SHORT CONSIDERATIONS ON GLASS BEAKERS DISCOVERED IN THE SÂNTANA DE MUREȘ ENVIRONMENT BETWEEN THE CARPATHIANS AND PRUTH

Costin Croitoru

Considerații sumare privind paharele din sticlă descoperite în mediul Sântana de Mureș dintre Carpați și Prut

De ceva vreme studiul recipientelor de sticlă se bucură de o atenție sporită din partea cercetătorilor, aceste artefacte fiind supuse unor analize dintre cele mai diverse, ce tind să pună în lumină din ce în ce mai elocvent adevărata importanță pe care anticii o acordau materialului vitric. Faptul că cercetările arheologice scot la iveală vase de sticlă specifice unor anumite ateliere sau zone de răspândire nuanțează în bună măsură cunoștințele pe care le deținem în legătură cu relațiile comerciale și de multe ori politice ale comunităților din teritoriul de la est de Carpați. Totodată, studiarea morfologiei acestor piese, a decorului deosebit de variat – uneori dovadă al unui simț estetic uimitor, decodifică nivelul remarcabil la care ajunsese acest meșteșug în antichitate, fără doar și poate datorat și cererii care exista în domeniu.

Scopul acestui material a fost acela de a aduna și interpreta, pe cât posibil exhaustiv, toate informațiile asupra descoperirilor de pahare din sticlă, fortuite sau provenind din siturile arheologice cercetate pe teritoriul cuprins între Carpați și Prut. Inițiativa s-a dovedit a fi mult mai dificilă decât ne-am fi așteptat. Informația, sintetizată în corpusul descoperirilor din partea finală, provine din studiile și articolele publicate până acum și prezintă numeroase lacune, iar situația are câteva explicații. Pe de o parte, multe din vasele de sticlă, îndeosebi acelea cu pereți foarte subțiri, aflate uneori în stare de conservare mediocră chiar din momentul descoperirii, au fost fie numai amintite, fie menționate în treacăt, cu detalii sumare sau doar prin ilustrație, ceea ce, de cele mai multe ori, face imposibilă încadrarea lor tipologică și cronologică. Nici anumite elemente morfologice ori relative la modul de realizare a recipientelor lucrate din material vitric n-au fost semnalate decât rareori cu date complete și ilustrație de bună calitate. De obicei lipsesc detaliile referitoare la contextul arheologic, tehnologia de lucru, caracteristicile materiei prime și modul de realizare a ornamentelor. O datare foarte precisă a diverselor tipuri de artefacte de sticlă este destul de dificilă în stadiul actual de cercetare, întrucât nu dispunem încă nici de o cronologie bine pusă la punct pentru siturile în cadrul cărora au fost identificate. Dificultățile sunt create așadar și de nesiguranța ce se menține în ceea ce privește încadrarea tipologică precisă a unora din recipiente, ca și de contextul de descoperire destul de neclar pentru unele dintre ele.

Pe de altă parte, așa cum rezultă din bibliografia fiecărei piese, multe dintre ele au fost publicate de către cercetători străini, fapt ce ilustrează încă o dată „atenția” de care s-au bucurat vasele de sticlă din această perioadă în istoriografia românească. În atare condiții, în mod evident, nu se pot face referiri decât la tipologiile „străine”.

Pentru perioada menționată se remarcă o abundență a materialului vitric în spațiul dintre Carpați și Prut. Recipiente de sticlă au fost semnalate pe cuprinsul a 29 de situri arheologice, aflate în stadii diferite de cercetare, atât în așezări (10 puncte arheologice însumând 16 recipiente de sticlă) cât și în necropole (19 puncte arheologice însumând 84 recipiente de sticlă), procentul majoritar fiind net în favoarea celor din urmă, numai vasele de sticlă identificate la Mihălășeni și Bârlad–Valea Seacă însumând aproximativ 60% din totalul descoperirilor efectuate în spațiul care ne interesează. Desigur pentru o asemenea realitate poate pleda și stadiul avansat al cercetărilor, respectiv al publicării din cadrul acestor două stațiuni arheologice, totuși diferența deloc de neglijat poate conduce către anumite interpretări. O așezare, cea de la Iași–Cartier Nicolina, se situează abia pe locul trei, la diferență foarte mare,

reprezentând „numai” 6% din cuantumul descoperirilor de recipiente de sticlă. Nu este mai puțin adevărat faptul că, pentru siturile în care s-au efectuat doar cercetări de teren, încadrarea în categoria ansamblurilor funerare sau de locuit ar putea suferi corijări pe măsura aprofundării lor.

Key words: Moldavia, Sântana de Mureș, glass beakers, typology, decorantion.

In recent years, glassware research benefited of scholars' increased focus, while such artefacts underwent most diverse analyses that aimed at emphasizing, rather eloquently, the real importance that the classics granted to glass material. Archaeological excavations led to the discovery of glassware specific to both certain workshops and dissemination areas and as a result, the knowledge on trade relations and often, political relations in the territory east of the Carpathians improved. Concurrently, the study of their morphology and rather varied decoration – occasionally proving an astonishing aesthetic taste, translated into the remarkable level that glassware making reached in Antiquity, unquestionably due to the demand in the field.

Herein we attempted to gather and interpret, as systematically as possible, all information on discoveries of glass beakers coming from either chance finds or archaeological sites explored in the territory between the Carpathians and Pruth River. Our enterprise proved more difficult as expected. The information, synthesised in the catalogue of finds by the end of the paper, comes from studies and articles already published and presents numerous flaws that could be explained to a certain extent. On one hand, many of the glass recipients, especially very thin-walled glassware, occasionally already in a poor state when found, are either hinted or only mentioned, little detailed or only illustrated, hence typologies and chronological dates are rather impossible to draw. Furthermore, morphological elements or aspects related to the manufacturing technique of the glass recipients are hardly ever comprehensively indicated or well illustrated, whilst details referring to the archaeological context, working technology, characteristics of the raw material and ornamentation means are usually lacking. The accurate dating of various types of artefacts is considerably difficult under current circumstances since there is no fine established chronology for the sites of origin. Consequently, difficulties are due to continued uncertainties regarding the correct typological framing of certain recipients and to rather frequent unclear contexts of discovery.

On the other hand, as indicated by bibliography, many of the pieces were published by foreign scholars, moreover confirming the “attention” that glassware of the period benefited in Romanian historiography¹. Subsequently, one may make no other references than to “foreign” typologies.

During the mentioned period, the glass material is abundant in the area between the Carpathians and Pruth River. Glass recipients were signalled within 29 archaeological sites, both settlements (10 archaeological points with up to 16 glass recipients) as well as necropolises (19 archaeological points with up to 84 glass recipients), the percentage being decidedly favourable to the latter, as only glassware identified at Mihălășeni and Bârlad–*Valea Seacă* sum up to 60% of the total finds from the region of interest. Obviously, the advanced state of research, respectively publishing of materials coming from the two archaeological sites pleads for such realities, yet the noticeable difference may also lead to certain interpretation. A settlement like the one from Iași–*Cartier Nicolina* ranks only third, at significant distance and representing “only” 6% of glass recipients share of finds. Nonetheless, the fact that sites

¹ The first synthesis, dedicated to a glassware category identified in Romania and dated during the 3rd – 5th centuries AD was issued only in 2007, Pánczél, Dobos 2007, 67–97.

explored by only field walking would be framed subsequent to further investigations, as either funerary or dwelling assembles, is also true.

Fig. 1. Distribution of glassware upon site categories

Regarding the distribution upon types of funerary assembles, 50 glass beakers were identified in inhumation graves and 20 inside cremation graves, while data on other 14 items does not indicate any point of origin

Fig. 2. Distribution of glassware upon burial categories

We should further emphasize the probability degree of percentage approaches since certain recipients might be associated to the general category of beakers only hypothetically. Therefore, another issue related to the study of glass material is the advised differentiation between beakers and cups, considering that in general the two notions are not always well established. Height and maximum diameter ratio represents the main separation criterion in the case of the two recipient categories². When height exceeds diameter, the recipient is ascribed to

² Straume 1987, 20; Ioniță 2001–2002, 223.

the beaker category, while vessels with a smaller height or equal to the diameter are classified as cups. Obviously, the mentioned criterion may be applied to complete vessels or to vessels whose general form can be restored with sufficient precision. Regarding the recipients whose morphologies cannot be established, their assignment to one or the other category is difficult and uncertain, like the case of some vessels that shall be referred to in the catalogue of finds.

