

THE COUNTY MUSEUM OF
BISTRIȚA-NĂȘĂUD

THE INTERNATIONAL UNION
OF THE PRE- AND PROTOHISTORIC SCIENCES
XXXth COMMISSION

THE MUSEUM OF BORDER
REGIMENT, NĂȘĂUD

THE MUSEUM OF BRĂILA

THE COUNTY COUNCIL OF BISTRIȚA-NĂȘĂUD

THRACIANS AND CELTS

Proceedings of the International Colloquium
from Bistrița

18–20 May 2006

Edited by
Valeriu Sârbu and Dan Lucian Vaida

Editura MEGA
Cluj-Napoca
2006

CELTIC GLASS BRACELETS IN EAST-HUNGARY

Károly Tankó

Eötvös Lorand University – Institute Archaeological Sciences

Budapest (Hungary)

E-mail: csiszar@freemail.hu

In 1944, Ilona Hunyady gave the first summary of the glass bracelets of the Carpathian Basin (Hunyady 1944, p. 100). She treated the known pieces as individual objects because from the low number of analogies there was no possibility to build up a common typological system. At the same time the known finds were mostly scattered objects which made it more difficult to date them apart from the pieces from Győr (H) and Alsógellér (today Holiare – SK) which came from more or less well documented burial assemblages (Lovas 1939, p. 88–96; Hunyady 1957, p. 188).

In 1960, Th. E. Haevernick summarized the La Tène glasswork in Europe, collected all the available data and made the fundamental classification of the Celtic glassware (Haevernick 1960). Because the majority of the glass jewellery in the museum collections were stray finds, the classification of the several typological groups remained uncertain. This might have been the reason that the research concentrated on the artistic value of the nicer pieces and paid less attention to special assemblages (Szabó 1971, p. 43; Petres-Szabó 1974, p. 41; Zachar 1987, p. 32).

The 1980s the publication of the Celtic cemeteries in South-Slovakia gave a new chance to determine the chronological state of glass objects in the Carpathian Basin (Gebhard 1989, p. 76ff). The recent publications, focusing on particular sites or geographical areas, have significantly aided the analysis of Celtic glass work both in regional context and on a European wide scale as well (Gebhard 1989; Venclová 1990; Karwowski 2004; Bride 2005; Seidel 2005). Nevertheless, the extending knowledge of the Celtic glasswork in Middle-Europe, the collections of Hunyady and Haevernick are still fundamental in terms of the region east of the Danube. At the same time, as a result of the large scale excavations and the extensive surveys, the number of the well-documented Celtic glass bracelets from the Great Hungarian Plain (SE-Hungary) and on the Mátra-Bükk highlands (NE-Hungary) has increased (see the list at the end of text). Nowadays the publication and scientific assessment of these finds are necessary to understand the wider European connections of this region. This paper focuses on the definition of the East-Hungarian La Tène glasswork based on the new and the already published data in relation to the neighbouring area.

The classification of the glass objects is based on the characteristics of colour, shape and decoration. It is widely accepted that the elements of the raw material gives the glass its colour, and it is a combination of the glasses colour and shapes of the objects which are representative of time periods (Venclová 1980, p. 77–79; Gebhard 1989, p. 6–9). It is generally considered that the glass is dark blue in the beginning of Middle La Tène (LT C1a), then it changes into a lighter, cobalt blue colour in the second half of the La Tène C1 (LT C1b). Similar changes from darker colours into a lighter shades, can be detected in green as well (Gebhard 1989, p. 70–71). Apart from some green pieces (Karcza, Kósd and Szurdokpüspöki – see the last example in Fig. 3.17), the blue shades (primarily dark and cobalt blue) dominate the finds from the eastern part of the Carpathian Basin. Beside of the changes in colour, the decoration of the bracelets became

more complex and elaborated. However, the simple types were well-spread during the Late Iron Age, and by the 'developed' Middle La Tène (LT C1b) period the cobalt blue, multi-ribbed bracelets with white or yellow zigzag string-application could be found in larger numbers. At the peak of the Celtic glasswork (LT C2) the wide bracelets with baroqueish decoration were the most popular. In the late La Tène period (LT D), beside the continuous manufacture of the monochrome variants, new bichrome bracelets appear as a result of a technological innovation (Gebhard 1989, p. 128; Gebhard 1989a, p. 100–102). But it is important to remark, though, that the bichrome glass bracelets have not yet been discovered east of the Danube.

The problem with the chronological definition of the glass finds in the eastern part of the Carpathian Basin is that even though there exist numerous series, few assemblages can be certainly dated. Apart from the typological system based on formal analogues, the colour of the bracelet can give us a chronological starting-point.

The glass bracelets known from East-Hungary show a varying picture. The simple narrow bracelet with a D-shaped cross-section in blue (Haevernick group **3a**; Gebhard serie 38 = Fig 3., 14) and in green with wavy decoration can be found (Gebhard serie 34 = Fig. 3., 17). For the dating of the blue-coloured, type 3a glass bracelet, the best analogue is a similar piece from the cemetery of Palárikovo (SK), which belonged to the LT C1b horizon according to the grave assemblages as interpreted by J. Bujna (Bujna 2005, p. 187).

Within the collected finds of the Celtic settlement Szurdokpüspöki the number of the fragments of the bracelets with three ribs is significantly high. Among these, the simple (Haevernick group **6a**; Gebhard serie 26 = Fig 3., 13, 16, 18) and the diagonally incised variants (Fig. 3., 19) are equally numerous.

