

# Wheel-thrown stamped ware from settlements of the Przeworsk culture in the territory of Hungary. A re-evaluation of the 'Bereg culture'

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The widespread phrase 'Bereg culture' is generally used for an individual cultural unit in the Upper Tisza Region hallmarked by wheel-thrown, grey pottery in the Late Roman Age. In this article a new interpretation is presented based on the lately analysed settlements in Hungary. Accordingly, the inhabitants of the Przeworsk settlements had begun to use fine, wheel-thrown ware produced in pottery workshops already from the end of the 2<sup>nd</sup> century AD. Part of the vessels were decorated with stamped motifs resembling Roman provincial pottery in Dacia. The fine, wheel-thrown bowls, jugs and pots with stamped decoration constituted only a part of the pottery inventory used in the Przeworsk settlements in the Upper Tisza Region from the 2<sup>nd</sup> to the 4<sup>th</sup> centuries AD.

Keywords: Przeworsk culture, stamped-in decoration, Porolissum, Bereg culture, Vandals, pottery

## The Przeworsk culture in the Carpathian Basin

During the Roman Age, the valleys of the mountainous and hilly areas belonging to the catchment area of the Upper Tisza in the northeastern part of Hungary were occupied by communities representing the so-called Przeworsk culture (*Gindele 2010*, 9-11; *Lamiová-Schmiedlová 1969*, Abb. 1; *Soós 2016*, Fig. 1), usually identified ethnically as Vandals (*Prohászka 2006*, *Olędzki 1999*, 109). Up to this day, the exact extent of the Przeworsk settlement area in the Carpathian Basin could not be outlined in all regions. The available data suggests that a clear boundary was set to it by the Dacian *limes* towards the southeast as well as the Sarmatian settlement area in the Great Hungarian Plain to the south-southwest (*Gindele 2010*, 10, Karte 2; *Masek 2012*, 254-256). At the present state of research, the western limits of the Przeworsk settlement area in the Carpathian Basin cannot be clearly defined, but it seems that in the territory west of the River Sajó/Slaná the material culture characteristic of the Quads was more dominant (*Soós 2017*, 36-37; *Soós–Tankó 2018* in press). The northeastern limits are even more vague: some researchers suggested the presence of the *Carpathian Barrow Culture* in the mountainous areas of the Maramureş Region, however its spread within the Carpathian Basin is disputed (*Kobály 1998*, 122-123; *Vakulenko 2008*, Fig. 1; *Istvánovits–Kulcsár 2017*, 255-256, Fig. 204).

### (Fig 1)

Archaeological material related to Germanic peoples first appeared in the 2<sup>nd</sup> century in this territory previously occupied by Late Iron Age communities. The find material from the cremation burials with weapons as well as from settlements shows a close relation to the material of the Przeworsk culture, spreading in the southeastern part of Poland at about the same time (*Madyda-Legutko–Rodzińska-Nowak 2012*; *Madyda-Legutko et al. 2013*). Research

has long since related this migration wave, also mentioned among the events of the Marcomannic wars (Godłowski 1984; Prohászka 2006, 91-92), with the arrival of Germanic groups named 'Hasding Vandal', 'Victofal' and 'Lacring'. Part of the archaeological material can be dated to the first half of the 2<sup>nd</sup> century, that is, earlier than that suggested by the historical sources (Hullám 2012, 86, 5. Ábra; Gindele 2013). However, the majority of the burials as well as settlement remains can be dated to the end of the 2<sup>nd</sup> century - first half of the 3<sup>rd</sup> century AD (Period B2/C1-C1), hinting towards a massive demographic growth in this period. Settlements were continuously inhabited up to the end of the Roman Age (Gindele 2010, 137-146; Soós 2016, 460), nonetheless the few cremation burials with weapons disappeared completely after the middle of the 3<sup>rd</sup> century (Hullám 2012, 92).

Although very few historical sources concern the Late Roman Age of the geographical area in question, they all report on an autonomous community of military importance with independent foreign relations (Istvánovits–Kulcsár 2017, 318-337). The princely graves of Ostrovany and Cejkov, being outstanding examples of the Leuna-Haßleben type royal burials, bear witness to the regional role of power as well as to social development in the Late Roman Age (Prohászka 2006; Quast 2009, 5-6).

**(Fig 2)**

The so-called 'Bereg culture' and the spread of wheel-thrown pottery in the settlement territory of the Przeworsk culture

For a long time, the identification and interpretation of settlement remains belonging to Przeworsk burials, the ethnicity of which is generally defined as Vandal, sometimes as Lugi or Victofal (Bóna 1993, 106-107; Olędzki 1999, 109; Olędzki 2017, 189-190), encountered difficulties in Hungarian research. Up to the 1980s, no larger settlements were excavated. Pottery finds recovered during probe excavations were related to certain ethnic groups based on their typology and decoration. As a result, hand-formed, coarse ware was usually identified as Dacian, while Roman Age wheel thrown pottery was defined as Celtic, and hand-formed fine polished ware as Germanic, often within the same settlement or even the same archaeological feature (Lamiová-Schmiedlová 1969; Végh 1964; Végh 1985; Végh 1989; Végh 1999). Grey wheel-thrown pottery came to light at Late Roman Age settlements in large amounts, however research could not relate it to any ethnic group, thus settlements were described as 'ethnically not determinable'.

It was the same methodological approach which has led to the concept of the 'Bereg culture', indicating Late Roman Age wheel-thrown ware with stamped decoration and archaeological sites yielding this type of pottery.

The definition 'Bereg culture' was first used by Dezső Csallány, researcher of the pottery workshop centre of Beregsurány. Based on the large quantity of archaeological material recovered at the site, he hypothesised the existence of an autonomous culture characterized by stamped ware in the 5-6<sup>th</sup> century AD, which he assumed to be Gepidic or Vandal (Csallány 1966). The archaeological material of Beregsurány is still unpublished. Nevertheless, the definition 'Bereg culture' as an individual culture was partially accepted, partially modified by Hungarian and international research. István Bóna described 'craftsmen beyond peoples' whose products were most probably purchased also by Vandals (Bóna 1993, 106-107). Maria

Lamiová-Schmiedlová compared the production and distribution of stamped ware to that of terra sigillata workshops. She also regarded the appearance of this pottery type as an individual phenomenon of civilization not related to any ethnic group, suggesting the term 'Blažice type' instead of 'Bereg culture' (Lamiová-Schmiedlová 1969, 473).