For instance, we may exemplify by recipients from Cârlişi (*catalogue no. 2*), Mihălăşeni (*catalogue no. 3–6, 12*), Miorcani (*catalogue no. 20–21*), Iaşi–*Fabrica de Cărămizi* (*catalogue no. 38*), Iaşi–*Cartier Nicolina* (*catalogue no. 39–42, 44*) and Bârlad–*Valea Seacă* (*catalogue no. 69, 88, 97–98*) represented by small fragments, which, upon decoration seem to principally belong to the beaker category although elements of certainty are lacking. Additionally, the fragmentary glass recipients from Mihălăşeni (*catalogue no. 13*), Poieneşti (*catalogue no. 57*) and Băiceni (*catalogue no. 35–36*) are worth mentioning. In the case of the latter, the conserved elements belong exclusively to vessel upper parts that might have composed cups as well, although no close analogies could be identified given that limited parts of decoration elements have been preserved. Other pieces, like those from Ripiceni (*catalogue no. 23*), Truşeşti (*catalogue no. 26*), Cavadineşti (*catalogue no. 31*), Holboca (*catalogue no. 37*), Spinoasa (*catalogue no. 46*), Vânători (*catalogue no. 47*), Dolheştii Mari (*catalogue no. 50*), Bozia (*catalogue no. 53*), Obîrşeni (*catalogue no. 55*), Pogoneşti (*catalogue no. 56*), Polocin (*catalogue no. 58*) and Bârlad–*Valea Seacă* (*catalogue no. 59–62, 70–75, 77–81, 87, 91*) are only mentioned, without supplementary details or illustration. It seems that at Ripiceni and Pogoneşti several (?) glass recipients were discovered.

Lastly, no appreciations can be made in the case of the completely damaged glass material unearthed at Călugăreni (*catalogue no. 1*), Mihălăşeni (*catalogue no. 11*) and Bârlad–*Valea Seacă* (*catalogue no. 83–86, 89–90, 95*) except for such judgment that would account for the amount of discoveries.

The precision of framing the 100 glass recipients designated as beakers is questionable in the case of a few exemplars and no hypotheses may be sketched for the lack of a thorough study regarding the preserved original pieces.

Under such circumstances, considerations relative to the glass beaker typology are rather difficult to outline and imperatively require further corrections. From morphological and specific decoration points of view and based on similar recipients identified in other areas, the beakers discovered in Moldova may classify as follows:

Type A. (types Eggers 230; Ekholm IIBc; Kowalk; Eketorpsglas 3/11; Straume I)

This category is illustrated by complete or restorable vessels unearthed at Mihălăşeni (*catalogue no. 16*), Barcea (*catalogue no. 29*), Lunca (*catalogue no. 32–34*), Polocin (*catalogue no. 58 a–b*) and Bârlad–*Valea Seacă* (*catalogue no. 64, 76, 82*). Other fragments found at Iaşi–*Cartier Nicolina* (*catalogue no. 39–40, 44*) and Bârlad (*catalogue no. 88, 98*) may belong to the same type, unless their original, yet non–restorable sizes would plead for their affiliation to the cup category. Complete exemplars known in the area between the Carpathians and Pruth River come exclusively from inhumation graves (probably except for a beaker discovered at Lunca – *catalogue no. 34*, identified in the necropolis debris).

This beaker type is well known and largely spread. Exemplars were identified in the Scandinavian Peninsula, Poland, Germany and Hungary³. In Muntenia, similar vessels were signalled at Copuzu⁴, Spanţov (G₁₀, G₆₇)⁵, Alexandru Odobescu (G₁₁)⁶, Pietroasele (G₁)⁷,

³ Straume 1987, 130, Karte 2.

⁴ Muşţeanu 1986, 209–220.

Mogoșani⁸, etc. In west Romania, the only exemplar comes from the damaged grave at Șeitin–Imaș⁹. They also mainly appear in the eastern area of Sântana de Mureș environment, at Budești¹⁰, Žovnin¹¹, Dănceni¹², Žuravka¹³, Gnatki¹⁴, etc.

The general shape is cylindrical, exhibiting a wide opening, slightly out-turned rim delimited from the rest of the body by a fine groove (except for the exemplar from Bârlad–Valea Seacă, *catalogue no. 64*, yet a restoration error could also be taken into consideration?), the outer surface is ornamented with four rows of cells placed vertically, while the base is either straight or slightly rounded. The glass is thick, greenish or yellowish, the sizes of the recipients are similar and the height of complete exemplars on which we have information varies between 12 and 13 centimetres.

Taking into account several available exemplars, E. Straume distinguishes two variants, also depending on the position and quality of oval decorations (variant IA¹⁵, represented in Moldova by finds from Mihălășeni *catalogue no. 16* and Barcea *catalogue no. 29* and respectively variant IB¹⁶, represented by discoveries at Lunca *catalogue no. 32–34*, Bârlad–Valea Seacă *catalogue no. 76, 82*).

In our space of reference, two other recipients belong to the same general shape, yet the decoration is either missing (?) or partial (?) as the case of the recipient uncovered at Bogdănești (*catalogue no. 52*, the illustration is not indicative – as much as one may distinguish, a single register of ovals slightly is placed above the central area) with very thin walls, or is represented by two fine grooves in the upper part, as the case of the recipient found at Bârlad–Valea Seacă (*catalogue no. 67*).

Chronologically and based on the context of discovery of similar pieces, recipients of the type emerge starting with stage C2, yet significantly distribute during stage C3 (approximately 310/320 – 375 AD), with the remark that if variant IA recipients are earliest (the end of stage C2 – end of stage C3), the exemplars of IB variant may reach stage D1¹⁷. The distribution of this type was attempted chronologically associated with the “development” or “classical” stage of the Sântana de Mureș–Černjachov culture¹⁸. Since the chronological boundaries of the above mentioned culture were not sufficiently clarified, any hypotheses are speculative. The chronological extension of this type of recipients found in Scandinavia to those identified in Sântana de Mureș environment is also questionable. Subsequently, it was specified that type IA beakers found in the east of the Continent would rather date from the first C3 stage, while those of IB type especially in stage C3, their emergence until stage D1 being debatable¹⁹.

⁵ Mitrea, Preda 1966, 22, fig. 20; 39, fig. 94/3. The exemplar discovered in G₆₇ may only be an imitation of type A beakers, acc. Pánczél, Dobos 2007, 69, no. 20, pl. III/20.

⁶ Mitrea, Preda 1966, 99, fig. 238/7, 239/5.

⁷ Diaconu, Tzony, Constantinescu, Drâmbocianu 1977, 29, fig. 25/5.

⁸ Pánczél, Dobos 2007, 80, no. 16 with references.

⁹ Dörner 1970, fig. 14/3.

¹⁰ Vornic 2006, 212, type 2, fig. 15/4, 6, 8; 110/7, 11, 18, 24; 127/1–7, 9, 15; 129/8.

¹¹ Kropotkin 1970, fig. 79/5.

¹² Rafalovič 1986, pl. XXXIX/8.

¹³ Symonovič 1964, fig. 1/4.

¹⁴ Kropotkin 1970, fig. 77/5.

¹⁵ Straume 1987, 28–29, Taf. 2; Table 2.

¹⁶ Straume 1987, 29–30, Taf. 3; Table 3.

¹⁷ Eggers 1951, 92–94; Ekholm 1965, 3, 20–21; Rau 1975, Abb. 6; Näsman 1984, 49–53; Straume 1987, 28–31; Godłowski 1970, 108; Godłowski 1992, 50; Tejral 1992, 229, 246; Pánczél, Dobos 2007, 69.

¹⁸ Rau 1972, 134; Tejral 1992, 235; Pánczél, Dobos 2007, 73.

¹⁹ Ioniță, Straume 1993, 167; Ioniță 1994–1994, 155.

The diffusion of these recipients on such a large area is probably due to several workshops, whilst the amassment of discoveries in eastern areas may indicate the presence of several exemplars even in *Barbaricum*²⁰, yet such a fact must be proven by further research.

Type B. (types Eggers 236; Ekholm IICa; Straume VI)

Thus far this category is exemplified by a single exemplar identified at Mihălășeni (*catalogue no. 17*). Like in our reference area, such exemplars are quite rare. Analogies come from Bremsnes²¹ and Gjerla²², both in Norway. Their shape is similar to the above discussed vessels, yet the decoration is different. The decoration made of four registers of ovals separated by fine grooves, with similarly sized ovals in the upper and third registers is specific. Considering known analogies, the recipients may date in the chronological interval comprised between stages C3 – D1 (310/320 – 400 AD).

Type C. (types Eggers 237; Ekholm IIAb–IIBc; Eketorpsglas 6/21; Straume VIIA–B)

Type C is represented by a large number of pieces and its large distribution is also confirmed by discoveries east of the Carpathians where they represent the most numerous category; in fact, except for the Scandinavian Peninsula, most exemplars come from the Sântana de Mureș–Černjachov environment. Taking into account known analogies, this type of recipients may be generally dated within the chronological interval comprised between stages C3 – D1 (310/320 – 410 AD)²³, based on the inventory they were discovered beside and related to late stages of Sântana de Mureș culture²⁴. The origin of such thick-walled beakers is uncertain. Hypotheses consider eastern and Syrian workshops, as well as a local origin, the Sântana de Mureș cultural environment²⁵.

