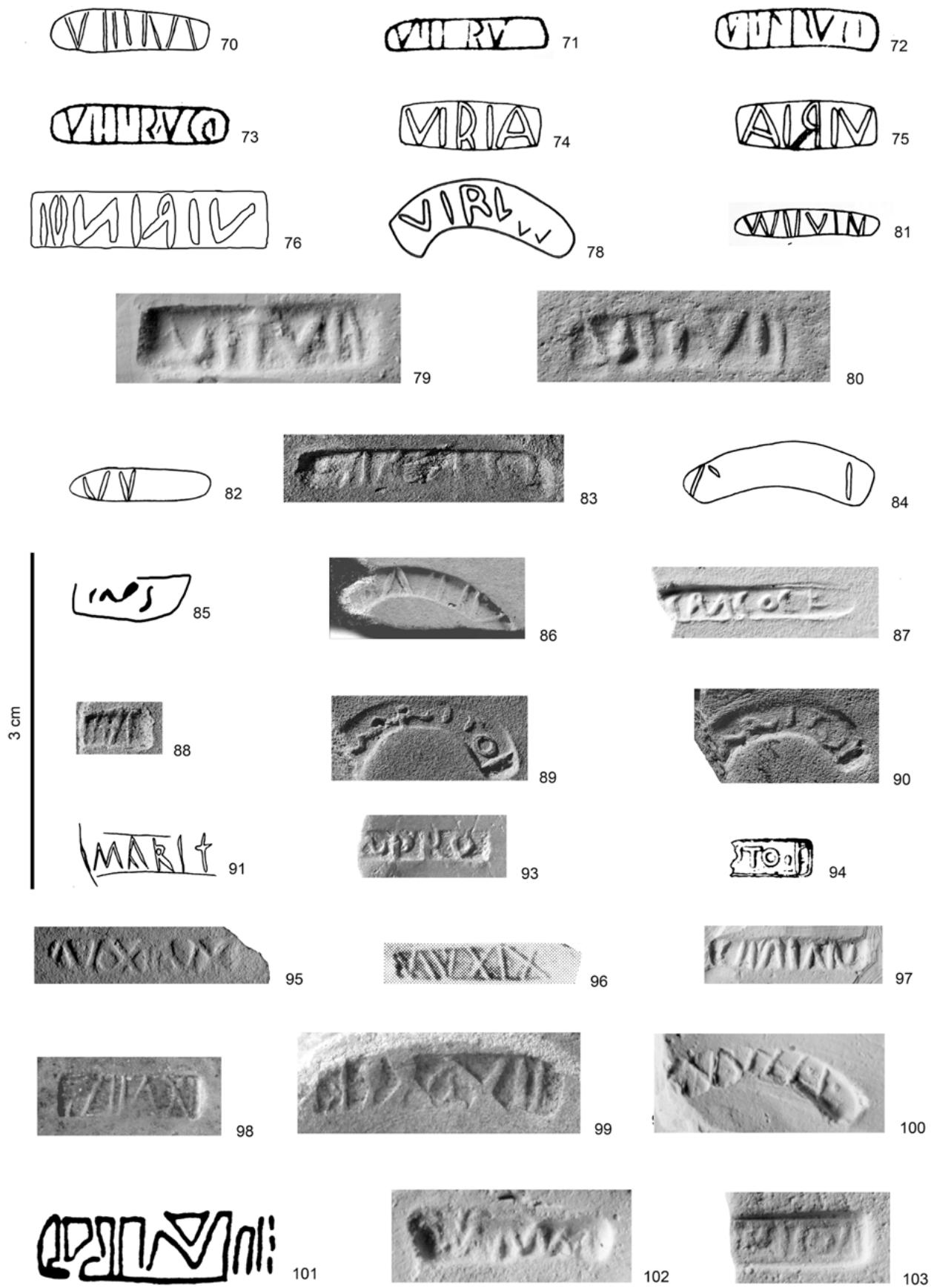
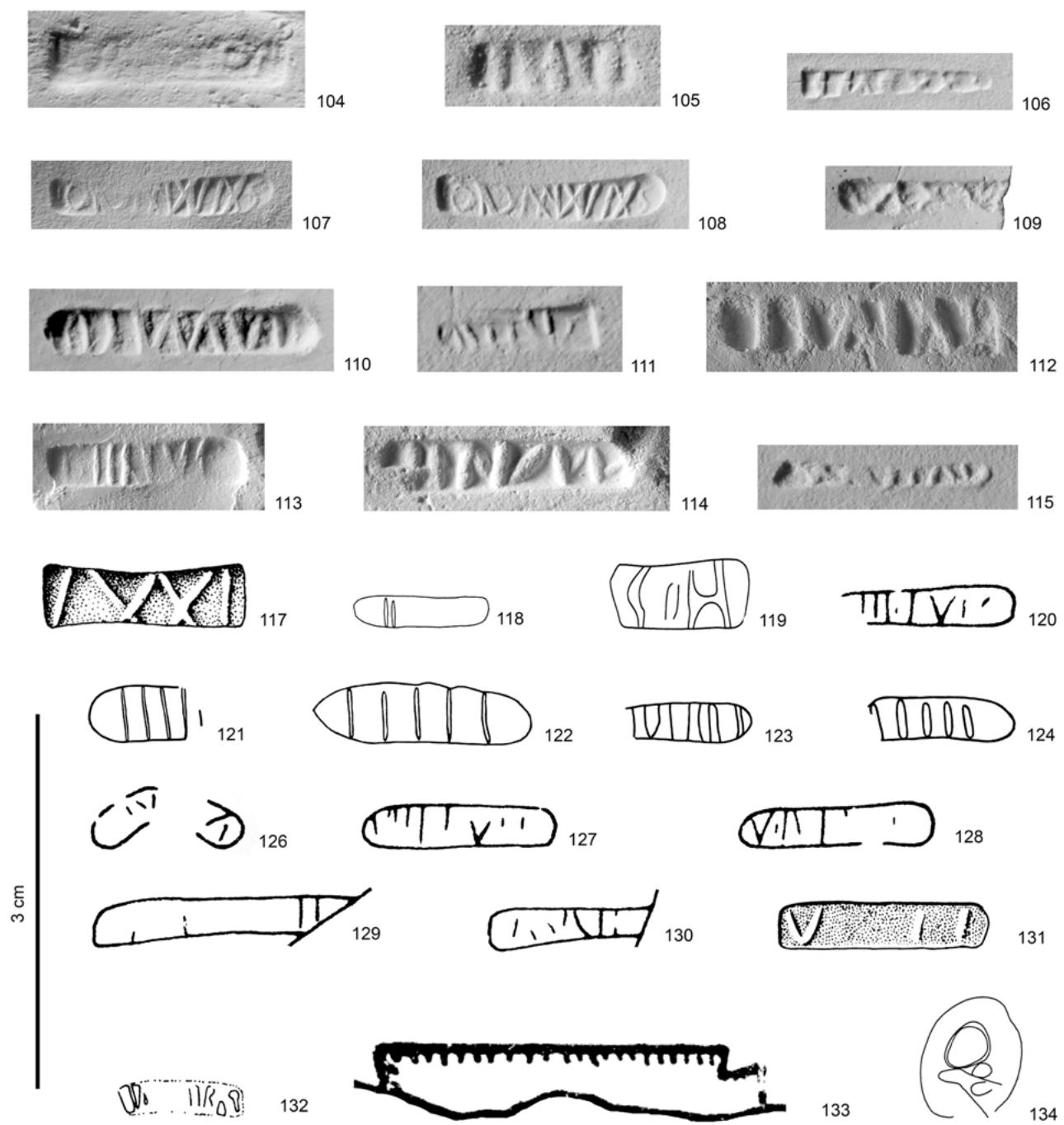
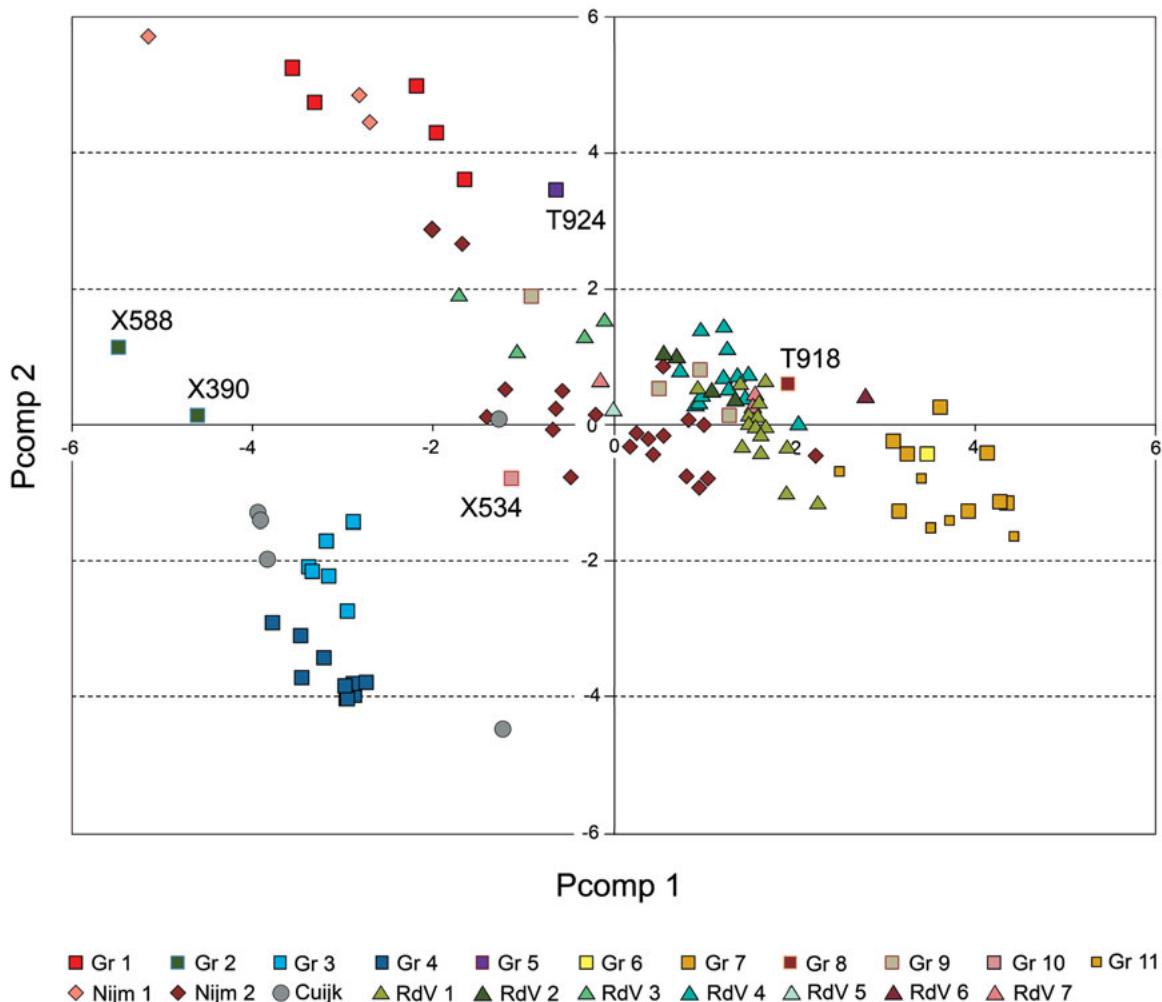