The bracelets decorated with wavy lines crossing each other (*Schleifenverzierung*) (Fig. 3., 12, 15) particularly characterise in the eastern Celtic circle. This kind of decoration – as the former mentioned fragments – is frequent on the bracelets belonging to the **6b** group of the Haevernick system and the centre of the spread can be localised to East-Austria and Southwest-Slovakia, and the middle section of the Danube River (Karwowski 2005, p. 164). According to this chronological system the group 6b is one of the most frequently used bracelet types, while the 'Schleifenverzierung' decoration is primarily characteristic of the beginning of the Middle La Tène glasswork (Karwowski 2004, p. 51–54; Karwowski 2005, p. 164). The type 6b was found in the cemetery of Maňa (SK) from grave No. 127 with a bracelet type 3b. From grave No. 133. type 6b came to the light with type 14 (Benadík 1983, Fig. 50. 1–2; 54. 1, 3), showing that these bracelets were used at the same time. J. Bujna analysed the type 6b bracelets in comparison with the accompanying finds of the eastern Slovakian burial assemblages (fibulas, hollow-knobbed anklets, pseudo-filigrae ornaments) and dates them into the LT C1b horizon, but presumes their longer usage as well (Bujna 2005, p. 187–188).

Also among the glass finds East-Hungary, are multi-ribbed bracelets. The bracelets with four (Haevernick group **7c**; Gebhard serie 18 = Fig. 3., 4, 20), and with five ribs decorated with white or yellow zigzag lines (Haevernick group **7b**; Gebhard serie 14 = Fig. 3., 1, 21) have been found in the foot-hills of Northeast-Hungary.

The diagonally incised mid-ribbed bracelets make an individual group within the multi-ribbed variants. At Gyöngyöspata, besides the three-ribbed diagonally incised example (Haevernick group **8a** = Fig. 3., 6), a mid-ribbed bracelet with alternating incisions and white zigzag string application was unearthed (Haevernick group **8e** = Fig. 3., 7, 8). Important to emphasize is that in a burial of a woman excavated at Mártély, not only a glass bracelet but an enamelled bronze belt-chain were found which indicates that these two find types were in use during the same time period (Fig. 4., 4). To the Southeast of the area under review, the variant 8e is known from the northern-Balkan site of Donja Bebrina (Todorović 1968, Fig. 6. 11), as well as from the Transylvanian Middle La Tène settlement of Morești (Horedt 1979, Fig. 22. 9). The five ribbed bracelet type with diagonal incisions and zigzag decoration (Haevernick group

8d = Gebhard serie 20.) has been discovered in Gyöngyöspata (Fig 3., 5) which is interesting, realizing the fact that the usage of the 8d types can be primarily localised to the western Celtic territories like France, Switzerland and South-Bohemia (Gebhard 1989, p. 16). The most eastern occurrence of this type is known from Zemplín (Benadik 1965, Fig. 18. 1). The close relationship of variant 8b and 8d separated by Haevernick, shows the three-ribbed **8b** type (Fig. 4., 11) came from the burial at Vác, which yellow-white changing decoration is identical to the five-ribbed 8d type fragment from Donja Bebrina (Todorović 1968, Fig. 24. 5).

Within the territory of the La Tène Culture the narrow glass bracelets decorated with knobs (*Haevernick group 14; Gebhard serie 1*) are wide-spread, and numerous examples known from the Mátra-Bükk highlands (Fig. 3., 2–3, 10–11). The bracelet type with knobs in three rows was examined by R. Gebhard. According to the grave assemblages of the necropolis of Manching-Steinbichel (D) he allocated them into the LT C1a-b horizon (Gebhard 1989, 51–52). The simultaneous use of type 2, 6b and 14, refer the closed-find assemblage of burial No. 772 at Holiare (Benadik 1957, Fig. 38. 7, 11) and burial No. 133. at Maňa (Benadik 1983, Fig. 54. 1, 3) in Southwest-Slovakia which were dated to the phase LT C1b by Bujna (Bujna 2005, p. 187). The glass bracelet type with bosses and rhomboids, decorated with spirals and zigzags is a relatively rare and characteristic only of the Eastern Celtic territories (Fig. 3., 9). This variant is the so called 'Érsekújvár type' (Karwowski 2005, p. 163–164) classified into the group **15** by Haevernick. Most of the one and a half dozen examples of this type are located in the north-western zone of the Carpathians, the territory of East-Moravia, South-Poland and Slovakia (Karwowski 2005, p. 164). The only exception was found at the site Gomolava (Yu – Jovanović 1988, pl. 46. 2, 7) which presumably got to the North-Balkan on the trade route along the Danube. According to Karwowski the glass bracelets belonging to group 15 can be dated to the beginning of Middle La Tène based on well-determinable grave assemblages (Karwowski 2005, p. 164). On the contrary Bujna's opinion is that this ornament marks the LT C1/C2 transitional horizon, the end of the Celtic flat cemeteries. His view is based on the fibula types and a bronze chain found in the cremation burials No. 186 and 741 in cemetery of Holiare (SK- Bujna 2005, p. 189). The typological constitution of the currently examined material (Fig. 2.) added to the Western and Middle-European sites (see: Venclová 1990, p. 143ff.) marks out that among the 'pan-European' bracelets it is only the type 14 which can be found in larger numbers in Eastern Hungary. The glass finds known from the eastern part of the Carpathian Basin fit well into the Eastern-European glasswork circle described by Venclová. Earlier researchers associated the glasswork only with the big Late La Tène oppida, but today it is thought that independent glasswork centres existed (Karwowski 2004, p. 81–82; Seidel 2005, p. 25–28). Bracelet types 6b and 15 are more characteristically found in the Eastern territories at the beginning of Celtic glasswork, for this reason probably more significant glasswork centres and simultaneously existing workshops are thought to have been located in Southwest-Slovakia and/or Northeast-Hungary at beginning of Middle La Tène period (Karwowski 2005, p. 167).