Due to the large number of such recipients, a few distinctions may be made within the same category, especially linked to the specific decoration (the ovals shape, cell-like or oval) expressively noticed by E. Straume²⁶, for which reason we shall adopt similar general framework:

1. Type c₁ beakers (Straume VII A; Lund–Hansen 25) uncovered at Mihălășeni (*catalogue no. 7, 9, 18*), Murgeni (*catalogue no. 54*) and Bârlad–Valea Seacă (*catalogue no. 100*). Other fragments coming from Iași–Fabrica de Cărmăzi (*catalogue no. 38*), Iași–Nicolina (*catalogue no. 42*) and Bârlad–Valea Seacă (*catalogue no. 69, 97*) seem to pertain to the same category. This sub-group is characterised by the general conical shape of the vessels, narrow base and wide opening. The specific decoration, generally inserted between two grooves – one placed immediately beneath the rim, the other in the lower part of the recipient is represented by three (Mihălășeni, *catalogue no. 7, 9*) or four rows of ovals (Mihălășeni, *catalogue no. 18*), linked one to the other and joined so that the inner ovals are transformed into hexagonal “facet” cuts. In the case of the identified exemplars, between the upper groove and register of ovals, an additional row of smaller ovals is placed slightly rarely and horizontally. A variant of the same type may be represented by the fragment pertaining to the lower part of a beaker found at Iași–Nicolina (*catalogue no. 43*). The general shape is identical, while slight differentiations emerge in decoration: the three rows of ovals although not joined, yet close one to another, seem to render similar “hexagonal facet cuts”. A close analogy is found at Archiud–Hânsuri²⁷ (variant?), exhibiting slightly distanced ovals.

²⁰ Rau 1972, 170; Straume 1987, 61; Ščukin 2005, 180.

²¹ Eggers 1951, 91, no. 323; Ekholm 1965, 22, no. 90; Straume 1987, 77, no. 2, Taf. 6/15:1.

²² Ekholm 1965, 22, no. 88; Straume 1987, 85, no. 15, Taf. 6/2.

²³ Ekholm 1965, Abb. 5; Rau 1972, 170; Ioniță 1986a, 305–306; Straume 1987, 38; Gomolka–Fuchs 1999, 139.

²⁴ Tejral 1992, 235–236; Pánczél, Dobos 2007, 73.

²⁵ Straume 1987, 60, 62.

²⁶ Straume 1987, 36–38, no. 15, Taf. 7–8.

²⁷ Gaiu 1999, 269, 286, fig. 16/2.

The beakers of the discussed type were also identified at Târgșor²⁸ or in the east, at Budești²⁹, Chișcăreni³⁰, etc.

2. Type c₂ beakers (Straume VII B; Lund–Hansen 24) discovered at Mihălășeni (*catalogue no. 10, 14*) and Bârlad–Valea Seacă (*catalogue no. 65*). A variant of the same type may be the exemplar from Bârlad (*catalogue no. 66*).

The general shape is similar to that of the preceding type, while the decoration preserves the mentioned lines: inserted between two grooves – one placed immediately under the rim, the other in the lower part of the recipient, is represented by four rows of ovals (in the case of pieces coming from our space of reference), while this time, the difference consists in the fact that they are no longer joined, but only brought near, so the impression of hexagonal facet cuts is missing. Another exemplar coming from Bârlad–Valea Seacă (*catalogue no. 93*) could belong to the same variant³¹ (we have our own doubts concerning the restoration proposition of the beaker shape in the lower part). In Romania, recipients of the same type come from Alba Iulia³², Călărași³³. In the east, they also appear at Budești³⁴, Černjachov³⁵, Žuravka³⁶, Panticapeum³⁷, etc.

Type D. (types Eggers 238; Eketorpsglas 6/24; Straume VIII)

They were identified at Miorcani (*catalogue no. 22*), Barcea (*catalogue no. 30*), Izvoare (*catalogue no. 48*) and Bârlad–Valea Seacă (*catalogue no. 63, 99*). The fragment from Tocileni (*catalogue no. 24*) seems to have belonged to a recipient from this category³⁸. Analogies are found especially in the Scandinavian Peninsula and rarely in the rest of the Continent³⁹ where are interpreted as Roman imports manufactured in the Eastern provinces of the Empire. The general shape of the type is conical, ended in a short foot. The decoration is made within two asymmetrical registers, separated by a richly ornamented intermediary field, usually made of circles or cut lines inserted between two grooves. The decoration of the lower register starts from the immediate vicinity of the foot and is represented by four large ovals made of glass fabric and applied in relief, occupying more than half of the wall. Their asymmetrical position gives the impression of facet cuts. Occasionally in the superior part, in between ovals, four small knobs are placed. Based on established analogies, they date between the chronological interval comprised between stages C3 – D1 (310/320 – 410 AD)⁴⁰.

Considering the decoration of the upper register, in the case of the exemplars coming from the analysed area, two variants may be distinguished:

1. Type d₁ beakers. The exemplars discovered at Tocileni (*catalogue no. 24*), Barcea (*catalogue no. 30*) and Bârlad–Valea Seacă (*catalogue no. 63*) exhibit an inscription applied on a strip in relief. The fully preserved text reading “*ΠΙΕ ΖΗΧΗC ΚΑΑΩS ΑΕΡ*” onto the recipient from Barcea may be possibly used for the reconstruction of the other fragments. The beakers from Miorcani (*catalogue no. 22*) and Bârlad–Valea Seacă (*catalogue no. 99*) may belong to the same category, yet since they lack precisely the upper part, we can only make suppositions.

²⁸ Diaconu 1965, pl. CIX/7. The exemplar is considered by Pánczél, Dobos 2007, 83, no. 36, a type Straume VII B variant.

²⁹ Vornic 2006, 213, type 4, fig. 33/7; 36/1; 67/19; 126/1–2, 4–6; 130/2–3.

³⁰ Levinschi 1997, fig. 4/7.

³¹ Similar framing to Pánczél, Dobos 2007, 82, no. 34, pl. IV/34.

³² Băluță 1979, 198, fig. 4/3.

³³ Culică 1974, 455, fig. 1/1.

³⁴ Vornic 2006, 213, type 5, fig. 110/15; 126/7–8, 10, 15; 127/12; 130/1.

³⁵ Kropotkin 1970, 105, fig. 76/1.

³⁶ Symonovič 1964, 9–10, fig. 2.

³⁷ Sorokina 1962, 232, fig. 13/6; 16/5.

³⁸ Similar framing to Pánczél, Dobos 2007, 84, no. 41, pl. V/41.

³⁹ Straume 1987, 38–40.

⁴⁰ Näsman 1984, 86; Straume 1987, 39–40.

Similar inscriptions appear on recipients discovered in Norway, Denmark, Hungary or Russia⁴¹. In Romania, only the exemplars identified in Moldova are known.

2. Type d₂ beakers. There are recipients where this secondary register is missing, like the case of the exemplar identified at Izvoarele (*catalogue no. 48*). Once again, the beaker from Bârlad (*catalogue no. 99*) may belong to the same variant, yet since the upper part is missing we can only make suppositions, as it may have well been one of the exemplars bearing inscription. In Muntenia, a complete exemplar was found at Independența (G₂₀)⁴². Fragmentary pieces come from Bratei⁴³, while in the east they were unearthed at Budești⁴⁴, Comrat⁴⁵, Kerč⁴⁶, etc.

Type E. (types Straume IX; Eketorpsglas 6/23)

A single exemplar was identified at Izvoarele (*catalogue no. 49*)⁴⁷. This category is characterised by the general conical shape of the vessels, narrow base and wide opening. The specific decoration, generally inserted between two grooves – one placed immediately under the rim, the other above the short foot, consists of three rows of inlaid ovals, linked one to another. The first, are the largest and are rounded in the upper part, while in the lower part they end in angle, so that the following row gives the impression of hexagonal facet cuts. A third row, the lower and the smallest, is formed only of oval cuts that seem to become round. Occasionally, as the case of our exemplar, between the larger, upper ovals also appear small circular knobs. Analogies for such recipients are found in the Scandinavian Peninsula⁴⁸, while in our space of reference they are extremely rare, in fact, except for the recipient at Izvoarele, fragments that might belong to the category under discussion are signalled only at Budești⁴⁹, Kurniki⁵⁰ or Jakuševcy⁵¹. For reasons related to the dissemination and density of beakers, it was considered they originate from Scandinavian glassware making workshops⁵². Such recipients seemed to have been in use in the chronological interval between stages C3 – D1 (310/320 – 400 AD), although in archaeological sites from Norway or Sweden they amass in complexes dated rather in stage D1⁵³. The inventory of G_{IX} from Izvoarele pleads for the dating of the beaker in the interval comprised between the last quarter of the 4th – beginning of the 5th centuries AD⁵⁴.