The research of the Germanic settlement area in the Carpathian Basin witnessed a considerable setback after the 1960s. It regained impetus only in the last decade, as the results of the excavations carried out after the change of the political system on the territory of Slovakia, Romania and Hungary, were published, as well as find assemblages from earlier archaeological digs were re-evaluated (Gindele–Istvánovits 2009; Luštiková 2013; Soós 2014; Soós 2017). However, international research still relied on previous publications describing wheel-thrown stamped ware as the indicator of an autonomous culture (Oledzki 1999, 118, 126; Oledzki 2014, 324; Błażejowski 2014, 54-58). An important factor was that publications of several related archaeological sites were scarcely available and then only in Hungarian, Slovakian or Romanian (Soós 2014b). Even though most studies use the term 'Bereg culture' in a chronological sense, namely to imply the material culture of the Late Roman Age, the concept of an autonomous 'Bereg culture' still appears in recent Hungarian and international research (Pintye 2010; Istvánovits–Kulcsár 2017, 303, 323, Fig. 252-254).

Lately, this concept is being reviewed. Previously, sites known only through stray finds or probe excavations of very limited extent were defined based on the conspicuous stamped ceramic fragments. However, the evaluation of the find material of settlements excavated over a larger area suggests that pottery decorated in this style constituted only part of the household pottery assemblage including other types of fine and coarse ware (Gindele–Istvánovits 2011; Soós 2015).

In contrast to the Quadi settlement area (Švaňa 2011), production and use of wheel-thrown pottery became widespread at a relatively early stage in the Przeworsk settlements of the Carpathian Basin. The indigenous roots of the technique are not yet fully retraceable, however, based on the latest research results from Medieșu Aurit, Dacians may have played the role of intermediary (Gindele 2015b). Initially, traditional Germanic hand-formed biconical black pots had a strong influence on vessel forms produced on the potter's wheel. As a result, a peculiar typological group came to being in Przeworsk territory, easy to distinguish from earlier Celtic, Dacian and Sarmatian wheel-thrown ware (Soós 2016, Fig. 5). The archaeological material of the settlements suggests that the composition of the average household pottery assemblage has been quite varied. At first, tableware consisted almost exclusively of hand-formed, fine polished Przeworsk pots, larger and smaller bowls. Good quality wheel-thrown ware complemented these to an ever-growing proportion. Initially, vessels used to store liquids such as jugs and cups, later bowls were also more and more frequently produced on the potter's wheel, however, in contrast to previous opinions (Lamiová-Schmiedlová 1969; Oledzki 2014), traditional hand-formed Przeworsk pottery stayed in use as well (Soós 2015, 373-374, 189. Kép; Soós 2016, Fig. 5).

Without question, the extensive spread of stamped ware was related to the pottery workshops of the neighbouring Dacia province specialised in the production of stamped bowls. The workshops of Porolissum, which operated from the beginning of the 2<sup>nd</sup> century AD, mostly satisfied local demand by producing tableware to substitute terra sigillata, this latter being quite expensive due to the geographical location of the province (Gudea–Filip 1997, 15, 28;

*Filip 2008*). Stamped decoration has spread quickly in Przeworsk territory where mainly black and grey bowls, jugs and cups were produced. Provincial craftsmen from Dacia may have had an important role in the spread of stamped ware as well as the establishment of pottery producing settlements and workshops in the Barbaricum, thus gaining a new outlet for their products (*Filip 2008, 277-278*).

The so-called 'Beregsurány' or 'Blažice type' stamped ware produced in the Barbaricum has spread over a larger territory mainly west of Dacia, as well as east of the Slovak Ore Mountains from the 2<sup>nd</sup> century AD, in the C1b-C2-C3 period. Its production started somewhat earlier in the surroundings of Zaláu, located quite close to the Dacian *limes* and we cannot exclude the possibility that in certain geographical regions workshops still produced this type of pottery at the turn of the 4<sup>th</sup> and 5<sup>th</sup> centuries. At the moment we know of 149 archaeological sites from the Upper Tisza Region where stamped pottery fragments came to light (*Gindele–Istvánovits 2011, 148-149, 160, Karte 2*).

Throughout the Przeworsk settlement area in the Carpathian Basin there existed both settlements specialised in pottery production as well as small workshops catering to local demand. The largest known pottery workshop centre, which among others produced stamped ware as well, is Beregsurány-Barátság kert/Luzanka-Sad Drujbi, extending over the Hungarian-Ukrainian border. At this site, remains of more than a hundred pottery kilns were documented on the bank of the Stream Mic (*Kotigorosko 1995, 293-308, Fig. 75-79*). Another settlement specialized in pottery production was unearthed at Blažice-Bohdanovce-Dorina in Slovakia, including 27 pottery kilns (*Pastor 1960; Jurečko 1981*). Smaller workshops with one or two kilns producing stamped pottery beside other types of wheel-thrown ware are frequently located on the fringes of Late Roman Age settlements, for example at Čičarovce-Vel'ká Mol'va (*Kaminská 2005*), Malé Raškovce and Ostrovany-Nad Imonou (*Lamiová-Schmiedlová–Tomášová 1995*) in Slovakia, Tiszacsoma/Csoma (*Gindele–Istvánovits 2011, 183*) and Beregovo IV (*Kotigorosko 1995, 118, Fig. 93*) in the Ukraine, Satu Mare 2-4. Farm (*Gindele–Istvánovits 2011, 144*), Zaláu-Valea Mâții-PECO (*Matei–Stanciu 2000, 153*) and Zaláu-Bd. Mihai Viteazul 104-106 (*Gindele–Istvánovits 2011*) in the territory of Romania.