Fig. 5. Stamps nos. 34–69. – Scale: 2 : 1.



**Fig. 6.** Stamps nos. 70–103. – Scale: 2 : 1.

**Fig. 7.** Stamps nos. 104-134. – Scale: 2 : 1.



**Fig. 8.** Principal component analysis of analyses of Mica-dusted Ware and samples from Xanten, Nijmegen, Les Rues de Vignes and Cuijk for comparison; elements used: Si, Ti, Al, Fe, Mn, Mg, Ca, Na, K, V, Cr, Ni, Zn, Rb, Sr, Y, Zr, and Nb (Z-scores, PComp 1 = 31.2%, PComp 2 = 22.1%).

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
1	4	Baralle	ABA[2-3]SI	Rect.	Undet.	DOR 2,21	HOSDEZ/JACQUES 1989, 98 no. J62D; 168 no. J62D; DERU 1994, 89 no. 1; 90 fig. 8,1
2	4	Xanten	AEDDICC	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C17352a2. – Sample T929
3	4	Amiens	AMVLO ?	Curved	Undet.	Beaker	DUBOIS/BINET 1996, 337; 338 fig. 8
4	4	Rues-des-Vignes	ARNIIV	Curved	Fab. RdV-B	DOR 2,22	DERU 2005, 475 fig. 5,12
5	4	Xanten	A[2-3]NI ?	Rect.	Chem. gr. 7	DOR 2,22	Unpublished; LVR-APX, find no. C23180. – Sample T930
6	4	Avennes	BALINACV	Rect.	Fab. RdV-B	DOR 2,22	GUEURY/VANDERHOEVEN 1994, 46 no. 5; 45 fig. 15,5
7	4	Cologne	BIILIIASI	Curved	Undet.	DOR 2,20	Unpublished; Römisch-Germanisches Museum Köln, inv.no. 50,151
8	4	Lincoln	CAMARO.F	Curved	Undet.	DOR 2,22	WEBSTER 1949, 58; 69 fig. 11,19. – Same die as no. 9
9	–	Lincoln	CAMARO.F	Curved	Undet.	DOR 2,22.1	RIGBY 2014. – Same die as no. 8
10	4	Nijmegen	CAPITO F	Curved	Chem. gr. 2	Beaker	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1988.20.1763. – Sample X390
11	4	Xanten	CINVIIIXVS	Curved	Chem. gr. 9	DOR 2,22	Unpublished; LVR-APX, find no. C1989. – Sample X497
12	4	Xanten	CRVCOI	Rect.	Chem. gr. 3	DOR 2,22	Unpublished; LVR-APX, find no. C12204. – Sample T923
13	4	Nijmegen	CVRNVTI	Rect.	Undet.	DOR 2,22.1	STUART 1977, 66 no. 4; DERU 1994, 89 no. 4
14	4	Nijmegen	IIBVRVS	Rect.	Undet.	DOR 2,22.1	STUART 1977, 65 no. 2; 144 fig. 56,2; DERU 1994, 89 no. 5; 90 fig. 8,5
15	4	Nijmegen	EBVRV ?	Rect.	Chem. gr. 7	Beaker	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. NIJM.174/1. – Sample X544
16	–	Avennes	IIMIMO ?	Unknown	Undet.	DOR 2,22.1	GUSTIN 1985, 84 footnote 25
17	4	Braives	IIMMA	Rect.	Undet.	Beaker	GUSTIN 1985, 80; 83 fig. 30,21
18	4	Braives	IIMMA ?	Rect.	Undet.	DOR 2,22	GUSTIN 1985, 78; 83 fig. 30,13
19	4	Braives	IIMMII	Rect.	Undet.	DOR 2,22	GUSTIN 1985, 75; 83 fig. 30,1
20	4	Braives	IIMMO ?	Rect.	Fab. RdV-B	Beaker	GUSTIN 1985, 80; 83 fig. 30,22
21	4	Braives	IIMMO ?	Rect.	Undet.	DOR 2,20	GUSTIN 1985, 80; 83 fig. 30,30
22	4	Beugin	ESOCRI (ES ret.)	Rect.	Undet.	DOR 1,1	TUFFREAU-LIBRE 1978, 119 fig. 11,3. – Same die as no. 23
23	4	Beugin	ESOCRI (ES ret)	Rect.	Undet.	DOR 1,2	TUFFREAU-LIBRE 1978, 108; 112 fig. 5; 119 fig. 11,3. – Same die as no. 22