Analysing the distribution map of the glass bracelets from the eastern part of Hungary it seems that the most of the finds concentrate on the northern fringe of the Great Hungarian Plain and south of the Mátra-Bükk highlands (Fig. 1.). The density of the glass finds show the intensity of the settlement pattern in this area in the Middle La Tène period. Chain of Celtic settlements were established on favourable slopes and in fertile river valleys of the Northern Middle highlands in the 3rd century BC (Hunyady 1957, 161–174; Patay 1956, p. 186–190; Patay 1972, p. 353–358; Hellebrandt 1995, p. 137–160; Hellebrandt 1999; Szabó 2005, p. 20–23). A good example of such a linear settlement pattern was recently investigated in the border area of Sajópetri, where the Celtic settlements were found located only 1 or 2 km distant from each other (Czajlik-Tankó 2004). At the same time, some glass bracelets came to the light from the densely populated area of the Great Hungarian Plain in the Middle La Tène period (Maráz 1977; Maráz 1977a). There is, at the moment, a lack of data about the area in between.

Apart from the bracelets, face beads are the other compelling products of the Late Iron Age glasswork in Middle Eastern Europe. Face beads are incorporated to the family of Punic amulettes dated to the 3rd century BC. These beads can be found in a wide area from Poland to Thracia, and also in East-Hungary. Besides the earlier published pieces, for example from the sites of Vác, Mezőnyárád and Tiszalök (Hellebrandt 1999, p. 88–90), recently new face beads came to the light from Polgár és Sajópetri (Szabó 2001, p. 1713–1714; Szabó 2003, p. 255–259; Szabó 2005, p. 150–151; Szabó 2006, p. 109). During the examination of burial No. 11 from Vác a new unpublished bead turned up. A fragmented piece identified as a glass bracelet by M. Hellebrandt (Hellebrandt 1994, p. 12. pl. 10, 14; Hellebrandt 1999, p. 60. pl. 26, 14) turned out to be fragments of a bobbin bead and a face bead (Fig. 4., 13, 16). With the burials at Domaniowice (Pl) and grave No. 29 at Vác this is new evidence the simultaneous usage of these beads. The appearance of a human mask on the cylindrical body of the beads indicates that the bobbin beads might have been the local imitations of the face beads (Karwowski 2005, p. 165–167). The production centre of the face beads known from the Eastern Celtic Circle was presumably in the Pontus zone (Szabó 2001, p. 1713–1714; Szabó 2003, p. 255–259; Szabó 2005, p. 150–151; Szabó 2006, p. 109) while the bobbin beads were the products of the La Tène Culture because their material and decoration technique is very similar to the glass bracelets (e.g. Type 15) dated to the same time period. According to M. Karwowski the evidence of the foreign origin of the face beads is that their production technology was unknown in the Eastern Celtic Circle (Karwowski 2005, p. 165–167). In connection to this, it has to be remarked that among the ornaments of the Celto-Scythian population in the 3rd century BC, the so called 'Schichtaugen' beads still can be found on the Great Hungarian Plain (Havassy 2001, p. 181–185). The manufacturing technology of the 'Schichtaugen' beads is the same as the face beads. On the other hand the eyed beads of Szurdokpüspöki and Fintinele (Ro) sites can be exclusively taken as the products of the La Tène Culture.

The glass find from Szurdokpüspöki is made from the similar sort of glass like the 'Schichtaugen' beads but with different decoration; white and yellow flower petals on a fragment of dark blue cylindrical body (Fig. 3., 22). The best comparison to this is from a rich grave of a woman besides a mask bead in the grave of Fintinele dated to the end of the 3rd century BC (Crişan 1975, p. 56; Crişan 1976, Fig. 3. 12, 14). Cylindrical beads are very similar to the mask beads in their production technique and white-yellow decoration on a dark blue base. Considering this, it is not surprising that one of the mask beads turned up in the Fintinele cemetery. According to the simultaneous usage and the technological similarities it seems the cylindrical beads decorated with flower petals or eyes and the mask beads could be produced in the same workshops.

Grave assemblages from a closed-context give a good opportunity to reconstruct the wear of women's jewellery. The dress of Celtic woman from Fintinele was very similar to the grave goods of burial No. 11 at Vác. In both burials enameled bronze belt chain, MLT fibulas, glass bracelets, eyed and mask beads were found. At Fintinele in addition to the above mentioned finds, a bronze hollow-knobbed anklet and a spropelit bracelet came to the light. These types of grave goods were found in the burial at Gyüre as well as a glass bracelet. In the burials containing glass bracelets at Mártély, Szentes-Berekhát and Delureni (Ro- Lazăr 1975, Fig. 2–3) were also found enameled bronze belt-chains in each grave. The same tendency seen in the combination of female grave goods in the Eastern Carpathian Basin is also present in burials in Southwest-Slovakia. With the appearance of the bronze hollow-knobbed anklets in the LT B2-C1 (Masse-Szabó 2005) and glass bracelets at the end of the LT C1; beside the enameled bronze belts and the MLT fibulas the female attire was significantly transformed during the beginning of Middle La Tène period (Bujna 2005, p. 192). According to the current data it seems that in the Carpathian Basin the glass bracelets were a typical part of the women's attire, like the hollow-knobbed bronze anklets (Masse-Szabó 2005) and the enameled bronze belts

(Stanczik-Vaday 1971, p. 26), also with the bobbin and the mask beads. In chronological sense the usage of the glass bracelets based on typological analogues could appear in the earliest Middle La Tène (LT C1a) in the Carpathian Basin. It became widespread during the age of the La Tène flat cemeteries (Gebhard horizon 5–6, LT C1b) and the final phase of the flat cemeteries in the LT C1/C2 transitional period (Gebhard 1989, p. 90–92; Bujna 2005, p. 192). The currently known latest grave assemblage containing a glass bracelet is burial No. 11 at Vác which can be dated to the LT C1/C2 transitional period according to the MLT fibula (Fig. 4., 15) among the grave goods (Bujna 2005, p. 192).