The knowledge of the potter's wheel had spread from the territories enclosed by the Carpathian Mountains to the Przeworsk settlement area in Poland as well. In contrast to the pottery production centres around Kraków (*Dobrzańska 1990, Abb. 25; Dobrzańska 2011*), Przeworsk communities living in the valley of the River Opava were served by one or two pottery kilns per settlement (*Loskotová 2011, 257*). Stamped decoration is however not characteristic in the territories north of the Carpathian Mountains. Stamped pottery recovered in this area rather show relation to the post-Chernyakhov horizon as well as the *Nordkarpatische Gruppe* (*Giertylová-Kučerová–Soják 2005; Madyda-Legutko–Tunia 2008, 231-232, Fig. 2, Fig. 3*).

In the territory of Hungary no pottery kilns have been recovered as yet, however in contrast to previous conclusions (*Gindele–Istvánovits 2011, Karte 2*) the find material of settlements does include wheel-thrown stamped ceramic sherds. A publication of these is prerequisite to a comprehensive evaluation of the topic discussed in this paper.

## **1. Abaújszántó**

Stray find

### ***Rim fragment of a bowl***

Wheel-thrown grey bowl made of fine grained clay. Biconical with outward bending rim, its shoulder decorated with a horizontal band of stamped rosettes enclosed by horizontal grooves. Wall-thickness: 0,7 cm; d (rim): 13 cm. (Fig. 3/1)

### **Fig. 3**

## **2. Arka-Fónyi patak**

During a small-scale excavation carried out at the site in 1959-1960 five pits as well as a semi-subterranean building with six posts were unearthed. The ceramic find material consisted of fine black Przeworsk bowls, coarse cooking pots and granaries as well as wheel-thrown sherds. Based on the shapes of local pottery as well as on terra sigillata sherds from the Westerndorf and Rheinzabern workshops recovered at the site, it can be dated to the second half/end of the 2<sup>nd</sup> century and the 3<sup>rd</sup> century AD (in details: *Soós 2017*).

1/3. cylindrical storage pit

### ***Body fragment of a storage vessel***

Brownish grey body fragment of a vessel made of sandy clay, with stamped decoration (serrated circle motif). Wall-thickness: 0,8 cm (Fig. 3/2)

### ***Body fragment***

Brown body fragment of a hand-thrown coarse vessel made of sandy, grainy clay with stamped egg-and-dart decoration. Wall-thickness: 0,8 cm (Fig. 3/4)

## **3. Bodrogkeresztúr-Kutyasor**

Stray find, perhaps remains of a Late Roman Age settlement (*Végh 1975, 69, II. t. 1*).

### ***Rim fragment***

Rim fragment of a wheel-thrown storage vessel made of sandy clay. Outward bending grooved rim, cylindrical neck and rapidly broadening bowl. Decorated on its shoulder with two irregular bands of stamped serrated oval motifs enclosed by roughly incised horizontal lines. Wall-thickness: 1,1 cm; d (rim): 20 cm (Fig. 3/3)

## **4. Garadna-Kastély zug**

During rescue excavations were carried out at the site in 1959-1960. The archaeological material which came to light from the sondages was documented according to layers, as no archaeological features could be identified. Beside a large amount of wheel-thrown bowls, pots and jugs numerous sherds from hand-formed coarse pots as well as some fine Przeworsk pottery fragments came to light. Based on terra sigillata sherds from the Severan era as well as a fragment belonging to a faceted, conical Roman glass beaker the site can be dated from the end of the 2<sup>nd</sup> century to the middle third of the 4<sup>th</sup> century AD (in details: *Soós 2014*).

### ***Body fragment***

Body fragment of a fine, wheel-thrown grey vessel, decorated with two roughly accomplished concentric circles. Wall-thickness: 0,7 cm (Fig. 3/5)

## **5. Garadna-Kovács tanya (Elkerülő út, 1. lh)**

In 2002-2003, rescue excavations were carried out at the site located close to the River Hernád. At the present state of research this is the second largest excavated and evaluated Przeworsk settlement in the Carpathian Basin after the one unearthed at Csengersima-Petea (*Gindele–Istvánovits 2009*). Altogether 430 archaeological features were identified over a territory of 6100 square metres (*Csengeri–Pusztai 2008*). At the site 26 semi-subterranean post structure buildings were excavated, which constituted five groups (Fig 4). These were located about 20-30 metres from each other and included five to ten buildings each. In all, 27 huge clay pits as well as 134 storage pits of various size filled with domestic waste were excavated, which once belonged to the buildings. 22 pits contained animal skeletons either partial or full, among which mostly dogs, but also pigs, goats/sheep as well as cats were identified (*Daróczy-Szabó 2009*). In the area enclosed by the buildings a number of rectangular fireplaces were lined up in north to south and east to west rows. These features of unknown function yielded only pieces of charcoal and stones (*Soós 2011; Gindele 2015*).

#### (Fig 4)

The archaeological material reaching almost 13 000 pieces mostly included pottery fragments. The majority of the typical hand-formed Przeworsk ware consisted of deep biconical bowls and pots (Fig 5/1-4), beside which a few small bowls and cups (Fig 5/5), sometimes decorated with incised, grooved or impressed decoration also came to light. Ceramics produced on the potter's wheel mainly included bowls with semispherical, biconical and articulated body (Fig 5/7-9), jugs with narrow neck (Fig 5/6) as well as fewer pots, biconical vessels and cups. Although wheel-thrown ware was present in an impressive amount, the majority of the fragments were without decoration. Hand-formed coarse cooking vessels mainly included pots, but the same material and technique was used to produce vessels of various functions imitating the forms of fine Przeworsk ware, such as bowls of different sizes, small pots, mugs, cups, lids, miniature vessels and oven pans (Fig 5/10-14). The villagers used large sized granaries with broad, grooved rims to store agricultural products (Fig 5/15).

#### (Fig 5)

Evidences of intensive trade relations towards the Roman Empire are the almost 70 pieces of terra sigillata (Fig 6/1-3) from the Rheinzabern, Westerdorf and Pfaffenhofen workshops (*Gyalai 2009*) as well as 47 pieces of Pannonian grey ware (*Pannonische Glanztonwäre*) (Fig 6/4) and three fragments of rare glass beakers (Fig 6/5-6).