Table 2. Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
24	4	Richborough	IIVIMI	Rect.	Undet.	Beaker	HAYTER 1949, 241 no. 10 pl. 72,1
25	4	Zwammerdam	[E]XBVR O F	Rect.	Undet.	Beaker	HAALEBOS 1977, 53; 176 no. C3 pl. 30,C3; DERU 1994, 89 no. 7
26	4	Zwammerdam	IIXOBNIVS	Rect.	Undet.	Beaker	HAALEBOS 1977, 53; 176 no. C4 pl. 30,C4; DERU 1994, 89 no. 9
27	4	Nijmegen	EXSCINGIVS	Curved	Undet.	DOR 2,18.1	STUART 1977, 65 no. 1; 144 fig. 56,1; DERU 1994, 89 no. 6; 90 fig. 8,6
28	4	Xanten	EXSCINGIVS	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C32672ke1. – Sample T919
29	4	Cologne	EXSCINGIV	Rect.	Undet.	Beaker	Unpublished; Römisch-Germanisches Museum Köln, inv.no. 84,3229.18. – Same die as no. 30
30	4	Cologne	EXSCINGIV	Rect.	Undet.	Beaker	DOPPELFELD/BINSFELD 1962/1963, 169; 167 fig. 21,10; LIESEN 2004, 486; 471 fig. 8. – Same die as no. 29
31	4	Tongeren	FAAAR	Rect.	Undet.	Beaker	VANVINCKENROYE 1965, 7 fig. 7,12
32	4	Nijmegen	IAAVS F	Curved	Chem. gr. 1	DOR 2,14	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/ Museum Het Valkhof, find no. CA.1990.4356. – Sample X392. – Same die as nos. 33–34
33	4	Nijmegen	[IAA]JVS	Curved	Chem. gr. 1	Beaker	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/ Museum Het Valkhof, find no. NIJM 1042.827. – Sample X546. – Same die as nos. 32, 34
34	5	Xanten	IAAVS F	Curved	Undet.	DOR 2,22	Unpublished; LVR-APX, find no. C7484. – Same die as nos. 32–33
35	5	Xanten	IACINVA ?	Rect.	Chem. gr. 4	Beaker	Unpublished; LVR-APX, find no. C2223. – Sample T920
36	5	Rues-des-Vignes	IAIII[---]	Rect.	RdV-B	DOR 2,22	DERU 2005, 475 fig. 5,9
37	–	Richborough	IA'MI	Unknown	Undet.	DOR 2,22	HAYTER 1932, 159 no. B3
38	5	Nijmegen	IARVS F	Curved	Chem. gr. 1	Beaker	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1987.719. – Sample X389. – Same die as nos. 39–42
39	5	Xanten	IARVS F	Curved	Undet.	Beaker	Unpublished; private collection (Rheinberg). – Same die as nos. 38, 40–42
40	5	Xanten	IARVS F	Curved	Undet.	Beaker	Unpublished; LVR-APX, find no. C53088. – Same die as nos. 38–39, 41–42
41	5	Xanten	IARVS F	Curved	Chem. gr. 1	Beaker	Unpublished; LVR-APX, find no. C15052. – Sample T928. – Same die as nos. 38–40, 42

Table 2 (cont.). Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
42	5	Xanten	IARVS F	Curved	Chem. gr. 1	Beaker	Unpublished; LVR-APX, find no. C52597ke01. – Sample X386. – Same die as nos. 38–41
43	5	Braives	IMMO	Rect.	Fab. RdV-B	DOR 2,22	GUSTIN 1985, 78; 83 fig. 30,15
44	5	Amiens	INDACILVS ?	Rect.	Undet.	Beaker	DUBOIS/BINET 1996, 337; 338 fig. 8
45	–	Baldock	INDOCCIVS	Unknown	Undet.	Unknown	MARSH 1978, 193
46	–	London	INDOCCI[VS]	Unknown	Undet.	Bowl/Plate	MARSH 1978, 193
47	5	Wederath	IPPO[.]E ?	Round	Undet.	DOR 2, 6.5	HAFFNER 1978, 40 grave 1102c; pl. 279,17; 329,2
48	5	Rues-des-Vignes	IX.VN	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 455
49	5	Neuss	LVCCO	Rect.	Chem. gr. 8	DOR 2,22.1	MÜLLER 1977, 100 grave 286 no. 6; pl. 56 grave 286.6
50	5	Blicquy	MASA[2-3]	Rect.	Undet.	DOR 2,18	DE LAET ET AL. 1972, 83 grave 16.3; pl. 6 grave 16.3
51	5	Verlaine	MAVINI	Rect.	Fab. RdV-B	Bowl	DESTEXHE 1994, 44 no. 65; 45 pl. 13,65
52	5	Xanten	MEDDICI	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C2019. – Sample X498
53	–	Amiens	MEDICVS	Unknown	Undet.	Beaker	DUBOIS/BINET 1996, 337
54	5	Mülheim-Kärlich	MIID[1-2]SIVS (retrograde)	Rect.	Chem. gr. 6	Beaker	Unpublished; LVR-Landesmuseum Bonn, inv. no. 40,435.05. – Sample T917
55	–	Koblenz	OXMIRO	Unknown	Undet.	Dor 2,22	RITTERLING 1913, 259
56	5	Rues-des-Vignes	RIIIVIIIR	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no 832,4
57	5	Tournai	RVIII	Rect.	Undet.	Beaker	AMAND 1968, 25 fig. 12,4
58	5	Rues-des-Vignes	TALLVSRVF	Curved	Fab. RdV-B	DOR 2,22	Unpublished; Service archéologique départemental du Nord, inv. no. 142,6
59	5	Xanten	TANNIICI	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C21088a5. – Sample T932
60	5	Nijmegen	VARI[1]V	Rect.	Chem. gr. 4	DOR 2,14	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1988.1816. – Sample T927
61	5	Rues-des-Vignes	VARIIRVS	Curved	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 681,1
62	5	Rues-des-Vignes	VARIIIII	Curved	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 327,7
63	5	Rues-des-Vignes	VARILVC	Curved	Fab. RdV-B	DOR 2,22	Deru 2005, 475 fig. 5,11
64	5	Meulun	VIIMRIV	Rect.	Fab. RdV-B	DOR 2,22	P. Quérel (Villeneuve-d'Ascq), pers. comm.
65	5	Rues-des-Vignes	VIIRIIRIVO	Curved	Fab. RdV-B	Beaker	Unpublished; Service archéologique départemental du Nord, inv. no. 832,1