Despite good evidence of glass-work in Middle La Tène in the eastern part of the Carpathian Basin, there is lack of data about the Late La Tène bracelets. Similar pieces of the glass bracelets have been found in Middle La Tène burials, and from Late La Tène oppida on the fringe of the Great Hungarian Plain. The typological identity of glass bracelets from Bükkszentlászló (Fig. 4., 1–2), Zemplín (SK – Benadik 1965, Fig. 18.1) and Gomolava (Yu – Jovanović-Jovanović 1988, Fig. 46. 1–7) and the ones known from burials could refer the extended usage of this type, not just in the Middle, but in the Late La Tène as well. The wearing of glass bracelets did not finish with the end of the flat cemeteries but continued during the period of Oppidum Culture. It seems a parallel can be drawn between the early phase of oppida and the middle La Tène cemeteries ending phase in the eastern part of the Carpathian Basin. It is still an open question whether the end of the Middle La Tène village-like settlements and the flat necropolises in connection in the first phase of LT C (Bujna 1982, p. 343–344; Bujna 2005, p. 192) in the Carpathian Basin, can be explained with the emergence of the oppida (Fichtl 2000, p. 36–40; Szabó 2005, p. 57). Taking it all round, it worth mentioning that because of the lack of research of the oppida and flat cemeteries belonging to these periods, it is not yet possible to show certain evidence in terms of strata or settlement horizons. Further analysis is also needed on why glass bracelets have been discovered in the oppida of the Eastern Carpathian Basin, but not from the large-scale researched Budapest-Gellérthegey or Bratislava (Bónis 1969, Čambal 2004).

List of East-Hungarian Celtic glass bracelets

<i>Site</i>	<i>Context</i>	<i>Type</i>	<i>Colour</i>	<i>Publication</i>
Alattyán-Tulát	secondary situation in a Migration Period grave	6b	?	Haevernick 1960, p. 131.
Bodrogkeresztúr	no details	?	purple	Hunyady 1944, p. 100. Hunyady 1957, p. 175.
Bükkszentlászló-Nagysánc	stray find from the late LT oppidum	6a	blue	Hunyady 1957, p. 177–178. Végh 1969, p. 71.
		14	blue	
Csongrád-Határ út	secondary situation in a sarmatian grave	3a	blue	Párducz 1944, Fig. 33.3
Gyöngyöspata-Geregi földek	stray find from a middle LT settlement	7c	dark blue	Fig. 3., 4
		8a	dark blue	Fig. 3., 6
		8d	dark blue	Fig. 3., 5
		8e	dark blue	Fig. 3., 7
		8e	dark blue	Fig. 3., 8
		14	cobalt	Fig. 3., 2
		14	dark blue	Fig. 3., 3
		15	dark blue	Fig. 3., 9
		7b	dark blue	Fig. 3., 1
Gyüre	grave	?	dark blue	Unpublished
Karcsa	grave ?	?	green	Dankó-Patay 2000, p. 29.

<i>Site</i>	<i>Context</i>	<i>Type</i>	<i>Colour</i>	<i>Publication</i>
Kistokaj-Kültelkek	stray find from the LT cemetery	7b	blue	Hellebrandt 1999, p. 210.
Kósd	grave ?	6a	blue	Haevernick 1960, p. 129.
Kósd	grave ?	14	green	Hunyadi 1944, Fig. 32. 2.
Mártély-Gátórház	grave	8e	dark blue	Maráz 1973, p. 47. Maráz 1977, p. 107–109.
Mátraszőlős-Királydomb	grave	5a ?	?	Patay 1972, Pl. 31.12.
Nyírbátor-Hunyadi street	grave	?	blue	Hellebrandt 1999, 88.
Szentes-Berekhát	grave	8b	blue	Unpublished. G. Szabó's excavation.
Szentes-Petőfi Hotel	secondary situation in a sarmatian grave	7b	Blue	Párducz 1941, Pl. 4, 9. 10.
Szurdokpüspöki- Tsz major	stray find from a middle LT settlement	3a ?	green	Fig. 3., 17
		3a	dark blue	Fig. 3., 14
		6a	cobalt	Fig. 3., 13
		6a	dark blue	Fig. 3., 16
		6a	dark blue	Fig. 3., 18
		6a	dark blue	Fig. 3., 19
		6b	dark blue	Fig. 3., 12
		6b	dark blue	Fig. 3., 15
		7c	dark blue	Fig. 3., 20
		7b	dark blue	Fig. 3., 21
		14	cobalt	Fig. 3., 10
		14	cobalt	Fig. 3., 11
Tápé-Malajdok	secondary situation in a Sarmatian grave	2	blue	Párducz-Korek 1948, p. 294.
Tiszalök-Fészkalja	grave	?	blue	Hellebrandt 1999, p. 88.
Vác-Kavicsbánya	grave No. 11.	6b	blue	Hellebrandt 1999, p. 60.
		8b	blue	Hellebrandt 1999, p. 60.