Type F. (types Straume X; Isings 106 d)

They were identified at Mihălășeni (*catalogue no. 15, 19*), Barcea (*catalogue no. 27–28*), Lețcani (*catalogue no. 45*), Moara (*catalogue no. 51*) and Bârlad–Valea Seacă (*catalogue no. 92*). Another fragmentary recipient comes from Bârlad–Valea Seacă (*catalogue no. 68*) seems to belong to the same type. Beakers are made of thin glass, by blowing, are conical, slender and tall. Upon the relatively simple decoration, they may be divided in several variants:

⁴¹ Eggers 1951, 95, 78, no. 11, 416; Ekholm 1965, 22, 24, no. 95, 118, Abb. 2/95, 3/118; Symonovič 1966, 105–109; Rau 1972, no. 71; Näsman 1984, 61; Straume 1987, 100–101, 121, 123, 127, 131, no. 44, 91, 96, 131, 149; Țau, Nicu 1985, 166; Gomolka–Fuchs 1999, 139, Abb. 7/1, 4–5.

⁴² Mitrea, Preda 1966, 143, fig. 134, 267 (type III beakers); Gomolka–Fuchs 1999, Abb. 7/3.

⁴³ Bârză 1973, 63.

⁴⁴ Vornic, 2006, 214, type 7, fig. 128/1.

⁴⁵ Rikman 1972, fig. 6/17.

⁴⁶ Gavrituchin 1999, 57.

⁴⁷ Pánczél, Dobos 2007, 84, no. 42, pl. VI/42, frames the fragment coming from Iași–Nicolina (*catalogue no. 42*) in the Straume IX category. As suggested, same fragment may well come from a type Straume VII A beaker.

⁴⁸ Ekholm 1965, pl. 1/17; no. 17–20, 106, 111; Näsman 1984, 150, type 23, Karta 6; Straume 1987, 40, no. 18, 21, 22, 39, 72.

⁴⁹ Vornic, 2006, 214, type 6, fig. 126/3, 9, 12; 128/12.

⁵⁰ Magomedov 1999, fig. 15/1.

⁵¹ Gavrituchin 1999, 54, 66.

⁵² Straume 1987, 40–41.

⁵³ Rau 1972, Abb. 37; Näsman 1984, 61; Straume 1987, 40; Gavrituchin 1999, 54, 86.

⁵⁴ Alexianu, Ellis 1995, 297–298.

1. Type f₁ beakers. (type Gavrilovka 35⁵⁵) made of thin glass, generally transparent or green–yellowish, decoration made of three (Mihălăşeni, *catalogue no. 15, 19*), rarely two (Bârlad–Valea Seacă, *catalogue no. 92*) fine grooves placed in the upper part. Similar exemplars are relatively well known in Muntenia, being discovered at Mogoşani (G₈, G₅₂)⁵⁶, Gherăşeni (G₅₉)⁵⁷, Spanţov (G₁₃, G₄₁?), Izvoru (G₆, G₇)⁵⁸, Mărtineşti⁵⁹, etc., or in the east at Mălăieşti⁶⁰, Budeşti⁶¹, Dănceni⁶², Slobozia–Chişcăreni⁶³, etc. Recipients belonging to the same general shape might not have any ornamentation, like the exemplar from Leţcani (*catalogue no. 45*). In Muntenia, a similar recipient was discovered at Copuzu (G₂₄)⁶⁴, but such exemplars are known in the north of the Black Sea⁶⁵ as well. The idea that thin-walled recipients are import pieces from the Roman world is generally accepted; they reach the Sântana environment especially from Eastern provinces and their chronology is restricted to the interval comprised between the second half of the 4th – beginning of the 5th centuries AD⁶⁶.

2. Type f₂ beakers. Their decoration consists of three fine grooves positioned in the upper part, while in the centre four large ovals (Nuppenverzierung) and four groups of three smaller dark blue ovals placed on two levels are displayed. The upper register comprises two larger ovals, placed symmetrically, inlaid by two groups of three smaller ovals; the lower register exhibits the same arrangement, with the groups of smaller ovals placed backwards. This type is exemplified by the discovery at Bârlad–Valea Seacă (*catalogue no. 94*). Such recipients are rather rare⁶⁷. The decoration of the beaker found within the above mentioned necropolis may be interpreted in the same manner (*catalogue no. 96*)⁶⁸.

3. Type f₃ beakers. (type Eketorpsglas 8/37), ornamented with bi–chrome ribs or ribs similar to the glass of which the vessel is manufactured, applied in relief. Two beakers decorated as such were identified at Barcea (*catalogue no. 27–28*). Recipients of the type are rather scarce and similar items come from the north of the Black Sea at Kosanovo and Žurovka or in the west at Holm and Thiétreville⁶⁹. The decoration probably follows the decoration of older recipients of Poienestii–Dumestii Vechi type. A glass fragment uncovered at Băiceni (S₂₂) which upon decoration, belongs to the last category according to the restoration proposed by Godruna Gomolka–Fuchs, was erroneously included in the catalogue of glass material specific to Sântana de Mureş culture⁷⁰, being identified with certainty within the inventory of a settlement of the “Free Dacians”⁷¹. Even if different by general morphology, being rather truncated–cone in shape, having a larger base and ending in a short circular foot, the beaker

⁵⁵ Rau 1972, 181, fig. 76c.

⁵⁶ Diaconu 1969, 379, pl. 5/10, 13.

⁵⁷ Constantinescu 1992, 197, fig. 2/2.

⁵⁸ Mitrea, Preda 1966, 143, fig. 216, 178/1, 179/1 (type I beaker).

⁵⁹ Bobi 1985, 208, fig. 10/1; Gomolka–Fuchs 1999, p. 136, Abb. 5/5.

⁶⁰ Fedorov 1960, 287, fig. 12.

⁶¹ Vornic 2006, 211–212, type 1, fig. 101/1.

⁶² Rafalovič 1986, pl. XXII/9.

⁶³ Levinschi 1997, fig. 4/9.

⁶⁴ Muşeteanu 1986, 211, pl. 4/15.

⁶⁵ Sorokina 1962, 104, pl. 40/3.

⁶⁶ Kropotkin 1970, 111; Tejral 1987, 16; Barkoczi 1988, 84; Gomolka–Fuchs 1999, 135; Gavrituchin 2000, 265–269, Vornic 2006, 212.

⁶⁷ Kovács 1912, 327; Harden 1970, 59; Diaconu 1965, 107.

⁶⁸ Pánczél, Dobos 2007, 70, no. 24, pl. III/24 do not exclude that the recipient from G₅₄₁ belongs to type Straume IV = Eggers 233.

⁶⁹ Symonovič 1964, Tab. 1, fig. 2; Kropotkin 1970, no. 993; Rau 1972, 181, no. 48, 50, fig. 48/5, 75/13; Näsman 1984, 85, 150, no. 34, 37, 41.

⁷⁰ Gomolka–Fuchs 1999, 141, 136, Abb. 5/3.

⁷¹ Ioniţă 1982, 61; Ioniţă 2000–2001, 236, no. 1.

from Todireni (*catalogue no. 25*) preserves yet the same specific decoration, although no close analogies could be established with our space of reference (see type Eketorpsglas 8/35⁷² or Arnswalde⁷³). The fragment from Mihălășeni (*catalogue no. 13*) has no analogies either, and, alike the exemplar from Todireni ends in a circular foot. There are no clues regarding the upper part of the recipient, which seemed to have exhibited a decoration made of horizontal ovals. It may possibly come from a vessel of shape Isings 108.

Another recipient that seems to be part of the short beakers category, yet which is fragmentary so it may have well pertained to a cup, was identified at Poieniști (*catalogue no. 57*). As much as one may distinguish from the piece illustration (left with no description or details regarding the context of discovery), the decoration seems to follow the example of the variant under discussion, consisting of a glass rib placed windingly in the upper register, as the case of the decoration on the beaker found at Szob⁷⁴, in Hungary or the beaker fragment (?) unearthed at Ciocâltei (the Republic of Moldova)⁷⁵.

4. Type f₄ beaker. Belonging to the same general shape, discovered at Moara (*catalogue no. 51*). There are also no analogies for this recipient type, decorated, starting from the inferior part on approximately half of the surface with vertical ribs. In the superior part a horizontal rib applied in relief is displayed. Due to a small fracture in the inferior part, the piece publisher⁷⁶, does not exclude the fact that the recipient might have probably ended in a foot (!?), that would differentiate it from the variant under discussion.