Table 2 (cont.). Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
66	5	Kretz	VIIRIIRIVS	Rect.	Fab. RdV-B ?	DOR 2,22	HABEREY 1938/1939, 405; 406 fig. 37,4
67	5	Rues-des-Vignes	VIIRIIRIVS	Rect.	Fab. RdV-B	Beaker	Unpublished; Service archéologique départemental du Nord, inv. no. 780,13
68	–	Bailleul	VIIRIIR[---]	Unknown	Fab. RdV-B	Beaker	A. Hanotte (Lille), pers. comm.
69	5	Rues-des-Vignes	VIIWI	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 18,1
70	6	Rues-des-Vignes	VIIIM	Rect.	Fab. RdV-B	DOR 2,22	DERU 2005, 475 fig. 5,10
71	6	Braives	VIIIRV	Rect.	Undet.	DOR 2,22	GUSTIN 1985, 78; 83 fig. 30,12
72	6	Braives	VIIIRVII	Rect.	Fab. RdV-B	DOR 2,22	GUSTIN 1985, 75; 83 fig. 30,3
73	6	Braives	VIIIIRVCO	Rect.	Fab. RdV-B	DOR 2,22	GUSTIN 1985, 78; 83 fig. 30,16
74	6	Wederath	VIRIA	Rect.	Undet.	DOR 2,14.2	HAFFNER 1978, 35 grave 1071c; pl. 274,17
75	6	Wederath	VIRIA (ret.)	Rect.	Undet.	DOR 2,14.2	HAFFNER 1978, 35 grave 1071c; pl. 274,17
76	6	Zwammerdam	VIRINOI (retrograde)	Rect.	Undet.	Beaker	HAALEBOS 1977, 53; 176 no. C5; pl. 30,C5; DERU 1994, 90 no. 13
77	–	Braives	VIRVVI	Curved	Undet.	Unknown	WILLEMS 1988, 72 fig. 3,43. – Same die as no. 78
78	6	Pommeroeul	VIRV[VI]	Curved	Fab. RdV-B	Beaker	DERU 1994, 90 no. 14; fig. 8.14. – Same die as no. 77
79	6	Nijmegen	VITVII	Rect.	Chem. gr. 4	DOR 2,14	Unpublished; Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1989.3110. – Sample T926. – Same die as no. 80
80	6	Xanten	VITVII	Rect.	Chem. gr. 4	DOR 2,14	Unpublished; LVR-APX, find no. C14470. – Sample T933. – Same die as no. 79
81	–	Liberchies	VVIVIM		Fab. RdV-B	DOR 2,22	DERU 1997, 194 fig. 110.1
82	6	Rues-des-Vignes	VV[2-3]	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 142,5
83	6	Rues-des-Vignes	VVI[3-5]	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 832A,8
84	6	Rues-des-Vignes	Λ[3-4]I	Curved	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 237,1
85	6	Xanten	[...]AVS	Rect.	Chem. gr. 10	DOR 2,22	Unpublished; LVR-APX, find no. C13696. – Sample X534
86	6	London	[---]BACILV[---]	Curved	Undet.	Beaker	DAVIES ET AL. 1994, 142
87	6	Xanten	[---]CRACOC F	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C24850. – Sample T922
88	6	Rues-des-Vignes	[---]IIII	Rect.	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 327,6

Table 2 (cont.). Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
89	6	Rues-des-Vignes	[---]MARITOI ?	Curved	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 832,5. – Same die as no. 90?
90	6	Rues-des-Vignes	[---]MARITOI ?	Curved	Fab. RdV-B	Unknown	Unpublished; Service archéologique départemental du Nord, inv. no. 291,3. – Same die as no. 89?
91	6	Rues-des-Vignes	[---]MARIT[---]	Rect.	Fab. RdV-B	Dor 2,22	DERU 2005, 475 fig. 5,13
92	–	Amay	[---]NCCIVS	Unknown	Undet.	Beaker	C. Hardy (Namur), pers. comm.
93	6	Xanten	[---]NDRO	Rect.	Chem. gr. 3	Beaker	HEIMBERG 1981, 371; LIESEN 1999, 44 no. B/18; 43 fig. 19,B/18. – Sample T935
94	6	Frankfurt a.M. -Heddernheim	[---].TO.F	Rect.	Undet.	Unknown	FISCHER 1973, 169; 172 fig. 62,4
95	6	Alphen aan den Rijn	Anepigraphic	Rect.	Chem. gr. 3	DOR 2,18	POLAK ET AL. 2004, 298 no. 1; 299 fig. 110,1. – Sample T921
96	6	Zwammerdam	Anepigraphic	Rect.	Undet.	Unknown	HAALEBOS 1977, 176 no. c8; pl. 30,C8
97	6	Neuss	Anepigraphic ?	Rect.	Undet.	DOR 2,22.1	MÜLLER 1977, 79 grave 227–228 no. 30 pl. 34 grave 227–228.30; DERU 1994, 89 no. 3; 90 fig. 8,3
98	6	Nijmegen	Anepigraphic	Rect.	Undet.	DOR 2,22	STUART 1977, 66 no. 3; 144 fig. 56,3; DERU 1994, 90 no. 16 fig. 8,16
99	6	Nijmegen	Anepigraphic	Rect.	Undet.	DOR 2,18.2	VERMEULEN 1932, 55 no. 62; 189 grave 77 no. 3 pl. 21,62
100	6	Nijmegen	Anepigraphic	Curved	Chem. gr. 3	Beaker	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1989.2681 – Sample X387
101	6	Nijmegen	Anepigraphic	Rect.	Undet.	Beaker	STUART 1962, 97; 172 table 25,460
102	6	Nijmegen	Anepigraphic	Rect.	Chem. gr. 4	Beaker	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/ Museum Het Valkhof, find no. CA.1990.3426. – Sample X391
103	6	Nijmegen	Anepigraphic ?	Rect.	Chem. gr. 4	DOR 2,14	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1991.6065. – Sample X395. – Same die as no. 104
104	7	Nijmegen	Anepigraphic ?	Rect.	Chem. gr. 4	DOR 2,14	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1990.3276. – Sample X394. – Same die as no. 103