Bibliography

- Benadik, B. 1957**, *Keltské pohrebiská na juhozápadom Slovensku. -Keltische Gräberfelder der Südwestslowakei*. Bratislava.
- Benadik, B. 1965**, *Die spätlatènezeitliche Siedlung von Zemplín in der Ostslowakei*. Germania 43, p. 63–91.
- Benadik, B. 1983**, *Maňa. Keltisches Gräberfeld*. Nitra.
- B. Bónis, É. 1969**, *Die spätkeltische Siedlung Gellérthegey-Tabán*. Budapest.
- Bride, A.-S. 2005**, *Le mobilier de verre des fouilles anciennes et récentes de Bibracte*. p. 81–162. In: Guilleaume, J.-P. – Szabó, M. (eds) *Études sur Bibracte I*. Glux-en-Glenne.
- Bujna, J. 1982**, *Spiegelung der Sozialstruktur auf latènezeitlichen Gräberfeldern im Karpatenbecken*. Památky Archeologické 73, p. 312–431.
- Bujna, J. 2005**, *Kruhový šperk z laténských ženských hrobov na Slovensku – Ringschmuck aus latènezeitlichen Frauengräbern in der Slowakei*. Nitra.
- Čambal, R. 2004**, *Bratislavský hrady vrch. Akropola neskorolatónskeho oppida – Der Bratislavaer Burghügel. Die Akropolis von spätlatènezeitlichem Oppidum*. Bratislava.
- Crişan, I. H. 1975**, *Mormîntul celtic de la Fîntînele-Livadă – Das Keltengrab von Fîntînele-Livadă*. SCIVA 26, p. 41–56.
- Crişan, I. H. 1976**, *Ein reiches keltisches Frauengrab in Fîntînele, Rumänien*. p. 639–652. In: Mitschamärchein, H. – Friesinger, H. – Kerchler, H. (Hrsg) *Festschrift für Richard Pittioni zum siebzigsten Geburtstag*. Archaeologica Austriaca Beiheft 13. Wien.
- Czajlik, Z. – Tankó, K. 2004**, *Késővaskori topográfiai adatok Sajópetri környékéről – Late Iron Age topographic data from the environs of Sajópetri*. Régészeti Kutatások Magyarországon – Archaeological Investigations in Hungary 2003 (2004), p. 97–110.
- Dankó, K. J. – Patay, P. 2000**, *Régészeti leletek a Sárospataki Református Kollégium tudományos gyűjteményeiben*. Miskolc.
- Dimitrijević, D. 1971**, *Spätlatènezeitliche Oppida in Jugoslawien*. Archeologicke rozhledy 23, p. 567–584.
- Fichtl, S. 2000**, *La ville celtique. Les oppida 150 av. J.-C. à 15 ap. J.-C*. Paris.
- Gebhard, R. 1989**, *Der Glasschmuck aus den Oppidum von Manching. Die Ausgrabungen in Manching 11*. Stuttgart.
- Gebhard, R. 1989a**, *Le verre à Manching: données chronologiques et apport des analyses*. p. 99–106. In: Feugère, M. (éd.) *Le verre péromain en Europe occidentale*. Montagnac.
- Haevernick, Th. E. 1960**, *Die Glasarmringe und Ringperlen der Mittel- und Spätlatènezeit auf dem Europäischen Festland*. Bonn.
- Havassy, P. 2001** (Hrsg.) *Hatalmasok a viadalokban. Az Alföld szkíta kora. – Sie sind in Kämpfen siegreich. Das Zeitalter der Skythen in der Tiefebene*. Gyula.
- Hellebrandt, M. 1994**, *Kelta leletek Vácról. A Vác-kavicsbányai temető. – Keltische Funde aus Vác. Das keltische Gräberfeld von Vác-Kavicsbánya*. Váci Könyvek 7, p. 7–84.
- Hellebrandt, M. 1995**, *Nógrád megye kelta-kori leletei. – Funde des Komitats Nógrád aus Keltzeit*. Nógrád Megyei Múzeumok Évkönyve 17, p. 137–160.
- Hellebrandt, M. 1999**, *Celtic finds from Northern Hungary. Corpus of Celtic Finds in Hungary III*. Budapest.
- Horedt, K. 1979**, *Grabungen in einer vor- und frühgeschichtlichen Siedlung in Siebenburgen*. Bonn.
- Hunyady, M. 1944**, *Kelták a Kárpát-medencében – Die Kelten im Karpatenbecken*. Budapest.
- Hunyady, M. 1957**, *Kelták a Kárpát-medencében. Leletanyag*. Budapest.
- Jovanović, B. – Jovanović, M. 1988**, *Gomolava. Naselje mladeg doba – Late La Tène settlement*. Novi Sad – Beograd.
- Karwowski, M. 2004**, *Latènezeitlicher Glasringschmuck aus Ostösterreich*. Wien.
- Karwowski, M. 2005**, *The earliest types of eastern-Celtic glass ornaments*. p. 163–177. In: Dobrzanska, H. – Megaw, V. – Polenska, P. (eds) *Celts on the Margin. Studies in European Cultural Interaction 7th Century BC – 1st Century AD. Dedicated to Zenon Woźniak*. Kraków.
- Lazăr, V. 1975**, *Mormintul celtic de la Delureni (Jud. Bistrița-Năsăud) – Le tombeau celtique de Delureni (Dép. Bistrița-Năsăud)*. Acta Musei Napocensis 12, p. 69–75.