The earliest datable find from the site is a denarius of Faustina. The 2<sup>nd</sup> half of the 2<sup>nd</sup> century and the beginning of the 3<sup>rd</sup> century AD is represented by terra sigillata from Rheinzabern, glass beakers (Fig 6/5), grey slipped bowls, a Knee Booch (Fig 6/11) (*Cociş 2004*, 88-90, Pl. LXII), an one-piece Sarmatian buckle (Fig 6/8) (*Vaday 1989*, 66, Abb. 8, 2), round-backed antler combs as well as a Kaczanowski XIII. type spearhead (Fig 6/7) (*Kaczanowski 1995*, 21-22, Tabl. 1-4, Tabl. XX). In the find material several object types characteristic for the whole late Roman period were also present, such as one-piece brooches with inverted foot and upper chord type Almgren 158 (*Peškar 1972*, 106-107) as well as iron brooches with inverted foot (Fig 6/9-10). According to the superpositions as well as the continuous accumulation of domestic waste, the settlement has been continuously inhabited in the Late Roman Age too. Based on a fragment from a conical Roman glass beaker (Fig 6/6) (*Barkóczy 1988*, 83, 47 types b-c-d) and a double-sided bone comb, the settlement must have been abandoned sometime in the last quarter of the 4<sup>th</sup> century AD.

(Fig 6)

The evaluation of the settlement provided important new data to the research of Przeworsk settlements. The village had a linear structure in which the domestic units consisting of semi-subterranean buildings in the centre and related clay pits, storage pits and rectangular fireplaces were always renewed at the same location. The pottery typo-chronology of the site suggests that the material culture of the community evolved uninterrupted to the end of the Roman Age. Hand-formed Przeworsk vessels were still in use in the late period while the domestic pottery assemblage was more and more supplemented with wheel-thrown ware (Soós 2015, 206-254; Soós 2016).

Str. no. 42-50 clay pits

***Fragment of a bowl***

Fragment of a fine wheel-thrown grey biconical bowl with a thin slip. Decorated with a horizontal groove below its outward bending rim, shoulder slightly bending with stamped decoration: impressed double concentric circles in a double arc, enclosed by incised arched lines. Wall-thickness: 0,7 cm, d (rim): 20 cm. (Fig. 7/1) (See detailed in: Soós 2014b)

***Body fragment***

Body fragment of a fine, hand-formed, globular vessel of black colour. Both inner and outer surface polished. Decorated with an incised horizontal line below which irregular oval and leaf-shaped stamped motifs are visible. Wall-thickness: 0,6 cm (Fig. 7/2)

Str. no. 63 clay pit

***Fragments of a pot***

Fragments of a fine, wheel-thrown, black pot with wide, straight bottom. On the middle part of the body irregular stamped decoration made up of semicircular serrated lines, smaller rosettes and larger serrated oval motifs. Wall-thickness: 0,8 cm, d (bottom): 14 cm (Fig. 7/3)

Str. no. 103 clay pit

***Body fragment of a bowl***

Body fragment of a fine, wheel-thrown biconical bowl of light grey colour. On its shoulder remains of decoration are traceable: a narrow groove with a two-rowed, semicircular serrated motif above it. Wall-thickness: 0,9 cm. (Fig. 7/4)

Str. no. 153 pit

***Shoulder fragment of a jug***

Fragment of a fine, wheel-thrown black jug with a conical shoulder with stamped decoration: three smaller rosettes surrounding a larger rosette. Wall-thickness: 0,5 cm, d (shoulder): 16 cm (Fig. 7/5)

***Bottom fragment of a bowl***

Fragment of a fine, wheel-thrown globular vessel of light grey colour. Roughly finished, covered with a clay coating. The vessel is arched with wide standing. The middle part of the body is articulated with a narrow horizontal groove, below which stamped decoration is



visible: irregular, serrated oval motifs. Wall-thickness: 0,9-1,3 cm, d (bottom): 7,5 cm. (Fig. 8/1)

Str. 275. pit

***Fragments of a bowl***

Fragments of a fine wheel-thrown biconical bowl of brownish-grey colour. Slightly outward bending rim, and standing at the bottom. The middle part of the body is articulated with a narrow horizontal groove, on the shoulder a stamped decoration consisting of rosettes connected by arched double serrated lines is visible. Wall-thickness.: 0,6 cm, d (rim): 20 cm, d (bottom): 7 cm. (Fig. 8/2)

**Fig 7**

Str. no. 276 Semi-subterranean building

***Body fragment of a bowl***

Fragment of a fine, hand-formed biconical bowl of reddish brown colour. Its surface is polished, on its shoulder and side irregular stamped decoration consisting of double serrated circles and larger oval motifs connected by serrated lines is visible. Wall-thickness: 0,7 cm. (Fig. 8/3)

***Body fragment***

Body fragment of a fine, wheel-thrown biconical vessel of black colour and polished surface. The middle of the body is articulated with a sharp horizontal cord, the shoulder is decorated with stamped motifs: closely aligned rosettes as well as a larger solitary rosette. Wall-thickness: 0,5 cm (Fig. 8/4)

***Body fragment of a bowl***

Fragment of a fine, hand-formed biconical bowl of dark grey colour. Its surface is polished. Body and shoulder articulated with horizontal grooves, among which pairs of short serrated lines aligned radially can be seen, imitating a floral pattern. Wall-thickness: 0,5 cm (Fig. 8/5)

Str. no. 296 rectangular fireplace

***Body fragment of a bowl***

Fragment of a fine, wheel-thrown vessel of black colour. Finished with a coat of varnish. Stamped decoration consisting of concentric rhombic motifs connected by simple or double serrated, arched lines. Wall-thickness: 0,5 cm; d: 22 cm. (Fig. 8/6)

**Fig. 8**

Str. no. 323 storage pit

***Rim fragment of a bowl***

Fragment of a fine, wheel-thrown biconical bowl of red colour. Slightly outward bending rim, shoulder mildly bulging. The middle of the rim is articulated with a deeper groove. On the shoulder and middle of the body, decorated by a horizontal row of irregular rosettes between shallow, horizontal grooves. Wall-thickness.: 0,6 cm, d (rim): 18 cm. (Fig. 8/7)