In general, considering the context of discovery and existent analogies, such recipients date from the chronological interval comprised between the stages C3 – D1 (310/320 – 400 AD)⁷⁷.

Type G.

A single exemplar was uncovered at Mihălășeni (*catalogue no. 8*). This category is represented by globe-shaped recipients made of thin transparent glass that seem to be close to shape Isings 94 dated largely in the interval comprised between the 3rd – 4th centuries AD⁷⁸. Morphologically close are the beakers discovered in the necropolises from Scupi and Brigetio, where they appear in contexts dated in the 3rd century AD⁷⁹. One may not exclude though, the fact that certain exemplars could be earlier, like the one from a grave at Constanța, dated based on a coin from Antoninus Pius⁸⁰. Other exemplars come from late Roman necropolises from Ságvár⁸¹, Augsburg⁸², Tomis (G₄₃)⁸³ and Callatis (G₁₄₈)⁸⁴. The latter ensures some dating elements even in later times, being identified beside a knob brooch. The single analogy from the Sântana de Mureș environment comes from Mogoșani (G₆)⁸⁵.

Taking into consideration their distribution area, thin-walled recipients represent import vessels from the Roman world that reached the Sântana environment mainly from Eastern provinces.

⁷² Näsman 1984, 150, no. 35.

⁷³ Rau 1972, 167, 172, fig. 57.

⁷⁴ Näsman 1984, 150, no. 42.

⁷⁵ Gomolka-Fuchs 1999, 135, 140, Abb. 4/9.

⁷⁶ Emandi 1976, 389–390, fig. 6/4, 9/1, does not exclude a footed – recipient since a base fracture was identified.

⁷⁷ Rau 1972, 135–138, fig. 76c; Symonovič 1960, 237, Pl. IX/14; Straume 1987, 41, Taf. 11; Palade 2004, 220.

⁷⁸ Isings 1951, 111.

⁷⁹ Acc. Lungu, Chera-Mărgineanu 1982, 190.

⁸⁰ Bucvală 1968, 54, no. 59 (2nd – 3rd centuries AD). Similar dating to Sorokina 1962, p. 227, fig. 11/1.

⁸¹ Burger 1966, 130, fig. 118.

⁸² Keller 1971, 138, 227, pl. 3/13, fig. 38/11.

⁸³ Lungu, Chera-Mărgineanu 1982, 190, pl. V/22.

⁸⁴ Preda 1980, 34, type f, pl. XIII, LXVII.

⁸⁵ Diaconu 1970, 18, fig. 5/18.

Catalogue of finds:

I. Călugăreni (Dămieniști commune, Bacău county)

Ferma, necropolis, rescue excavations

1. glass beaker damaged during works, small fragments were recovered (note), discovered in an inhumation grave

Bibl.: Mitrea 1979, 175.

II. Cârliști (Filipești commune, Bacău county)

Rădi-Hărmănești, settlement, systematic digs

2. cream-coloured glass beaker (?), fragmentary, decorated with a groove near the rim and other two below, unknown discovery circumstances

Bibl.: Mitrea 1986, 144, fig. 6/4, 8/10.

III. Mihălășeni (Mihălășeni commune, Botoșani county)

Șesul Bașeului, necropolis, systematic digs

3. fragmentary glass beaker (?), sizes: H = 2.5 cm., found in G₂₈ inhumation grave

Bibl.: Șovan 2005, 23, pl. 19C, 3.

4. fragmentary glass beaker (?), thin-walled, sizes: H = 1.5 cm., unearthed in the filling of G₄₁ inhumation grave

Bibl.: Șovan 2005, 26, pl. 26B, 2.

5. fragmentary greenish glass beaker (?), sizes: H = 1.5 cm., discovered in G₄₄ cremation grave

Bibl.: Șovan 2005, 27, pl. 28A, 4.

6. thick-walled fragmentary glass beaker (?), partially melt, sizes: H = 2.1 cm., discovered in G₈₈ cremation burial

Bibl.: Șovan 2005, 38, pl. 48B, 1.

7. thick-walled, coned-shaped glass beaker, decorated with four registers of ovals, sizes: H = 12 cm., discovered in G₁₁₇ inhumation grave

Bibl.: Șovan 2005, 46, pl. 62, 13.

8. thin-walled transparent glass beaker (?), globed body and large opening, sizes: H = 4.4 cm., discovered in G₁₂₃ inhumation grave

Bibl.: Șovan 2005, 48, pl. 70, 49.

9. thick-walled, greenish glass beaker, cone-shaped, decorated with two large grooves, in between with three registers of hexagonal vertical facet cuts delimited by a row of small horizontal ovals, sizes: H = 25.2 cm., discovered in G₁₇₅ inhumation grave

Bibl.: Șovan 2005, 62, pl. 95, 17.

10. thick-walled, greenish glass beaker, cone-shaped, decorated with four registers of ovals delimited in the upper register by a row of rare smaller ovals, placed horizontally, sizes: H = 14.4 cm., discovered in G₂₉₆ inhumation grave

Bibl.: Șovan 2005, 93, pl. 162, 15.

11. smashed thin-walled glass beaker (?), discovered in G₂₉₇ inhumation grave

Bibl.: Șovan 2005, 95.

12. fragmentary glass beaker (?), melted, sizes: H = 4 cm., discovered in G₃₄₆ cremation grave

Bibl.: Șovan 2005, 107, pl. 189C, 1.

13. fragmentary glass beaker, decorated with ovals, circular base, sizes: H = 1.4 cm., discovered in G₃₅₉ inhumation grave

Bibl.: Șovan 2005, 112, pl. 200, 8.

14. thick-walled greenish glass beaker, cone-shaped, decorated with four registers of vertical ovals, delimited in the upper part by a register of small rare horizontally placed ovals, sizes: H = 13 cm., discovered in G₃₆₉ inhumation grave

Bibl.: Şovan 2005, 114, pl. 206A, 25.

15. thin-walled transparent glass beaker, cone-shaped, decorated with wide parallel horizontal grooves, sizes: H = 19 cm., discovered in G₃₇₆ inhumation grave

Bibl.: Şovan 2005, 116, pl. 210, 13.

16. cream-coloured thick-walled glass beaker, decorated with four registers of ovals, rounded base, sizes: H = 12.6 cm., discovered in G₄₀₅ inhumation grave

Bibl.: Şovan 2005, 122, pl. 225A, 2.

17. cream-coloured thick-walled glass beaker, decorated with five registers of ovals, delimited by grooves, sizes: H = 15 cm., discovered in G₄₂₆ inhumation grave

Bibl.: Şovan 2005, 127, pl. 235C, 1.

18. thick-walled greenish glass beaker, cone-shaped, decorated with five registers of hexagonal and oval facet cuts, sizes: H = 16 cm., discovered in G₄₅₀ inhumation grave

Bibl.: Şovan 2005, 131, pl. 245A, 12.

19. thin-walled glass beaker, truncated-cone shape, decorated with three wider grooves of which two more evident, sizes: H = 18.8 cm., discovered in G₄₆₆ inhumation grave

Bibl.: Şovan 2005, 134, pl. 250C, 1.

IV. Miorcani (Dămieniști commune, Botoșani county)

Iazul Mare or *Izvorul Lupului*, necropolis, systematic digs

20. transparent glass beaker (?), fragmentary, discovered in G₁₁₅ inhumation grave

Bibl.: Ioniță 1977, R 49a, pl. 6.

21. thick, transparent, greenish glass beaker (?), decorated with large oval facet cuts, discovered in G₁₃₃ inhumation grave

Bibl.: Ioniță 1977, R 51, pl. 2.

22. fragmentary glass beaker, cone-shaped, decorated with large ovals in the lower part and small ovals framed by fine grooves in the upper part, discovered in G₁₄₄

Note: it may have exhibited an inscription in the upper part.

Bibl.: Gomolka-Fuchs 1999, 139, Abb. 7/2; Pánczél, Dobos 2007, 83–84, no. 40, pl. V/40.

V. Ripiceni (Ripiceni commune, Botoșani county)

Sterleuca or *Sterleuca*, settlement, systematic digs

23. fragmentary (note) glass beakers (!?), unknown circumstances of discovery

Bibl.: Păunescu 1978, pp. 506–507.

VI. Tocileni (Stăuceni commune, Botoșani county)

Lutărie, necropolis, systematic digs

24. transparent glass beaker, fragmentary – upper part decorated with a row of ovals delimited by grooves under which appear the beginning letters of an inscription, of which is preserved only the first letter “C”, discovered in G₂₁

Bibl.: Gomolka-Fuchs 1999, 139, Abb. 7/1; Pánczél, Dobos 2007, 84, no. 41, pl. V/41.