- Lovas, E. 1939**, *Kelta leletek a győri kálváriai és újszállási temetőkből és Rábatamásiából.* – *Keltische Funde aus Győr und Rábatamási.* Folia Archaeologica 1–2, p. 88–96.
- Maráz, B. 1973**, *La Tène-kori magányos sírok és kis temetők a Dél-Alföldről.* – *La Tène-age isolated graves and small cemeteries on the South Hungarian Plain.* Békés Megyei Múzeumok Közleményei 2, p. 41–59.
- Maráz, B. 1977**, *Chronologische Probleme der Spätlatènezeit in der Südosttiefebene (Südost-Ungarn).* Janus Pannonius Múzeum Évkönyve 19, p. 107–131.
- Maráz, B. 1977a**, *Délkelet-Magyarország La Tène korának kronológiai kérdései.* – *Die chronologischen Probleme des Latènezeitlichen Fundmaterials von Südostungarn.* Archaeologiai Értesítő 104, p. 47–64.
- Masse, A. – Szabó, M. 2005**, *La parure annulaire en bronze à oves creux de la période laténienne dans le Bassin des Carpates.* Communicationes Archaeologicae Hungariae 2005, p. 213–225.
- Párducz, M. 1941**, *Denkmälern der Sarmatenzeit Ungarns I.* Archaeologica Hungarica 25. Budapest
- Párducz, M. 1944**, *Denkmälern der Sarmatenzeit Ungarns II.* Archaeologica Hungarica 28. Budapest.
- Párducz, M. – Korek, J. 1948**, *Germán befolyás a Maros-Tisza-Körös-szög késő szarmata emléktanyájában* – *Les éléments germaniques dans la civilisation sarmatique récente de la région limitée par les fleuves Maros, Tisza et Körös.* Archaeologiai Értesítő ser. III. vol. 7–9 (1946–1948), p. 291–311.
- Patay, P. 1956**, *Újabb kőkori és kelta leletek Nógrádkövesden és a Nógrádi dombvidéken.* – *Late neolithic and Celtic finds at Nógrádkövesd and in the Nógrád Hills.* Archaeologiai Értesítő 83, p. 181–191.
- Patay, P. 1972**, *Celtic Finds in the Mountainous Region of Northern Hungary.* Acta Archaeologica Academiae Scientiarum Hungaricae 24, 353–358.
- F. Petres, É. – Szabó, M. 1974**, *A keleti kelta művészet.* – *Eastern Celtic Art.* Székesfehérvár.
- Seidel 2005**, *Keltische Glasarmringe zwischen Thüringen und dem Niederrhein.* Germania 83, 1–43.
- Stanczik, I. – Vaday, A. 1971**, *Keltische Bronzegürtel „ungariscen” Typs im Karpatenbecken.* Folia Archaeologica 22, p. 7–27.
- Szabó, M. 1971**, *Sur le traces des Celtes en Hongrie.* Budapest.
- Szabó, M. 2001**, *La formation de la communauté culturelle des Celtes orientaux au III^e s. av. J.-C.* Académie des Inscriptions et Belles-Lettres 2001, p. 1705–1724 (Comptes rendus des séances).
- Szabó, M. 2003**, *Perles à masque en verre.* p. 255–259. In: Vitali, D. (ed.), *L’immagine tra mondo celtico e mondo etrusco-italico.* Bologna.
- Szabó, M. 2005**, *A keleti kelták. A késővaskor a Kárpát-medencében.* Budapest.
- Szabó, M. 2006**, *Les Celtes de l’Est.* p. 97–117. In: M. Szabó (ed) *Les Civilisés et les Barbares du Ve au IIe siècle avant J.-C. Celtes et Gaulois l’Archéologie face à l’Histoire.* Bibracte 12/3. Glux-en-Glenne.
- Todorović, J. 1968**, *Kelti u jugoistočnoj Evropi.* – *Die Kelten in Süd-Ost Europa.* Beograd.
- K.Végh, K. 1969**, *Kelta leletek a miskolci múzeumban* – *Keltenfunde in Hermann Ottó Museum in Miskolc.* Hermann Ottó Múzeum Évkönyve 8, p. 69–114.
- Venclová, N. 1980**, *Nástin chronologie Laténských skleněných náramků v Čechách.* – *Zur Chronologie der latènezeitlichen Glasarmringe in Böhmen.* Památky Archeologické. 71, p. 61–86.
- Venclová, N. 1990**, *Prehistoric glass in Bohemia.* Praha.
- Zachar, L. 1987**, *Keltische Kunst in der Slowakei.* Bratislava.

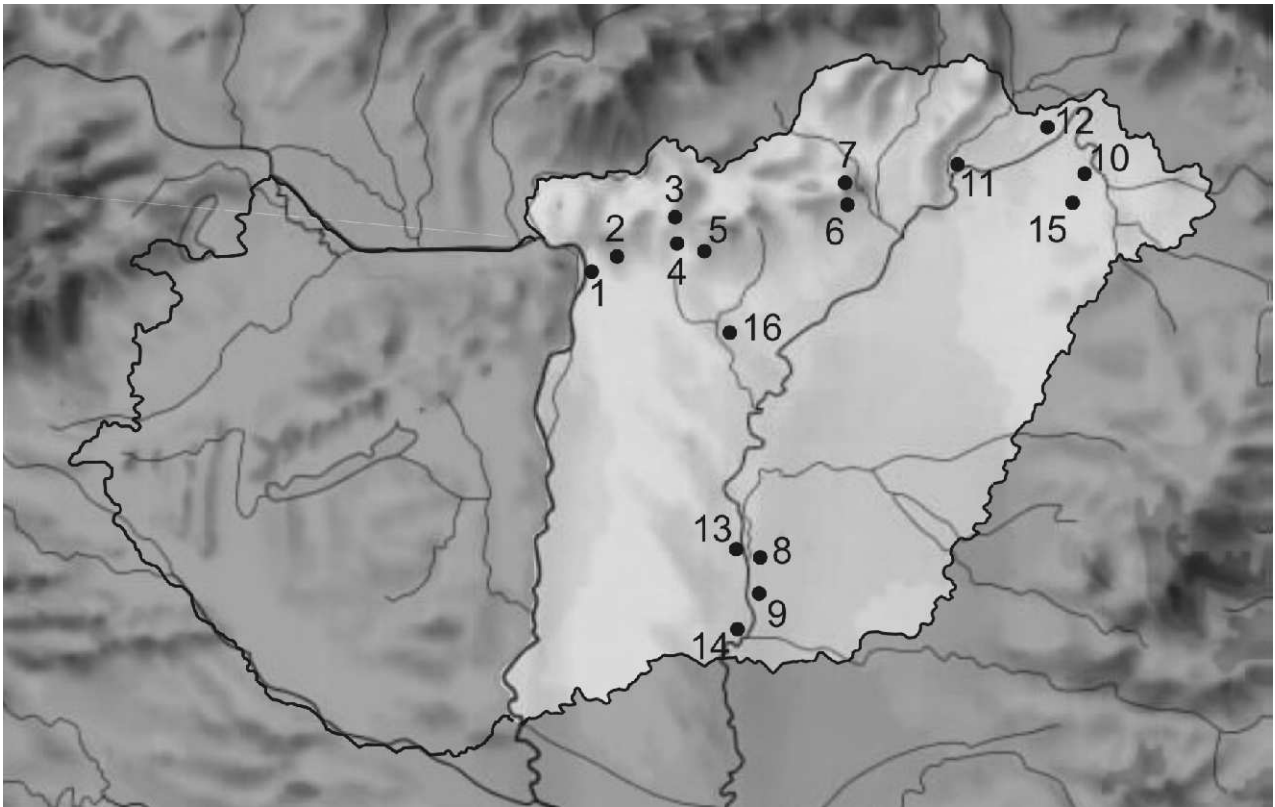


Fig. 1. Distribution of Celtic glass bracelets in East-Hungary.