Str. no. 324 storage pit

***Bowl***

Fine, wheel-thrown bowl reddish brown colour. Outward bending rim, slightly biconical body and standing. The shoulder is articulated by a deep groove. In the upper part of the body decorated with a horizontal band of stamped double concentric circles. Wall-thickness.: 0,7 cm, d (rim): 16 cm, d (bottom): 6,5 cm, height: 9,5 cm (Fig. 8/8)

**6. Hernádvécse-Nagy rét, site no. 4**

Rescue excavations at the sites Hernádvécse-Nagy rét no. 4, no. 5, no. 6 and no. 7 were carried out in 2004. Located on a terrace of the River Hernád, the sites revealed the remains of a diffuse Przeworsk settlement beside the traces of inhabitation from prehistoric times as well as the Hunnic period. Post structure buildings built on the surface as well as smaller, semi-subterranean dwellings with six posts constituted the centre of the settlement. Domestic waste accumulated in smaller and larger pits of irregular size, originally used as clay pits, located some 40 metres from the buildings. The economic quarter of the settlement was excavated in the southern half of the archaeological site, including smaller, semi-subterranean buildings with two posts as well as storage pits. About 40-50 metres north of the buildings built on the surface several dozen rectangular fireplaces were located, lined up in multiple rows. No other settlement features were found nearby (Fig 9).

**(Fig 9)**

The archaeological material of the settlement consisted almost exclusively of hand-formed Przeworsk fine (Fig 10/1-3, 6, 9-10) and coarse ware (Fig 10/7, 11-15), supplemented by a few sherds originating from granaries. Based on fragments of terra sigillata from the Rheinzabern and Westerndorf workshops (Fig 10/16), moreover a fragment of an early type mortarium (Fig 10/8) as well as that of a transparent, green rectangular glass bottle, the settlement could have been inhabited from the 2<sup>nd</sup> half of the 2<sup>nd</sup> century to the beginning of the 3<sup>rd</sup> century AD (*Soós 2015*, 94-162).

**(Fig 10)**

Although the village excavated at Hernádvécse-Nagy rét was at least partly parallelly inhabited with the settlement unearthed at Garadna-Kovács tanya, the archaeological material of the two sites represent different traditions. The presence of archaic forms as well as the almost complete absence of wheel-thrown ware hints to a community with different regional connections. Possibly it belongs to another horizon, identified at some archaeological sites in Romania as well, datable to the period of the Marcomannic wars (*Gindele 2014*, 141).

Str. 48. storage pit

***Fragments of a bowl***

Coarse, wheel-thrown deep bowl made of sandy clay, of reddish brown colour. Outward bending profiled rim, bulging body. The middle part of the body is decorated with a horizontal band of stamped rosettes above which asymmetrical stamped motifs resembling rosettes can be seen. Wall-thickness: 1 cm, d (rim): 24 cm. (Fig. 11/1)

**7. Mezőzombor-Temető**

In 2000-2001 a small-scale excavation was carried out at the site, located on a hill rising above the one-time floodplain of the Szerencsköz. In 2001, an area of 300 square metres was excavated where a semi-subterranean building as well as 16 pits came to light from the Roman Age. Beside the ceramic find material similar to that of the above-mentioned settlements 14 terra sigillata sherds were also found, most probably datable to the Severan era. As a working hypothesis, the settlement remains can be dated to the end of the 2<sup>nd</sup> century - 3<sup>rd</sup> century AD.

***Body fragment of a bowl***

Body fragment of a fine, wheel-thrown grey bowl, decorated with an incised horizontal line and above it, stamped rosettes. Wall-thickness: 0,6 cm (Fig. 11/2)

Feature no. 39. pit

***Body fragment***

Body fragment of a wheel-thrown grey polished vessel, with stamped decoration (a smaller and a larger two-rowed rosette). Wall-thickness: 0,6 cm (Fig. 11/3)

***Body fragment***

Body fragment of a wheel-thrown grey vessel, decorated with coarsely accomplished stamped motifs (double rhombic motif made up of concentric lines). Wall-thickness: 0,7 cm (Fig. 11/4)

**8. Szerencs-Rákóczi utca**

Stray finds, probably the remains of a Roman Age settlement (*Végh 1975, 79, XXIII. T. 3-8*).

***Body fragment***

Body fragment of a fine wheel-thrown grey vessel, its surface polished in bands and decorated with stamped rosettes. D: 22 cm, Wall-thickness: 0,6 cm (Fig. 11/5)

***Body fragment of a bowl***

Body fragment of a fine, wheel-thrown bowl decorated with a broad, flat rib with incisions, and below it larger, serrated arches. Wall-thickness: 0,7 cm (Fig.11/6)

***Body fragments***

Body fragments of a wheel-thrown brownish grey vessel with hand-smoothed surface. Its stamped decoration consist of two vertically, double triangular motifs made up of simple and serrated concentric lines. The corners of the triangles are accentuated with double concentric circle motifs. Wall-thickness: 0,8 cm (Fig. 11/7)

**9. Viss-Kutyor**

Stray finds.

***Body fragment of a jug***

Body fragment of a wheel-thrown grey jug with a narrow neck, with irregular stamped decoration: rosettes and short double serrated lines. Wall-thickness: 0,6 cm (Fig.11/8)

***Rim fragment of a bowl***

Fragment of a fine wheel-thrown grey bowl with short, outward bending rim and a curved neck. Below the rim semicircular serrated lines can be seen, stamped across each other. Wall-thickness: 0,5 cm; d (rim): 21 cm (Fig.11/9)

## Fig. 11

### 10. Zalkod-Jakab domb

During the excavation of the site in 1965, a single building and 10-12 pits came to light in sondages of about 200 square metres altogether. The archaeological features can be dated to the Roman Age (*Salamon 1966; Salamon 1970*).

The pottery find material mainly consisted of wheel-thrown pots, bowls and jugs in addition to hand-formed pots. Beside thin walled granaries, typical Przeworsk fine ware constituted the smaller part of the find assemblage. The settlement can preliminarily be dated to the Late Roman Age.