VII. Todireni (Todireni commune, Botoșani county)

Malul Negru, settlement, systematic digs

25. glass beaker, cone-shaped, ended in a short circular foot, ornamented with ribs (bi-chrome or made from the same glass as the recipient?), applied in relief, sizes: H = 14 cm. discovered in damaged G₁ or G₂

Bibl.: Ioniță 1980, Abb. 2/12; Gomolka-Fuchs 1999, 139, Abb. 7/1; Pánczél, Dobos 2007, 84, no. 41, pl. V/41.

VIII. Trușești (Trușești commune, Botoșani county)

Pe Cuha, settlement, systematic digs

26. glass (remark) beaker (?), unknown circumstances of find

Bibl.: Ioniță 1966, 207; Gomolka–Fuchs 1999, 141; Petrescu 2002, 258, no. 853d.

IX. Barcea (Barcea commune, Galați county)

Grădina de zarzavat, necropolis, systematic digs

27. iridescent glass beaker, cone-shaped, decorated with ribs applied in zigzag, bi-chrome, cream and blue, discovered in G₁₁₄ inhumation grave

Bibl.: Țau, Nicu 1983, 421–428, fig. 8/6; Gomolka–Fuchs 1999, 136, Abb. 5/2 (and not 5/1 as erroneously indicated by the illustration legend).

28. thin glass beaker, cone-shaped, ornamented with ribs applied in relief, bi-chrome (?), fragmentary – the lower part is missing, discovered in G₁₃₇ inhumation grave

Bibl.: Gomolka–Fuchs 1999, 136, Abb. 5/2 (and not 5/1 as erroneously indicated by the illustration legend).

29.* cone-shaped beaker, with round lower part, ornamented with large ovals placed symmetrically on the body in four rows, discovered in G₅₀ inhumation grave

Bibl.: Gomolka–Fuchs 1999, 136, Abb. 6/1.

30. thick glass beaker, cream-coloured, cone-shaped, provided with a short foot, above which four large ovals are placed in relief in the immediate vicinity, located symmetrically, thus faceting approximately half of the recipient height (7.0 x 4.5 cm.), while the upper part in between appear small circles also symmetrical. The upper part is ornamented with two belts in relief, separated by a groove. The first is filled with small ovals separated by sets of parallel lines, the second, the upper, comprises an incised decoration in the shape of a fir (?) followed by the inscription *πτε ζήσης χαλώς αεί*, sizes: H = 14.6 cm., D. opening = 11.3 cm., D. base = 4.3 cm., discovered in G₁₂₃ inhumation grave.

Bibl.: Țau, Nicu 1985, 165–166, fig. 1–2; Țau, Nicu 1986, 177–178, fig. 4/1; Gomolka–Fuchs 1999, 139, Abb. 7/5.

X. Cavadinești (Cavadinești commune, Galați county)

Râpa Glodului, settlement, systematic digs

31. cream-coloured fragmentary glass beaker, iridescent – the lower part, the foot (note), unknown circumstances of discovery

Bibl.: Dragomir 1959, 466; Ursachi 1979, 171.

XI. Lunca (Jorăști commune, Galați county)

Râpa cu Oale, necropolis, systematic digs

32. greenish glass beaker, semitransparent, iridescent and exfoliated, cylinder-shaped, large opening, slightly out-turned rim provided with an external groove, oval base, restored, exterior surface ornamented with four lenticular-oval registers, slightly concave, placed horizontally, sizes: H = 12.3 cm., D. opening = 9 cm., discovered in G₂₁ inhumation grave

Bibl.: Dragomir 1996, 644–645, fig. 11/1; Dragomir 2001, 107, fig. 40/6.

33. greenish glass beaker, semitransparent, iridescent and exfoliated, cylinder-shaped, large opening, slightly out-turned rim provided with two horizontal incisions, oval base, restored, exterior surface ornamented with four lenticular-concave registers, placed horizontally, sizes: H = 12 cm., D. opening = 8 cm., discovered in G₃₅ inhumation grave

Bibl.: Dragomir 1996, 646–647, fig. 11/2; Dragomir 2001, 107, fig. 45/5.

* Within the exhibition “*Antichitatea târzie în bazinul Prutului*”, recently opened, on 17.05.2009, at the “Vasile Pârvan” Museum from Bârlad, except for the recipient from G₅₀, a beaker coming from the necropolis at Barcea, entirely preserved, belonging to type A (Eggers 230; Ekholm IIBc; Kowalk; Eketorpsglas 3/11; Straume I) is exhibited. The second piece, unique, was not taken into consideration herein.

34. greenish glass beaker, semitransparent, iridescent and exfoliated, cylinder-shaped, large opened opening, slightly out-turned rim provided with two external grooves, rounded base, restored, exterior surface ornamented with four rows of lenticular cells placed horizontally, sizes: H = 13 cm., D. opening = 8.8 cm., discovered the necropolis debris

Bibl.: Dragomir 1996, 647, fig. 11/3; Dragomir 2001, 107, fig. 47/6.

XII. Băiceni (Cucuteni commune, Iași county)

Siliște, settlement, systematic digs

35. fragmentary glass beaker (?) – the upper part preserves part of the ornament made of a row of small, horizontal ovals, unknown circumstances of discovery

Bibl.: Gomolka–Fuchs 1999, 131, Abb. 2/7 (with reconstruction proposition).

36. fragmentary glass beaker (?) – the upper part preserves part of the ornament made of a row of circles and another row of ovals placed vertically and a fine groove, unknown circumstances of discovery

Bibl.: Gomolka–Fuchs 1999, 131, Abb. 2/7 (with reconstruction proposition).

XIII. Holboca (Holboca commune, Iași county)

La Moară, settlement (?), surface research

37. thick glass beaker (?), fragmentary, strongly iridescent, unknown circumstances of discovery

Bibl.: Zaharia, Dîmbovița, Zaharia 1970, 198, no. 44e.

XIV. Iași, (city, Iași county)

Fabrica de cărămizi, settlement, rescue excavations

38. fragmentary glass beaker, thick-walled and ornamented with hexagonal facet cuts (note), unknown circumstances of discovery

Bibl.: Ioniță 1972, p. 272, fig. 7/3.

XV. Iași, (city, Iași county)

Cartier Nicolina, settlement, rescue excavations

39. glass beaker (?), fragmentary, preserves part of the decoration made of circles and ovals, sizes: L = 4.3 cm., discovered in surface dwelling A₉

Bibl.: Ioniță 1985, 43, fig. 11/4; Ioniță 1986, p. 76, fig. 16/3.

40. glass beaker (?), fragmentary, preserves part of the decoration made of ovals, sizes: L = 4.6 cm., discovered in surface dwelling A₉

Bibl.: Ioniță 1985, 43, fig. 11/5; Ioniță 1986, p. 76, fig. 16/4.

41. glass beaker (?), fragmentary, preserves part of the decoration made of grooves, sizes: L = 4.2 cm., discovered in surface dwelling A₉

Bibl.: Ioniță 1986, p. 76, fig. 16/2.

42. glass beaker (?), fragmentary, preserves part of the decoration made of hexagonal facet cuts, sizes: L = 4.7 cm, discovered in surface dwelling A₁₄

Bibl.: Ioniță 1985, p. 43, fig. 11/6; Ioniță 1986, p. 76, fig. 16/5.

43. thick glass beaker, the lower part is cone-shaped, straight base and exhibits a groove above, still preserves part of the decoration made of hexagonal facet cuts, sizes: H = 4.3 cm., discovered in surface dwelling B₃

Bibl.: Ioniță 1985, p. 43, fig. 11/7; Ioniță 1986, p. 76, fig. 16/6.

44. glass beaker (?), fragmentary, preserves part of the decoration made of large ovals, sizes: L = 2.6 cm., discovered in the surface dwelling C₂

Bibl.: Ioniță 1986, p. 76, fig. 16/1.

XVI. Lețcani (Lețcani commune, Iași county)

Vatra satului, necropolis, systematic digs

45. thin glass beaker, iridescent, cone-shaped, sizes: H = 12.4 cm., discovered in G₂₃ inhumation grave

Bibl.: Bloşiu 1973, 111; Bloşiu 1975, 236, fig. 20/12; 41/9; 9.

XVII. Spinoasa (Erbiceni commune, Iaşi county)

Movila de la N de halta C.F.R., necropolis (?), field walking

46. fragmentary glass beaker – lower part (note), unknown circumstances of discovery

Bibl.: Zaharia, Dîmboviţa, Zaharia 1970, 218, no. 72c; Chirică, Tănăsachi 1984, 145, no. XXVI.3.C.