Table 2 (cont.). Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
105	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 4	DOR 2,14	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1993.7423. – Sample X393
106	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 9	Beaker	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. NIJM 214.4. – Sample X590
107	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 5	Beaker	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1989.2296. – Sample T924. – Same die as no. 108
108	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 9	Beaker	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. NIJM 4.2. – Sample X591. – Same die as no. 107
109	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 3	DOR 2,18	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. NIJM 217.4. – Sample X589
110	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 3	DOR 2,22	Unpublished, Nijmegen, Provinciaal Depot voor Bodemvondsten van Gelderland/Museum Het Valkhof, find no. CA.1990.3487. – Sample X388
111	7	Nijmegen	Anepigraphic	Rect.	Chem. gr. 2	Beaker	STUART 1962, 97; 172 pl. 25,459. – Sample X588
112	7	Xanten	Anepigraphic	Rect.	Chem. gr. 4	Beaker	Unpublished; LVR-APX, find no. C11220. – Sample T925
113	7	Xanten	Anepigraphic	Rect.	Chem. gr. 9	DOR 2,22	Unpublished; LVR-APX, find no. C2847. – Sample T934
114	7	Xanten	Anepigraphic	Rect.	Chem. gr. 4	Beaker	Unpublished; LVR-APX, find no. C18357a2. – Sample T931
115	7	Xanten	Anepigraphic	Rect.	Chem. gr. 7	Beaker	Unpublished; LVR-APX, find no. C9137. – Sample X541
116	-	Gutschoven	Anepigraphic	Unknown	Undet.	DOR 2,22	VANVINCKENROYE 1987, 12 grave 3.11
117	7	Wederath	Anepigraphic	Rect.	Undet.	Beaker ?	CORDIE-HACKENBERG/HAFFNER 1997, 80 grave 2204b pl. 600 grave 2204b
118	7	Bavay	Anepigraphic ?	Rect.	Fab. DR-B	DOR 2,22	LORIDANT/DERU 2009, 181 grave 6/152 no. 10; 182 fig. 78 grave 6/152.10
119	7	Bavay	Anepigraphic	Rect.	Fab. DR-R-A	DOR 2,6.2	LORIDANT/DERU 2009, 185 grave 6/157 no. 4; 184 fig. 80 grave 6/157.4
120	7	Braives	Anepigraphic ?	Rect.	Undet.	Beaker	GUSTIN 1985, 80; 83 fig. 30,26
121	7	Reims	Anepigraphic	Rect.	Undet.	Beaker	DELOR AHÜ ET AL. 2005, 585 fig. 13,72

Table 2 (cont.). Catalogue.

No.	Fig.	Findspot	Stamp	Shape	XRF/Fabric	Form	References
122	7	Reims	Anepigraphic	Rect.	Undet.	Beaker	DELOR AHÜ ET AL. 2005, 585 fig. 13,73
123	7	Reims	Anepigraphic ?	Rect.	Undet.	Beaker	DELOR AHÜ ET AL. 2005, 585 fig. 13,74
124	7	Reims	Anepigraphic	Rect.	Undet.	Beaker	DELOR AHÜ ET AL. 2005, 585 fig. 13,75
125	-	Xanten	Illegible	Rect.	Undet.	Beaker	LIESEN 1999, 44 no. B/19; 43 fig. 19,B/19
126	7	Braives	Illegible	Curved	Fab. RdV-B	DOR 2,22	GUSTIN 1985, 75; 83 fig. 30,2
127	7	Braives	Illegible	Rect.	Undet.	DOR 2,22	GUSTIN 1985, 78; 83 fig. 30,17
128	7	Braives	Illegible	Rect.	Fab. RdV-B	DOR 2,22	GUSTIN 1985, 80; 83 fig. 30,23
129	7	Braives	Illegible	Rect.	Undet.	DOR 2,15	GUSTIN 1985, 80; 83 fig. 30,32
130	7	Braives	Illegible	Rect.	Undet.	Dish	GUSTIN 1985, 81; 83 fig. 30,38
131	7	Wederath	Illegible	Rect.	Undet.	DOR 2,14	CORDIE-HACKENBERG/HAFFNER 1991, 66 grave 1568a pl. 407 grave 1568a
132	7	Wederath	Illegible	Rect. ?	Undet.	DOR 2,14	CORDIE-HACKENBERG/HAFFNER 1997, 86 grave 2229e pl. 610 grave 2229e
133	7	Heidelberg	Damaged	Tab. Ans.	Undet.	Jug ?	HEUKEMES 1964, 94; 96 no. 4 fig. 26,4
134	7	Bavay	Gemstone	Round	Fab. Sept.	DOR 2,22	LORIDANT/DERU 2009, 170 grave 5/149 no. 3; 171 fig. 71 grave 5/149.4
135	-	St. Albans	Unknown	Unknown	Undet.	Unknown	RIGBY 2014