#### ***Rim fragment of a bowl***

Rim fragment of a fine, wheel-thrown bowl covered in a black varnish. Under the slightly outward bending rim a zig-zag pattern made up of fine serrated lines can be seen. Wall-thickness: 0,8 cm, d (rim): 16 cm (Fig. 11/10)

#### ***Rim fragment of a bowl***

Rim fragment of a wheel-thrown conical bowl of grey colour. The swollen rim is articulated with grooves. Under the rim a single, serrated arch can be seen. Wall thickness: 0,6 cm, d (rim): 16 cm. (Fig. 11/11)

#### ***Body fragment of a bowl***

Body fragment of a fine, wheel-thrown bowl of brownish grey colour. Below its rim a horizontal decorative band can be seen made up of left oriented single serrated arches. Wall-thickness.: 0,5 cm (Fig. 11/12)

#### ***Body fragment***

Body fragment of a fine, wheel-thrown vessel of grey colour. It is decorated with a stamped rosette as well as single serrated lines. Wall-thickness: 0,5 cm (Fig. 11/13)

#### ***Body fragment of a pot***

Body fragment of a wheel-thrown, globular pot of reddish brown colour, made of grainy clay. In the middle part of the body decorated with a horizontal band of stamped rosettes. Wall-thickness: 1,2 cm (Fig. 11/14)

### Types of pottery with stamped decoration

With all certainty, wheel-thrown pottery fragments with stamped decoration which came to light from archaeological sites in the territory of Hungary were produced in one of the Beregsurány- or Blažice-type pottery workshops in the Barbaricum, even though their technological standards, forms and decorations may represent different pottery traditions. The attribution of particular ceramic fragments/vessels to certain workshops would provide vital information in understanding the trade and exchange relations of the Upper-Tisza Region, however this is not feasible based exclusively on the traditional methods of typology. Up to this day only the material recovered from the pottery kilns excavated at Csengersima-Petea has been published and evaluated in detail (*Gindele–Istvánovits 2011*), types of stamped motifs used at the larger pottery manufacturing centres are only known to us from preliminary reports. A comparative study of the motifs is also unsuitable for workshop attribution, as the

craftsmen from the Upper-Tisza Region used individual clay stamps instead of moulds, thus they varied particular motifs in innumerable ways from vessel to vessel (*Filip 2008*, Pl. I.; *Gindele–Istvánovits 2011*, 119). Therefore, by the analysis of the stamped motifs known from pottery fragments found in the territory of Hungary only tendencies can be determined regarding the frequency of particular motifs in certain regions. Questions regarding origins may be answered with the help of the results of scientific examinations, however no such research has yet been conducted on pottery material from this archaeological period.<sup>1</sup>

25 out of 32 pieces of the above mentioned stamped pottery fragments belonged to fine wheel-thrown vessels. Bowls constitute the most frequent form (13 pieces), but fragments of a smaller globular vessel, a jug and a pot could also be identified. In the Hernád Valley area bowls mostly represented the biconical form, while in the territory east of the Slovak Ore Mountains the conical variant was preferred, thus the form of bowls mirrored the general pottery shapes of the region or site. Beside a small globular vessel from Garadna and a fragment found at Szerencs, all the above mentioned pottery fragments are of fine quality and craftsmanship.

In Przeworsk settlements unearthed in the territory of Hungary stamped decoration also appears on coarse vessels made of grainy, sandy clay. Curiously, cooking vessels decorated this way are rather known from archeological sites where the fine variant of stamped pottery was less typical, such as Arka and Hernádvécse. On the contrary, at the Garadna-Kovács tanya settlement where the use of wheel-thrown pottery became widespread relatively early, no fragments of coarse ware with stamped decoration were found, although this site yielded the largest pottery find material among the above mentioned sites.

A distinctive feature of sites in the territory of Hungary is the presence of fine Przeworsk ware with stamped decoration. On a globular bowl and another one with biconical profile, both found at Garadna-Kovács tanya, coarsely accomplished stamped decoration imitating imported motifs can be seen.

#### Analysis of stamped decoration

In general, stamped decoration on ceramic fragments from the territory of Hungary consists of the simplest, mostly wide-spread motifs while more complex motifs are absent.

Rhombic motifs (Fig. 12/1-2) were quite frequent on stamped pottery fragments from Porolissum (*Filip 2008*, Pl. CXXIII, U10a-U20), as well as from Romanian and Slovakian sites once belonging to the territory of the Barbaricum (*Gindele–Istvánovits 2011*, Abb. 95-96; *Lamiová-Schmiedlová 1969*, Abb. 42, 17-18, 21-22; *Gudea–Filip 1997*, 143, Abb. 15). In the Hungarian material the rhombic motif appears on a fragment found at Garadna as well as on another, coarser piece from Mezőzombor. These two vessels were definitely the products of different workshops. The piece from Garadna is of outstanding quality: unlike other wheel-thrown fragments from the same site, it is finished with a coat of black varnish. This same technique characterizes the rim fragment of a bowl from Zalkod, decorated with a zigzag line (*Gindele–Istvánovits 2011*, Stemp. I.1. Abb. 101, 1; *Matei–Stanciu 2000*, Pl. 296, 1, 6). The

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<sup>1</sup> First of all petrographic examinations would be useful. See: *Nagy–Szakmány 2015*; *Szebenyi et al. 2014*; *Korom 2015*

latter bowl form corresponds to the F4 or F6 type from Porolissum (*Filip 2008*, Pl. CLXXIII), however, Robert Gindele suggested a local workshop in the case of the vessels from Csengersima, thus other pieces found in the territory of Hungary could also have been produced in workshops of the Barbaricum (*Gindele–Istvánovits 2011*, 263). Beside the fragments from the Szatmár region, in the find material of Beregsurány we may assume even more vessels finished with a coat of black or grey varnish (*Kotigorosko 1997*, 801).