XVIII. Vânători (Popricani commune, Iaşi county)

Dealul Vultur, settlement (?), field walking

47. fragmentary glass beaker, decorated with ovals and two grooves near the opening (note), unknown circumstances of discovery

Bibl.: Zaharia, Dîmboviţa, Zaharia 1970, 226, no. 85e; Chirică, Tănăsachi 1984, 325, no. LVIII.8.E.

XIX. Izvoarele (Dumbrava Roşie commune, Neamţ county)

La Iaz, necropolis, systematic research

48. greenish glass beaker, iridescent, cone-shaped, ended in a small foot in the shape of a knob, decorated in the middle with three ellipses in relief rendering the sensation of facet cuts, sizes: H = 12.4 cm., D. opening = 10 cm., discovered in G_{VIII} inhumation grave

Bibl.: Vulpe 1957, 45–48, 300, fig. 319–320.

49. greenish glass beaker, cone-shaped, large opening and straight walls, ended in the lower part with a circular foot decorated with eight alveoli and two rows of eight facet cuts, discovered in G_{IX} inhumation grave

Bibl.: Alexianu, Ellis 1995, 297, fig. 2/8; Petrescu 2002, 166; Gomolka–Fuchs 1999, 138, Abb. 6/7.

XX. Dolheştii Mari (Dolheşti commune, Suceava county)

La Todireasa, necropolis, systematic research

50. glass beaker (?), fragmentary (note), discovered in G₂₃

Bibl.: Ignat 1980, 243; Ignat 1993, 321; Gomolka–Fuchs 1999, 141.

XXI. Moara Mică (Moara commune, Suceava county)

Putreda, necropolis, rescue excavations

51. coned greenish glass beaker with a reddish crust on the inside, thick and iridescent walls ornamented with a rib in relief under the edge and other ribs in relief slightly twisted starting from the beaker base and ascending to a height of 7 cm., sizes: H = 10 cm., D = 8 cm., discovered in G_I inhumation grave

Note: the recipient has a base fracture, which may account for the existence of an ending foot (!?)

Bibl.: Emandi 1976, 381–382, 389–390, fig. 6/4; 9/1.

XXII. Bogdăneşti (Fălciu commune, Vaslui county)

Lutărie?, necropolis, rescue excavations

52. glass beaker, truncated– cone shape with tall and very thin walls, discovered in G₂₆ inhumation grave, disturbed

Bibl.: Palade 1973, 180, fig. 6/4; Coman 1980, 138, fig. 144/3.

XXIII. Bozia (Fălciu commune, Vaslui county)

Lutărie?, necropolis, rescue excavations

53. iridescent glass beaker (?), white coloured, frosted
Bibl.: Zaharia, Dîmbovița, Zaharia 1970, 341, no. 405c.

XXIV. Murgeni (Murgeni commune, Vaslui county)
(?), settlement, chance find (?)

54. fragmentary glass beaker – upper part, cone-shaped, large opening, the decoration preserves only two large rows of ovals and fragmentary, the third, in the upper part small horizontally placed ovals and a fine groove under the rim

Bibl.: Rau 1975, 480, Abb. 7; Straume 1987, 126, no. 143; Gomolka–Fuchs 1999, 140; Pánczél, Dobos 2007, 82, no. 29, pl. IV/29.

XXV. Obîrșeni–Lingurari (Voinești commune, Vaslui county)
Dealul Coșărului, necropolis, systematic digs

55. fragmentary glass beaker (note) discovered in G₇ inhumation grave
Bibl.: Mitrea 1969, 222.

XXVI. Pogonești (Ivești commune, Vaslui county)
La Movilă, necropolis, systematic excavations

56. glass (?) beakers (!?) (note)
Bibl.: Mamalaucă 1997, pl. II/2; Mamalaucă 1998, 87.

XXVII. Poieniști (Poieniști commune, Vaslui county)
Dealul Teilor, necropolis, systematic excavations

57. glass beaker (?) decorated with semicircular lines (grooves? Glass threads?), located in the upper part

Bibl.: Gomolka–Fuchs 1999, 134, Abb. 4/8 (with reconstruction proposition).

XXVIII. Polocin (Ivești commune, Vaslui county)
Izlaz, necropolis, systematic excavations

58.* (a–b). well preserved glass beaker (note), discovered in G₁₅ inhumation grave
Bibl.: Mamalaucă 2003, 245.

XXIX. Bârlad (city, Vaslui county)
Valea Seacă, necropolis, systematic excavations

59. fragmentary glass beaker (note), discovered in G₄ cremation grave
Bibl.: Palade 2004, 87.

60. fragmentary glass beaker (note), discovered in G₁₂ cremation grave
Bibl.: Palade 2004, 87.

61. fragmentary glass beaker (note), discovered in G₁₈ cremation grave
Bibl.: Palade 2004, 88.

62. fragmentary glass beakers (!?) (note), discovered in G₄₆ cremation grave
Bibl.: Palade 2004, 90.

63. fragmentary glass beaker, straight walls, coned-shaped, straight base, partial decoration – four fine parallel grooves in between with a row of ovals, respectively a fragmentary inscription (description upon drawing), discovered in G_{47A} cremation grave

Bibl.: Palade 2004, 90, fig. 84/7.

64. yellow–brownish glass beaker, almost cylindrical, thin walls slightly bent outwards, spherical base; coloured glass, ornamented with four rows of ovals, discovered in G₈₃ inhumation grave

Bibl.: Palade 2004, 114, fig. 165/2.

* Within the exhibition “*Antichitatea târzie în bazinul Prutului*”, recently opened, on 17.05.2009, at the “Vasile Pârvan” Museum of Bârlad, two beakers from the Polocin necropolis are exhibited, both entirely preserved, novel, belonging to type A (Eggers 230; Ekholm IIBc; Kowalk; Eketorpsglas 3/11; Straume I). The second item was not considered herein.

- 65.** yellow–brownish fragmentary glass beaker, almost conical, thin recurved walls, spherical base, ornamented with five rows of ovals discovered in G₈₄ inhumation grave
Bibl.: Palade 2004, 114, fig. 166/3.
- 66.** yellowish glass beaker, greenish iridescent, cone–shaped, straight base, ornamented with hexagonal facet cuts, placed in four registers and a circular groove under the rim, discovered in G₁₁₂ inhumation grave
Bibl.: Palade 2004, 116, fig. 177/2.
- 67.** fragmentary glass beaker [although presented within the text as single exemplar (Palade 2004, 95), the illustration (fig. 277/1–4) shows four fragments, probably coming from different recipients most likely discovered within the same burial] straight walls whose decoration preserves two fine grooves (description upon drawing), discovered in G₁₄₃ cremation grave
Bibl.: Palade 2004, 95, fig. 277/3.
- 68.** fragmentary glass beaker – the upper part is missing, cone–shaped, straight walls (description upon drawing) discovered in G₁₄₃ cremation grave
Bibl.: Palade 2004, 95, fig. 277/1.
- 69.** fragmentary glass beaker (?), preserves part of the facet cut decoration (description upon drawing), discovered in G₁₄₃ cremation grave
Bibl.: Palade 2004, 95, fig. 277/2.
- 70.** fragmentary glass beaker (note), discovered in G₁₆₀ cremation grave
Bibl.: Palade 2004, 96.
- 71.** fragmentary glass beaker (note), discovered in G₁₆₄ cremation grave
Bibl.: Palade 2004, 97.
- 72.** glass beaker (note), discovered in G₂₁₂ inhumation grave
Bibl.: Palade 2004, 120.
- 73.** fragmentary glass beaker (note), discovered in G₂₄₁ cremation grave
Bibl.: Palade 2004, 101.
- 74.** fragmentary glass beaker (note), discovered in G₂₅₇ cremation grave
Bibl.: Palade 2004, 102.
- 75.** glass beaker (note), discovered in G₂₇₉ inhumation grave
Bibl.: Palade 2004, 123.
- 76.** fragmentary glass beaker (?) – upper part is missing, oval shape, straight base, ornamented with three rows of large distanced ovals (description upon drawing), discovered in G₂₉₅ inhumation grave
Bibl.: Palade 2004, 125, fig. 206/16.
- 77.** glass beaker (note), discovered in G₃₀₇ inhumation grave
Bibl.: Palade 2004, 126.
- 78.** glass beaker (note), discovered in G₃₁₉ inhumation grave
Bibl.: Palade 2004, 127.
- 79.** fragmentary glass beaker (note), discovered in G₃₄₄ cremation grave
Bibl.: Palade 2004, 104–105.
- 80.** fragmentary glass beaker (note), discovered in G₃₆₃ inhumation grave
Bibl.: Palade 2004, 131.
- 81.** fragmentary glass beaker (note), discovered in G₃₇₃ cremation grave
Bibl.: Palade 2004, 105.
- 82.** yellow–brownish glass beaker, almost cylindrical, thin, slightly recurved walls, spherical base ornamented with four rows of ovals, discovered in G₃₈₀ inhumation grave
Bibl.: Palade 2004, 131, fig. 233/3.