**Table 2 (cont.). Catalogue.**

Cat.	Lab.	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	V	Cr	Ni	(Cu)	Zn	Rb	Sr	Y	Zr	(Nb)	Ba	(La)	Ce	(Pb)	I.o.i.	total		
		weight per cent				ppm																						%	%
<b>Group 1</b>																													
38	X389	68.81	<b>1.681</b>	20.16	5.59	0.026	0.28	0.59	0.00	1.47	1.39	99	<b>307</b>	64	129	58	101	170	32	361	42	426	111	<b>173</b>	23	2.11	100.15		
32	X392	69.63	<b>1.695</b>	20.33	5.71	0.029	0.34	0.29	0.00	1.39	0.59	148	<b>322</b>	64	51	54	96	133	35	362	43	376	91	<b>151</b>	28	1.21	100.36		
33	X546	66.88	<b>1.692</b>	19.05	6.51	0.023	0.38	1.06	0.11	1.77	2.53	187	<b>290</b>	73	54	112	86	199	34	246	38	685	56	<b>148</b>	27	1.94	99.57		
41	T928	61.37	<b>1.650</b>	24.06	4.47	0.025	0.31	2.10	0.08	1.90	4.03	106	<b>249</b>	63	48	105	126	182	51	322	49	679	70	<b>182</b>	33	5.10	100.01		
42	X386	69.53	<b>1.561</b>	19.46	4.21	0.030	0.28	1.39	0.04	1.42	2.09	102	<b>266</b>	65	43	63	123	226	34	342	37	565	75	<b>133</b>	28	3.19	100.27		
<b>Group 2 (?)</b>																													
10	X390	57.75	0.958	20.23	7.31	0.047	1.58	<b>6.05</b>	0.16	<b>3.79</b>	2.13	122	116	52	34	137	179	300	23	139	23	932	34	5	3.72	103.28			
111	X588	61.21	0.972	20.98	7.34	0.027	1.22	1.19	0.10	<b>3.73</b>	3.22	133	146	76	36	104	169	169	57	184	18	813	64	104	35	4.68	100.35		
<b>Group 3</b>																													
100	X387	70.01	<b>1.017</b>	16.70	5.92	0.033	1.69	0.95	0.39	<b>3.00</b>	0.29	166	131	36	27	92	148	117	27	291	16	415	37	76	22	0.60	100.52		
110	X388	69.28	<b>1.015</b>	17.12	5.98	0.015	1.47	0.61	0.28	<b>2.87</b>	1.36	161	134	43	22	86	143	140	30	279	16	432	37	77	22	1.27	100.42		
109	X589	67.83	<b>1.078</b>	16.64	6.39	0.026	1.17	1.49	0.41	<b>2.51</b>	2.46	96	123	44	51	210	94	213	25	207	954	52	49			3.53	101.86		
12	T923	67.37	<b>1.059</b>	17.33	6.43	0.058	1.38	1.03	0.33	<b>2.97</b>	2.05	131	134	42	39	104	130	150	22	274	19	605	42	83	22	2.47	100.17		
93	T935	69.07	<b>1.026</b>	16.76	5.94	0.038	1.56	1.70	0.30	<b>2.49</b>	1.12	159	127	46	43	178	155	135	21	265	17	586	27	66	23	4.08	100.09		
95	T921	70.47	<b>1.028</b>	16.44	5.80	0.028	1.69	0.83	0.45	<b>3.09</b>	0.17	141	128	38	25	84	134	115	26	269	15	492	44	59	21	1.48	99.70		
<b>Group 4</b>																													
79	T926	70.63	0.858	16.54	5.07	0.047	1.36	0.61	0.38	<b>3.14</b>	1.36	81	118	61	30	135	143	137	33	335	17	730	38	101	30	1.65	100.12		
60	T927	73.20	0.848	15.57	4.20	0.041	1.53	0.52	0.42	<b>3.16</b>	0.51	88	111	51	34	121	143	113	33	346	16	556	41	90	27	0.95	100.22		
102	X391	70.27	0.926	16.56	5.07	0.031	1.65	0.74	0.43	<b>3.07</b>	1.25	71	121	70	35	145	115	131	34	278		760	39	53	44	1.35	97.91		
105	X393	72.03	0.818	15.29	4.66	0.051	1.42	0.78	0.40	<b>3.04</b>	1.51	71	109	49	44	137	135	162	34	342	15	618	34	75	28	1.73	99.64		
104	X394	72.79	0.822	15.35	4.44	0.025	1.43	0.68	0.43	<b>3.11</b>	0.92	80	111	48	20	117	141	132	35	351	17	613	51	88	26	1.40	99.87		
103	X395	73.00	0.886	15.42	4.51	0.029	1.59	0.53	0.49	<b>3.28</b>	0.27	76	109	57	40	139	128	85	38	286		701	35	61	29	1.07	97.77		
35	T920	73.62	0.803	15.39	4.16	0.025	1.48	0.59	0.44	<b>3.27</b>	0.22	85	109	52	25	123	154	102	33	324	17	533	47	97	37	0.65	100.15		
112	T925	73.46	0.826	15.30	4.27	0.024	1.42	0.64	0.45	<b>3.30</b>	0.29	81	109	54	26	128	157	106	32	328	17	551	33	95	29	1.37	100.07		
114	T931	73.52	0.810	15.21	4.44	0.027	1.53	0.56	0.45	<b>3.27</b>	0.18	93	107	52	20	117	152	102	33	336	17	469	30	79	24	0.67	99.96		
80	T933	71.91	0.840	15.91	4.62	0.044	1.26	0.74	0.43	<b>3.21</b>	1.02	88	117	56	26	131	152	120	34	346	17	640	35	76	33	1.56	100.12		

**Table 3.** Results of analyses by WD-XRF of samples of mica-dusted ware found in Nijmegen, Xanten and two other sites: ignited samples, loss on ignition at 900°C (l.o.i.), major elements normalized to a constant sum of 100 %. Significant data are highlighted in bold. (Melted samples were measured at GeoForschungsZentrum GFZ Potsdam using spectrometer AXIOS by courtesy of A. Schleicher.)

Cat.	Lab.	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	MnO	Mgo	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	V	Cr	Ni	(Cu)	Zn	Rb	Sr	Y	Zr	(Nb)	Ba	(La)	Ce	(Pb)	I.o.i.	%	total
		weight per cent																								ppm	%	%
<b>Group 5</b>																												
107	T924	67.95	0.794	24.64	<b>2.76</b>	0.006	<b>0.35</b>	1.45	0.18	<b>1.05</b>	0.82	198	168	71	90	50	68	227	53	270	19	629	67	131	30	6.82	100.44	
<b>Group 6</b>																												
54	T917	74.13	0.690	20.66	<b>2.94</b>	0.009	<b>0.30</b>	0.64	0.26	<b>0.29</b>	<b>0.08</b>	147	167	24	13	14	16	35	13	343	12	79	12	24	14	0.80	100.09	
<b>Group 7</b>																												
15	X544	74.62	0.639	17.04	<b>2.76</b>	0.007	<b>0.29</b>	1.95	0.07	<b>0.60</b>	2.03	106	145	33	5	31	24	155	21	291	17	225	10	30	16	5.31	99.75	
28	T919	72.61	0.626	19.10	<b>2.30</b>	0.054	<b>0.29</b>	2.01	0.15	<b>0.65</b>	2.20	91	124	28	35	63	29	114	12	285	12	422	14	36	16	4.57	99.70	
87	T922	73.22	0.596	19.59	<b>2.19</b>	0.010	<b>0.30</b>	2.19	0.06	<b>0.51</b>	1.34	86	125	31	12	31	25	54	7	278	10	494	6	25	16	6.22	100.35	
2	T929	72.80	0.655	20.71	<b>2.00</b>	0.005	<b>0.26</b>	1.67	0.14	<b>0.40</b>	1.35	117	140	27	12	15	25	54	12	257	10	141	18	23	19	4.87	100.14	
5	T930	74.59	0.565	16.58	<b>2.14</b>	0.014	<b>0.30</b>	2.16	0.08	<b>0.34</b>	3.22	95	131	27	23	42	24	223	14	293	8	157	5	22	17	5.91	99.89	
59	T932	72.90	0.605	18.47	<b>2.25</b>	0.004	<b>0.26</b>	2.23	0.02	<b>0.29</b>	2.98	79	130	31	22	53	20	106	8	300	11	918	5	16	16	6.05	100.09	
52	X498	72.19	0.604	19.32	<b>1.90</b>	0.014	<b>0.20</b>	2.55	0.10	<b>0.22</b>	2.90	118	137	22	10	41	18	202	20	259		184	6	25	16	5.39	100.26	
115	X541	73.09	0.584	17.26	<b>2.66</b>	0.048	<b>0.22</b>	2.43	0.05	<b>0.30</b>	3.36	111	134	28	5	38	31	195	25	293	14	1124	31	38	19	6.44	99.93	
<b>Group 8</b>																												
49	T918	68.96	1.274	18.25	<b>2.26</b>	0.004	<b>0.26</b>	0.90	0.04	<b>0.59</b>	7.54	106	141	24	160	82	45	165	19	412	24	749	37	62	24	6.08	100.17	
<b>Group 9</b>																												
106	X590	69.09	1.043	20.12	<b>2.47</b>	0.012	<b>0.60</b>	1.68	0.06	1.55	3.37	109	147	55	82	120	67	122	20	226		882	23	41		6.45	98.35	
108	X591	67.11	0.901	21.85	<b>2.63</b>	0.022	<b>0.51</b>	2.29	0.24	1.76	2.68	147	137	63	77	76	271	40	182		654	70	106		4.83	100.19		
113	T934	70.88	0.906	19.03	<b>2.75</b>	0.009	<b>0.57</b>	1.92	0.04	1.92	1.98	131	156	33	44	42	90	112	23	324	17	501	27	55	32	6.26	100.09	
11	X497	70.90	1.043	19.01	<b>2.45</b>	0.015	<b>0.40</b>	2.08	0.14	1.31	2.65	121	157	24	52	47	72	169	41	350	22	635	45	67	32	5.18	100.33	
<b>Group 10</b>																												
85	X534	70.31	0.877	17.23	<b>4.77</b>	0.014	1.07	2.06	0.26	1.82	1.58	155	141	39	23	95	104	162	30	285	19	769	39	72	18	4.46	101.24	