Double triangular motifs/hour-glass motif (*Miklósity 2009*, 239, 9. Ábra 9.) is visible on a fragment from Szerencs (Fig. 12/3), complemented by simple concentric circles positioned at the corners of the main motif. Triangles as individual motifs are relatively rare in the Slovakian ceramics material (*Lamiová-Schmiedlová 1969*, Abb. 42, 38, 42), they were however more widespread in the Szatmár region. A fragment from Csengersima yielded a quite similar combination of motifs (*Gindele–Istvánovits 2011*, Stemp. VIII. Abb. 93, Abb. 102, 16).

Stamped rosettes were frequent on fragments analysed in this study (Fig. 12/4-10). Simple combinations of motifs such as rosettes stamped above each other and connected by serrated arches (Fig. 12/4) or a geometrical design built up of embellished manifold rosettes (Fig. 12/9-10) as well as the multiple concentric design (Fig. 12/9-10) is of provincial origin,<sup>2</sup> but was widespread in the Barbaricum as well.<sup>3</sup>

There are several vessels the upper part of which is decorated with a horizontal band of solitary, usually roughly accomplished rosettes of larger size (Fig. 12/7-8) (*Gindele–Istvánovits 2011*, Abb. 88. Stemp. III. 7). Simple and widespread compositions usually stand out more at sites where more complex compositions are rare.<sup>4</sup>

Other fragments discussed in this paper are decorated with variations of a basic and very widespread motif: the circle. Concentric circles built up of simple lines (Fig. 12/11-12) appear in the Szatmár-Bereg Region,<sup>5</sup> however they are definitely more frequent in the territory west of the Slovak Ore Mountains (*Lamiová-Schmiedlová 1969*, Abb. 12, 3, Abb. 42, 4).

Based on the available data, there is a difference between the geographical spread of the circle and rosette motifs: while rosettes are scarcely to be seen on vessels produced at the Beregsurány and Csengersima workshops (*Gindele–Istvánovits 2011*, Abb. 88, Stemp. 5-7),

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<sup>2</sup> In Pannonia (*Nagy 2017*, Fig. 14, 1, Table 72), and, as an effect, in Dacia as well (*Filip 2008*, Pl. XXXVII, Pl. CII).

<sup>3</sup> Zaláu/Zaläu (*Matei 1997*, Taf. XXXVI, 221); Zaláu–Bd. Mihai Viteazul (*Matei–Stanciu 2000*, Pl. 192, 10); Zaláu–ISCIP (*Matei–Stanciu 2000*, Pl. 323, 8); Luzanka (*Kotigoroshko 1997*, Fig. 9, 6); Lazuri–Lubi tag (*Matei–Stanciu 2000*, Pl. 88, 5, Pl. 115, 3); as well as Lamiová-Schmiedlová 1963, Tab. V; *Lamiová-Schmiedlová 1969*, Abb. 42, 10; Prešov (Budinský-Krička 1963, Obr. 17, 3); Blažice (*Lamiová-Schmiedlová 1969*, Abb. 42, 41) and Csengersima-Petea (*Gindele–Istvánovits 2011*, Abb. 88, Stemp. II.2, Stemp. III. 5-7; Abb. 99, 10, Abb. 100, 5; Abb. 102, 5).

<sup>4</sup> *Gindele–Istvánovits 2011*, Abb.102, 4. Luzanka (*Kotigoroshko 1997*, Fig. 9, 1); Čičarovce (*Kaminská 2005*, Obr. 12, 3, Obr. 14, 10, Obr. 16, 4); Šebastovce–Barca (*Lamiová-Schmiedlová 1963*, Tab. VIII, 12); Peder (*Lamiová-Schmiedlová 1969*, Abb. 12, 5, Abb. 42, 8).

<sup>5</sup> Lazuri–Lubi tag (*Matei–Stanciu 2000*, Pl. 87, 6); Beregsurány (*Kotigoroshko 1997*, Fig. 11).

they appear considerably more frequently around Zalău, in the geographical foreground of the Dacian *limes* (Matei–Stanciu 2000, Pl. 12a, 13) as well as west of the Slovak Ore Mountains (Lamiová-Schmiedlová 1969, Abb. 42, 8). Half of the circular motifs documented on pottery fragments from Hungary were also rosettes.

## Fig. 12

Serrated single or double lines and arches consisting of tiny rectangles (Fig. 12/13-18) served as elements connecting other motifs (Gindele–Istvánovits 2011, Abb. 101, Abb. 84-85, Stemp. I. és Stemp. II). These patterns also appear in Pannonia on locally produced stamped pottery.<sup>6</sup> They were used as an individual motif in the decoration of a vessel found at Garadna, where three double lines were stamped next to each other in a radial pattern. Similar compositions were described from the surroundings of Zalău and Košice (Lamiová-Schmiedlová 1969, Abb. 42, 43; Matei–Stanciu 2000, Pl. 184, 9, Pl. 296, 1, 6).

In the case of several fragments found in the territory of Hungary, serrated arches do not constitute a continuous horizontal ‘garland’, but they are stamped vertically next to each other. On vessels produced in the pottery workshop of Csengersima yielding plentiful of data, a horizontal arrangement of this motif is characteristic (Gindele–Istvánovits 2011, Abb. 86, 8, 12, Abb. 87, 5). Serrated arches rarely appear in the Szatmár Region,<sup>7</sup> while they are quite frequent in Porolissum as well as at the neighbouring settlements in the surroundings of Zalău and Košice (Gudea–Filip 1997, 155, Taf.VIII; Matei 1997, 401-403, Taf. 1-3, Taf. III, 17; Matei–Stanciu 2000, Pl. 315, 5; Filip 2008, Pl. XIV, Pl. XXXIII, Pl. XLIX; Lamiová-Schmiedlová 1963, Tab. V, 10, 12., Tab. VIII, 1; Lamiová-Schmiedlová 1969, Abb. 42, 35). Straight, serrated lines may constitute individual motifs (Fig. 12/17) or serve either as elements or a motif sequence (Fig. 12/16, 18), same way as on Roman provincial ware (Nagy 2017, Fig. 16-18; Filip 2008, D VI. 132, Pl. XXXIII, Pl. XLI, Pl. CXXI).