- 83.** glass beaker (note, destroyed), discovered in G₃₈₁ inhumation grave
Bibl.: Palade 2004, 132.
- 84.** glass beaker (note, destroyed), discovered in G₃₈₇ inhumation grave
Bibl.: Palade 2004, 132.
- 85.** glass beaker, thick and faceted walls (decayed), discovered in G₃₉₀ inhumation grave
Bibl.: Palade 2004, 133.
- 86.** glass beaker (note, damaged), discovered in G₄₀₉ inhumation grave
Bibl.: Palade 2004, 134.
- 87.** fragmentary glass beaker (note), discovered in G₄₁₄ cremation grave
Bibl.: Palade 2004, 107.
- 88.** glass beaker (?), fragmentary – two fragments (the text mentions only one, yet the illustration shows two fragments) most likely coming from the same recipient (?), decoration that preserves at least two rows of inlaid ovals (description upon drawing), discovered in G₄₅₀ cremation grave
Bibl.: Palade 2004, 109, fig. 151/13, 15.
- 89.** glass beaker (note, damaged), discovered in G₄₆₂ inhumation grave
Bibl.: Palade 2004, 137.
- 90.** glass beaker (note, damaged), discovered in G₄₈₆ inhumation grave
Bibl.: Palade 2004, 138.
- 91.** fragmentary glass beaker (note), discovered in G₄₉₂ cremation grave
Bibl.: Palade 2004, 111.
- 92.** white glass beaker, transparent with violaceous iridescences on the exterior, comprising small air bubbles and dead fibres in the structure, cone-shaped, slim sharp body, thin-walled, out-turned rim with a slight groove inside and straight cut-edge, ornamented with two slightly deepened grooves made by polishing, placed one under the rim, the other, below, on the body, sizes: H = 17.2 cm., D = 7.2 cm., discovered in G₅₀₁ inhumation grave
Bibl.: Palade 2004, 139, fig. 265/9.
- 93.** glass beaker, truncated– cone shape, wide opening with straight rim and slightly rounded edge, narrow base, slightly concave, ornamented under the rim with a circular groove, slightly deepened, made by polishing, main decoration consisting of three rows of various sized inlaid ovals (description upon drawing), discovered in G₅₀₆ inhumation grave
Bibl.: Palade 2004, 140, fig. 268/1.
- 94.** yellowish glass beaker, transparent, with a few air bubbles in the structure, cone-shaped, wide opening and straight rim, slightly rounded edge, narrow base, slightly concave, ornamented under the rim with three circular grooves, slightly deepened, made by polishing, of which two larger and the third finer and almost invisible, main decoration comprising four large ovals and four groups of three small dark– blue ovals, located on two levels; the upper register comprises two large ovals, placed symmetrically, face to face, inlaid by two groups of three smaller ovals, while the lower register exhibits similar arrangement, with the groups of smaller ovals positioned backwards, sizes: H = 19.5 cm., D. opening = 13.2 cm., D. base = 2,6 cm., discovered in G₅₀₇ inhumation grave
Bibl.: Palade 2004, 141, fig. 269/4; Gomolka–Fuchs 1999, Abb. 5/4.
- 95.** glass beaker (?) (note, damaged), discovered in G₅₃₂ inhumation grave
Bibl.: Palade 2004, 145.
- 96.** cone-shaped glass beaker, decorated in the central part with two rows of rather extended ovals, inlaid (description upon drawing), discovered in G₅₄₁ inhumation grave
Bibl.: Palade 2004, 147, fig. 292/1.

97. glass beaker (?), still preserving part of the facet cut decoration (description upon drawing), found within the layer

Bibl.: Palade 2004, 649, fig. 276/1.

98. fragmentary glass beaker – lower part still preserving part of the decoration: two rows of ovals (description upon drawing), found within the layer

Bibl.: Palade 2004, 649, fig. 276/2.

99. fragmentary beaker – the upper part is missing, footed, conical shape, thick straight walls, decorated with large ovals, upon reconstruction they seem to be four, faceting the recipient in four registers (description upon drawing), possible inscription in the upper register, found within the layer

Bibl.: Palade 2004, 649, fig. 276/3.

100. fragmentary beaker – centre part, cone shaped, thick, straight walls, decorated in the upper part by a fine groove, a row of small horizontal ovals, beneath with a row of larger ovals and beneath them hexagonal facet cuts (description upon drawing), discovered within the layer

Bibl.: Palade 2004, 649, fig. 276/4.

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No.	Find spot	Site type	No. of items
I	Călugăreni (BC)	necropolis	1
II	Cârligi (BC)	settlement	1
III	Mihălășeni (BT)	necropolis	17
IV	Miorcani (BT)	necropolis	3
V	Ripiceni (BT)	settlement	1
VI	Tocileni (BT)	necropolis	1
VII	Todireni (BT)	necropolis	1
VIII	Trușești (BT)	settlement	1
IX	Barcea (GL)	necropolis	4
X	Cavadinești (GL)	settlement	1
XI	Lunca (GL)	necropolis	3
XII	Băiceni (IS)	settlement	2
XIII	Holboca (IS)	settlement	1
XIV	Fabrica de cărămizi (IS)	settlement	1
XV	Cartier Nicolina (IS)	settlement	6
XVI	Lețcani (IS)	necropolis	1
XVII	Spinoasa (IS)	necropolis	1
XVIII	Vânători (IS)	settlement	1
XIX	Izvoarele (NT)	necropolis	2
XX	Dolhești Mari (SV)	necropolis	1
XXI	Moara Mică (SV)	necropolis	1
XXII	Bogdănești (VS)	necropolis	1
XXIII	Bozia (VS)	necropolis	1
XXIV	Murgeni (VS)	settlement	1
XXV	Obârșeni–Lingurari (VS)	necropolis	1
XXVI	Pogonești (VS)	necropolis	1
XXVII	Poienești (VS)	necropolis	1
XXVIII	Polocin (VS)	necropolis	1
XXIX	Valea Seacă (VS)	necropolis	42
Total		n = 19; a = 10	100

Fig. 3. Glass beakers discovered in Moldova

No.	Necropolis		Settlement	No data	Remarks
	Inhumation	Cremation			
1	1	5	2	22 (necropolis)	
2	3	6	23	24 (necropolis)	
3	4	12	26	25 (necropolis)	
4	7	59	31	34 (necropolis)	Debris
5	8	60	35	46 (necropolis)	
6	9	61	36	50 (necropolis)	
7	10	62	37	53 (necropolis)	
8	11	63	38	56 (necropolis)	
9	13	67	39	57 (necropolis)	
10	14	68	40	58 (necropolis)	
11	15	69	41	97 (necropolis)	layer
12	16	70	42	98 (necropolis)	layer
13	17	71	43	99 (necropolis)	layer
14	18	73	44	100 (necropolis)	layer
15	19	74	47		
16	20	79	54		
17	21	81			
18	27	87			
19	28	88			
20	29	91			
21	30				
22	32				
23	33				
24	45				
25	48				
26	49				
27	51				
28	52				
29	55				
30	64				
31	65				
32	66				
33	72				
34	75				
35	76				
36	77				
37	78				
38	80				
39	82				
40	83				
41	84				
42	85				
43	86				
44	89				
45	90				
46	92				
47	93				

48	94				
49	95				
50	96				

Fig. 4. Distribution of glassware upon site categories

Fig. 5. Glass beakers

Fig. 6. Glass beakers

Fig. 7. Glass beakers

Fig. 8. Glass beakers

Fig. 9. Glass beakers

Fig. 10. Distribution of A-type beakers. 1. Barcea; 2. Lunca; 3. Bogdănești; 4. Bârlad – *Valea Sacă*; 5. Iași–*Nicolina*; 6. Mihălășeni

Fig. 11. Distribution of B-type (Mihălășeni G₄₂₆) and E-type beakers (Izvoare G₉)

Fig. 12. Distribution of C-type beakers. 1. Bârlad – Valea Sacă; 2. Murgeni; 3. Iaşi–Nicolina; 4. Iaşi–Fabrica de Cărmăzi; 5. Mihălăşeni

Fig. 13. Distribution of D-type beakers. 1. Barcea; 2. Bârlad – *Valea Sacă*; 3. Izvoare; 4. Tocileni; 5. Miorcani

Fig. 14. Distribution of F– type beakers. 1. Barcea; 2. Mărtineşti; 3. Bârlad – Valea Sacă; 4. Leţcani; 5. Mihălăşeni, 6. Moara