**Table 3 (cont.).** Results of analyses by WD-XRF of samples of mica-dusted ware found in Nijmegen, Xanten and two other sites; ignited samples, loss on ignition at 900°C (1.o.i.), major elements normalized to a constant sum of 100 %. Significant data are highlighted in bold. (Melted samples were measured at GeoForschungsZentrum GFZ Potsdam using spectrometer AXIOS by courtesy of A. Schleicher.)

## Bibliography

- AMAND 1968 M. AMAND, Un nouveau quartier romain à Tournai. Les fouilles du Luchet d'Antoing. Arch. Belgica 102 (Brussels 1968).
- BET/DELOR 2000 P. BET/A. DELOR, La typologie de la sigillée lisse de Lezoux et de la Gaule centrale du Haut-Empire. Révision décennale. SFECAG Actes Congrès Libourne 2000 (Marseille 2000) 461–484.
- BOELICKE ET AL. 2000 U. BOELICKE/U. BRANDL/B. LIESEN, Antiken der Sammlung Gerhard Alsters. Urgeschichtliche und römische Funde. Führer u. Schr. Regionalmus. Xanten 48 (Uedem 2000).
- CARMELEZ 1988 J.-C. CARMELEZ, La céramique gallo-belge du premier siècle conservée au Musée de Bavay. Fouilles et Études. Arch. et Pédagogie 10, 1988, 67–136.
- CORDIE-HACKENBERG/HAFFNER 1991 R. CORDIE-HACKENBERG/A. HAFFNER, Das keltisch-römische Gräberfeld von Wederath-Belginum 4. Gräber 1261–1817, ausgegraben 1978–1980. Trierer Grabungen u. Forsch. 6,4 (Mainz 1991).
- CORDIE-HACKENBERG/HAFFNER 1997 R. CORDIE-HACKENBERG/A. HAFFNER, Das keltisch-römische Gräberfeld von Wederath-Belginum 5. Gräber 1818–2472, ausgegraben 1978, 1981–1985. Trierer Grabungen u. Forsch. 6,5 (Mainz 1997).
- DAVIES ET AL. 1994 B. DAVIES/B. RICHARDSON/R. TOMBER, A Dated Corpus of Early Roman Pottery from the City of London. The Archaeology of Roman London. CBA Research Report 98 (London 1994).
- DE LAET ET AL. 1972 S. J. DE LAET/A. VAN DOORSELAER/P. SPITAELS/H. THOEN, La nécropole gallo-romaine de Blicquy (Hainaut – Belgique). Diss. Arch. Gandenses 14 (Brügge 1972).
- DELOR AHÜ ET AL. 2005 A. DELOR AHÜ/G. FLORENT/S. LEMAÎTRE/P. ROLLET, Le dépôt de la rue de l'Équerre à Reims (Marne). SFECAG Actes Congrès Blois 2005 (Marseille 2005) 575–592.
- DERU 1994 X. DERU, La deuxième génération de la céramique dorée (50–180 après J.-C.). In: La céramique du Haut-Empire en Gaule Belgique et dans les régions voisines: faciès régionaux et courants commerciaux. Actes de la Table ronde d'Arras 1993. Nord-Ouest Arch. 6 (Arras 1994) 81–94.
- DERU 1996 X. DERU, La céramique belge dans le nord de la Gaule. Publ. Hist. Art et Arch. Univ. Catholique Louvain 89 (Louvain-la-Neuve 1996).
- DERU 1997 X. DERU, La céramique belge (TR/TN). In: R. Brulet/J.-C. Demanet (eds.), Liberches III. Vicus gallo-romain. Publ. Hist. Art et Arch. Univ. Catholique Louvain 94 (Louvain-la-Neuve 1997) 201–212.
- DERU 2004 X. DERU, Les estampilles littérales et anépigraphes sur céramique belge et le rapport à l'écrit des potiers belgo-romains. Gallia 61, 2004, 133–143.
- DERU 2005 X. DERU, Les productions de l'atelier de potiers des «Quatre Bornes» aux Rues-des-Vignes (Nord). SFECAG Actes Congrès Blois 2005 (Marseille 2005) 469–478.
- DESTEXHE 1994 G. DESTEXHE, La villa gallo-romaine de la «Campagne du Vivier» à Verlaine. Arch. Hesbironne 12, 1994, 23–101.
- DOPPELFELD/BINSFELD 1962/1963 O. DOPPELFELD/W. BINSFELD, Fundbericht 55.44. In: Tätigkeitsbericht für das Jahr 1955. Kölner Jahrb. Vor- u. Frühgesch. 6, 1962/1963, 165–171.
- DUBOIS/BINET 1996 S. DUBOIS/E. BINET, La céramique à Amiens (Somme) dans la deuxième moitié du I<sup>er</sup> siècle après J.-C., d'après les fouilles du Palais des Sports. SFECAG Actes Congrès Dijon 1996 (Marseille 1996) 331–352.
- ETTLINGER/SIMONETT 1952 E. ETTLINGER/C. SIMONETT, Römische Keramik aus dem Schutthügel von Vindonissa. Veröff. Ges. Pro Vindonissa 3 (Basel 1952).
- FISCHER 1973 U. FISCHER, Grabungen im römischen Steinkastell von Heddernheim 1957–1959. Schr. Frankfurter Mus. Vor- u. Frühgesch. 2 (Frankfurt a. M. 1973).
- GUEURY/VANDERHOEVEN 1988 M.-C. GUEURY/M. VANDERHOEVEN, Les tombes sous tumulus au Musée Curtius (II). Braives (Avennes). Bull. Inst. Arch. Liégeois 106, 1994, 5–76.
- GUSTIN 1985 M. GUSTIN, La céramique dorée. In: R. Brulet (dir.), Braives gallo-romain. III. La zone périphérique occidentale. Publ. Hist. Art et Arch. Univ. Catholique Louvain 46 (Louvain-la-Neuve 1985) 72–86.
- HAALEBOS 1977 J. K. HAALEBOS, Zwammerdam-Nigrum Pullum. Ein Auxiliarkastell am Niedergermanischen Limes. Cingula 3 (Amsterdam 1977).
- HAALEBOS 1990 J. K. HAALEBOS, Het grafveld van Nijmegen-Hatert. Een begraafplaats uit de eerste drie eeuwen na Chr. Op het platteland bij Noviomagus Batavorum. Beschrijving Verzamelingen Provinciaal Museum G. M. Kam Nijmegen 11 (Nijmegen 1990).
- HAALEBOS/GIELEN 1975 J. K. HAALEBOS/H. W. L. M. GIELEN, Belgische Waar. In: J. E. Bogaers/J. K. Haalebos et. al, Problemen rond het Kops Plateau. Oudheidkde. Mededel. 56, 1975, 149.
- HABEREY 1938/1939 W. HABEREY, Kretz. In: F. Oelmann, Bericht über die Tätigkeit des Landesmuseums in Bonn in der Zeit vom 1. April 1937 bis 31. März 1938. Bonner Jahrb. 143/144, 1938/1939, 401–407.
- HAFFNER 1978 A. HAFFNER, Das keltisch-römische Gräberfeld von Wederath-Belginum 3. Gräber 885–1260, ausgegraben 1958–1960, 1971 u. 1974. Trierer Grabungen u. Forsch. 6,3 (Mainz 1978).
- HANEL 1995 N HANEL, Vetera I. Die Funde aus den römischen Lagern auf dem Fürstenberg bei Xanten. Text und Tafeln. Rhein. Ausgr. 35 (Köln 1995).