(1: Vác, 2: Kósd, 3: Mátraszőlős, 4: Szurdokpuszta, 5: Gyöngyöspata, 6: Kistokaj, 7: Bükkszentlászló, 8: Szentés, 9: Mártély, 10: Gyüre, 11: Bodrogkeresztúr, 12: Karcsa, 13: Csongrád, 14: Tápé, 15: Nyírbátor, 16: Alattyán).

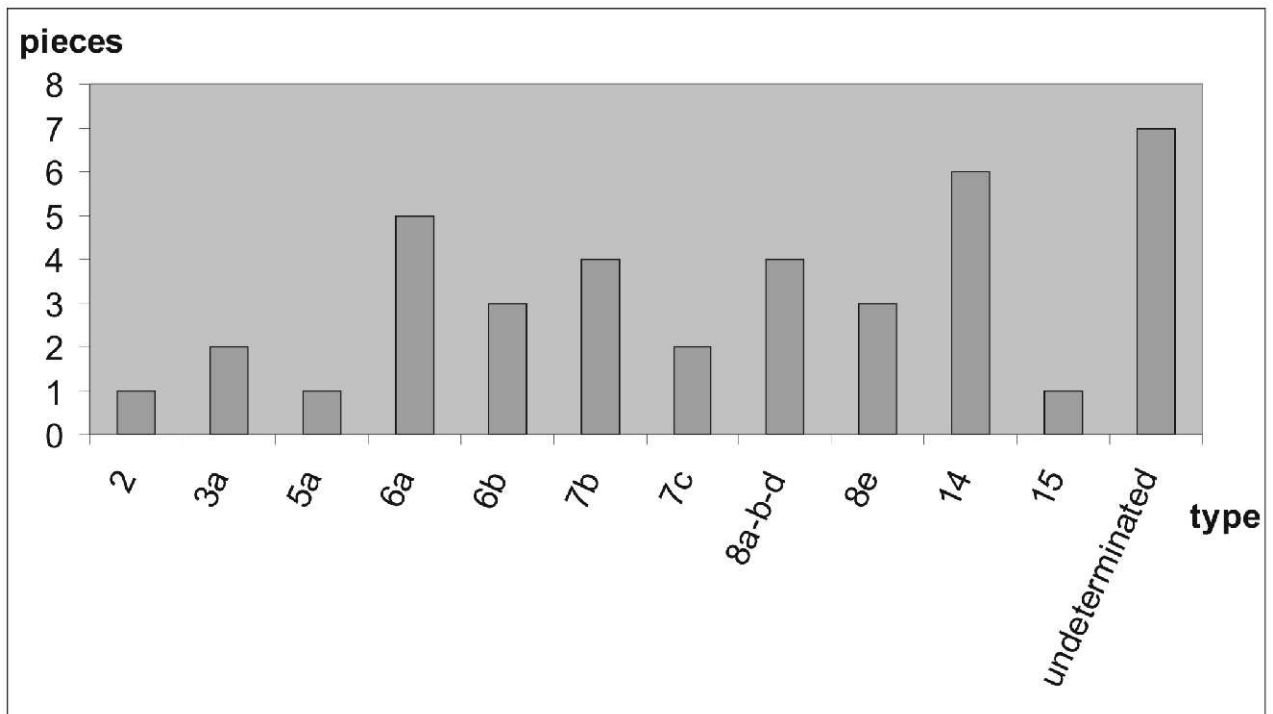


Fig. 2. Types of glass bracelets in East-Hungary.