- HAYTER 1932 G. C. F. HAYTER, Potters' Stamps. In: J. P. Bushe-Fox, Third Report on the Excavations of the Roman Fort at Richborough, Kent. Report Research Comm. Soc. Ant. London 10 (Oxford 1932) 123–165.
- HAYTER 1949 G. C. F. HAYTER, Potters' Marks. In: J. P. Bushe-Fox, Fourth Report on the Excavations of the Roman Fort at Richborough, Kent. Report Research Comm. Soc. Ant. London 16 (Oxford 1949) 184–253.
- HEIMBERG 1981 U. HEIMBERG, Das Haus am kleinen Hafentor in der Colonia Ulpia Traiana. Keramik und Kleinfunde. Bonner Jahrb. 181, 1981, 355–381.
- HEUKEMES 1964 B. HEUKEMES, Römische Keramik aus Heidelberg. Mat. Röm.-Germ. Keramik 8 (Bonn 1964).
- HOLWERDA 1941 J. H. HOLWERDA, De Belgische Waar in Nijmegen. Beschrijving Verzamelingen Provinciaal Museum G. M. Kam Nijmegen 2 (Nijmegen 1941).
- HOSDEZ/JACQUES 1981 C. HOSDEZ/A. JACQUES, La nécropole a incinérations de Baralle (Pas-de-Calais). Nord-Ouest Arch. 2 (Berck-sur-Mer 1981).
- LIESEN 1999 B. LIESEN, Ausgewählte Fundgruppen aus dem Bereich des „Hauses am kleinen Hafentor“ auf der Insula 38 der Colonia Ulpia Traiana. In: Xantener Ber. 8 (Köln 1999) 9–54.
- LIESEN 2004 B. LIESEN, Römische Importkeramik in Köln – eine Bestandsaufnahme. Kölner Jahrb. 37, 2004, 463–487.
- LORIDANT/DERU 2009 F. LORIDANT/X. DERU (dir.), Bavay: la nécropole gallo-romaine de la «Faches des près Aulnoys». Rev. Nord, Hors Sér. 13 (Villeneuve d'Ascq 2009).
- MARSH 1978 G. Marsh, Early second century fine wares in the London area. In: P. Arthur/G. Marsh (eds.), Early Fine Wares in Roman Britain. BAR Brit. Ser. 57 (Oxford 1978) 119–223.
- MÜLLER 1977 G. MÜLLER, Die römischen Gräberfelder von Novaesum. Novaesum VII. Limesforschungen 17 (Berlin 1977).
- PETROVSZKY 1993 R. PETROVSZKY, Studien zu römischen Bronzegefäßen mit Meisterstempeln. Kölner Stud. Arch. Röm. Provinzen 1 (Buch am Erlbach 1993).
- Polak *et al.* 2004 M. POLAK/R. P. J. KLOOSTERMAN/R. NIEMEIJER, Alphen aan den Rijn – Albaniana 2001–2002. Opgravingen tussen de Castellumstraat, het Omloopkanaal en de Oude Rijn. Libelli Noviomagenses 7 (Nijmegen 2004).
- RIGBY 2014 V. RIGBY, The Camaro beaker from The Park. In: M. Darling/B. Precious, A Corpus of Roman Pottery from Lincoln. Lincoln Arch. Stud. 6 (Oxford 2014) 15.
- RITTERLING 1913 E. RITTERLING, Das frührömische Lager bei Hofheim im Taunus. Ann. Ver. Nassau. Altkde. u. Geschichtsforsch. 40, 1913.
- TUFFREAU-LIBRE 1978 M. TUFFREAU-LIBRE, La céramique gallo-romaine dorée au mica dans le Nord de la France (Nord et Picardie). Helinium 18, 1978, 105–125.
- STUART 1962 P. STUART, Gewoon aardewerk uit de Romeinse legerplaats en de bijbehorende grafvelden te Nijmegen. Oudheidkde. Mededel. Suppl. 43/Beschrijving Verzamelingen Provinciaal Museum G. M. Kam Nijmegen 6 (Leiden 1962).
- STUART 1977 P. STUART, Een Romeins grafveld uit de eerste eeuw te Nijmegen. Onversierde terra sigillata en gewoon aardewerk. Beschrijving Verzamelingen Provinciaal Museum G. M. Kam Nijmegen 8 (Nijmegen 1977).
- VANVINCKENROYE 1965 W. VANVINCKENROYE, Opgravingen te Tongeren in 1963–1964. Limburg 44, 1965, 1–45.
- VERMEULEN 1932 W. G. J. R. VERMEULEN, Een Romeinsch grafveld op den Hunnerberg te Nijmegen (uit den tijd van Tiberius-Nero) (Amsterdam 1932).
- WEBSTER 1949 G. WEBSTER, The Legionary fortress at Lincoln. Journal Roman Stud. 39, 1949, 57–78.
- WILLEMS 1988 J. WILLEMS, Introduction à l'étude de la céramique dorée dans la civitas tungrorum. Vie Arch. 8–29, 1988, 70–79.

## References

- Figs. 1–3:** X. Deru.
- Figs. 4–7:** See references in table 2, except nos. 2, 5, 7, 10–15, 24–25, 27–29, 32–35, 38–42, 49, 52, 54, 59, 60, 76, 79–80, 85, 87, 93, 95, 97–100, 102–115; B. Liesen. – nos. 48, 56, 58, 61, 62, 64, 65, 67, 69, 82–84, 88–90; X. Deru. – no. 86: [http://www.museumoflondon.org.uk/ceramics/pages/object.asp?obj\\_id=19929](http://www.museumoflondon.org.uk/ceramics/pages/object.asp?obj_id=19929) (02/02/2017)
- Fig. 8:** Małgorzata Daszkiewicz, Gerwulf Schneider.