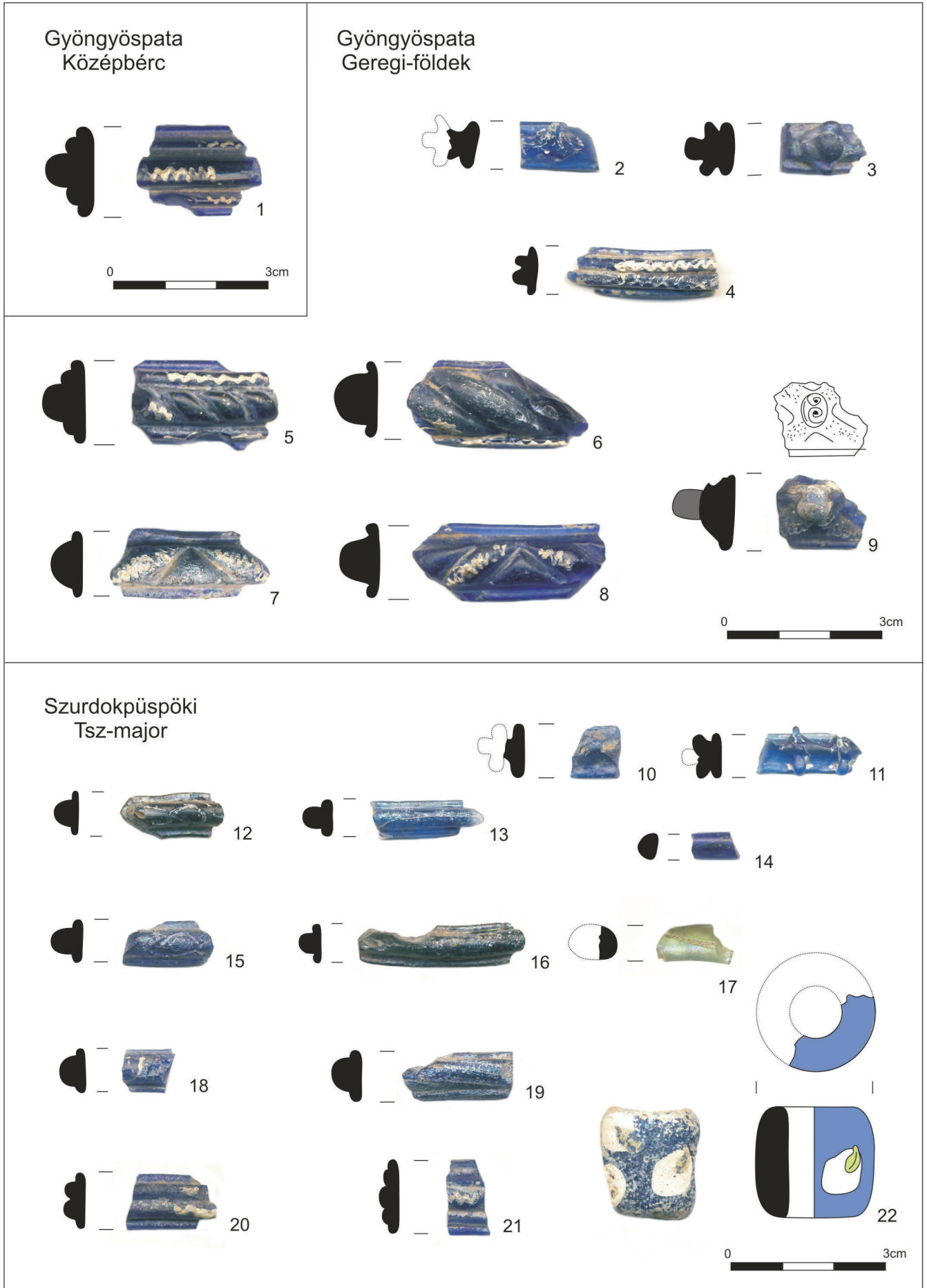


Fig 3. Celtic glass bracelets from Gyöngyöspata and Szurdokpüspöki (NE-Hungary)

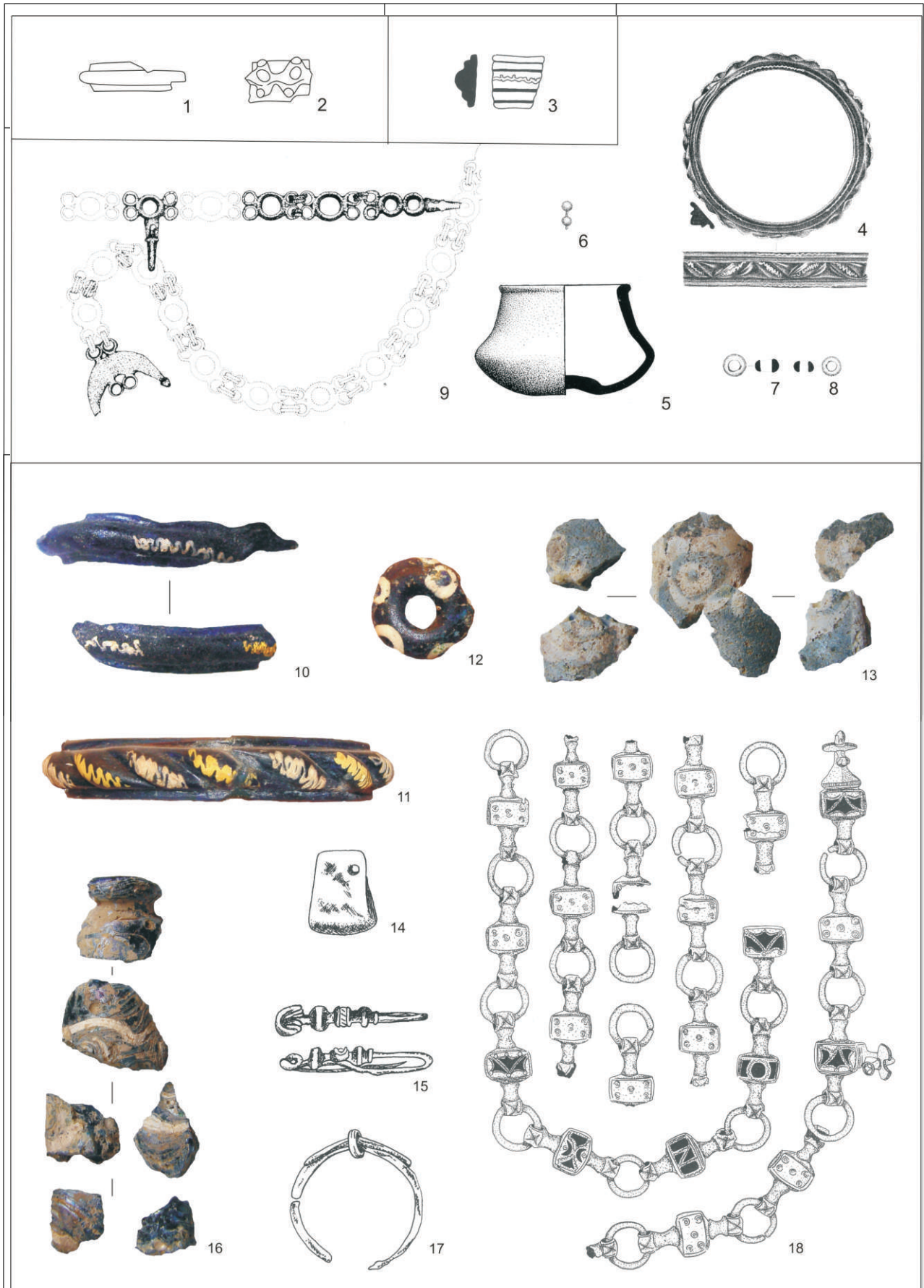


Fig. 4. Celtic glass jewels and other grave goods from East-Hungary. 1-2: Bükk-szentlászló, 3: Kistokaj, 4-9: Mártély, 10-18 Vác grave No. 11.