On several fragments found at the Garadna-Kovács tanya settlement roughly accomplished, large, serrated oval motifs can be seen, combined with simple rosettes, circles and lines (Fig. 12/19-21). Similar decorations of a lesser quality are entirely absent from pottery workshops in the Bereg and Szatmár regions. The motif appears on a few fragments found in the surroundings of Zalău,<sup>8</sup> while a relatively large amount of further examples are known west of the Slovak Ore Mountains (Luštikova 2013, Tab. VIII, 7, 15).

Applying stamped decoration on wheel-turned, coarse cooking vessels of grainy clay is noticeable at Przeworsk sites from the territory of Hungary, being otherwise alien to the pottery traditions of the Dacian and Beregsurány-type workshops. During the Roman period, stamped decoration applied on hand-formed fine and coarse ware can be documented in the territories settled by the Quads (Varsik 2011, 152–155, Abb. 78, 1, Abb. 80), later, at the turn of the 4-5<sup>th</sup> century AD it appears on the large sized granaries of the *Nordkarpatische Gruppe*

<sup>6</sup> Traced back on terra sigillata forerunners (Fényes 2003, Abb. 42, 23a-b).

<sup>7</sup> Lazuri–Lubi tag (Matei–Stanciu 2000, Pl. 87, 3).

<sup>8</sup> Lazuri–Lubi tag (Matei–Stanciu 2000, Pl. 93, 7); Suplacu de Barcău–Lapiş I. (Matei–Stanciu 2000, Pl. 128, 2).

(Madyda-Legutko–Tunia 2008, 231-232, Fig. 2, Fig. 3). The presence of stamped coarse ware is only characteristic to Przeworsk settlements situated west of the Slovak Ore Mountains (Végh 1975, IV. tábla 5; Végh 1985, 96, 5. kép 26; Lamiová-Schmiedlová 1969, Abb. 15, Abb. 43, 27-28, 31-33, 37; Jurečko 1983, Obr. 14, 5; Luštikova 2013, Tab. IV, 9), and can most probably be explained with the influence of the Quads. The motifs mostly imitate those of characteristic of the wheel-thrown, fine quality import ware, but a few unique stamps are also known. For example, no parallels are known as yet of the asymmetric rosette motif on a bowl from Hernádvécse, however analogues to the roughly accomplished egg-and-dart motif, the basic rosette and the oval motifs applied with a comb-like tool (Fig. 12/19-22) were all found at settlements in the territory of Eastern Slovakia.<sup>9</sup>

### Fig. 13.

It is very interesting that at the Garadna-Kovács tanya site even hand-formed fine Przeworsk table ware had stamped decoration on a few occasions (Fig. 7/2, Fig. 8/3). The decoration of both fragments is roughly accomplished, they could have been produced as local imitations of fine wheel-thrown ware. The asymmetrical star-shape could be a deformation of either the Csengersima Type III.4.a or Type III.6 motifs, or a leaf motif (Gindele–Istvánovits 2011, Abb. 98; Nagy 2017, Table 60). The roughly accomplished, serrated oval motif visible on a biconical vessel fragment is more characteristic of coarse ware. No other evidence of stamped decoration on Przeworsk fine ware has yet been found, although a few fragments were recovered at other sites which can be evaluated as local imitations based on their design.<sup>10</sup>

### Summary

In Przeworsk sites located in the territory of Hungary, the use of stamped ware was less widespread than at contemporary settlement in Eastern Slovakia or the Bereg and Szatmár regions. No pottery kiln was yet unearthed in the territory of Hungary, and also the significant differences between the technological and typological characteristics of wheel-thrown vessels with stamped decorations suggest that the products of different workshops were imported to the settlements. Earlier studies summarizing the topic emphasised the absence of stamped ware from the archaeological material in Hungary, however this viewpoint was partly due to a low amount of related research results (Gindele–Istvánovits 2011, Karte 2).

When looking at the spread of stamped ware, the preliminary publications of pottery workshop centres give a false impression: only a small fraction of the overwhelmingly abundant archaeological material retrieved from excavated pottery kilns appears at other sites. Only one third of the pottery output of the Beregsurány workshop centre has been stamped ware, while at the settlement unearthed at Trstené pri Hornáde, not more than eight or nine fragments out of almost 300 published pieces had stamped decoration (Bóna 1993, 109;

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<sup>9</sup>Prešov (Budinský-Krička 1963, Tab. XIV, 7XV, 9); Peder (Lamiová-Schmiedlová 1969, Abb. 15, 5); Luštikova 2013, Tab. IV, 4.

<sup>10</sup>Zaláu–Bd. Mihai Viteazul (Matei–Stanciu 2000, Pl. 176, 7) Suplacu de Barcău-Lapiş I. (Matei–Stanciu 2000, Pl. 128); Nižná Myšľa–Alamenev (Lamiová-Schmiedlová 2000, Obr. 2, 1).



*Jurečko* 1983). Therefore, beyond the rich and diversified archaeological material of the workshops, it seems more difficult to outline the outlets for these products (*Kotigoroshko* 1997, 805).

Beside the fine, wheel-turned ware analysed in this study, stamped decoration also appears on coarse cooking vessels and on two occasions, on hand-formed, fine Przeworsk fragments as well. The fact that coarse ware was decorated this way may be explained by the influence of the Quad culture area. However, stamped decoration on Germanic fine ware has not yet been documented in any other regions.

The sortiment of motifs and their combinations documented on the fragments analysed in this study are on the whole poorish in comparison to similar pottery of the surrounding geographical regions. Only very general and widespread motifs and their simplest combinations can be observed. More complex geometric and floral patterns are missing, even though they are present at sites located along the Slovakian course of the River Hernád (*Lamiová-Schmiedlová* 1963, Tab. VIII; *Jurečko* 1983, Obr. 18, 9).

Due to the low amount and simple style of the stamped fragments found in the territory of Hungary, as well as the lack of related scientific research, a particular pottery workshop producing this type of ware cannot be identified. However, beside the widespread motifs the analogues to certain pieces were more frequently found in the surroundings of Zaláu and in the valleys of the Rivers Hernád and Torysa. The role of the Slovak Ore Mountains as a kind of border has already been suggested by Maria Lamiová-Schmiedlová. She considered the fragments found east of the Slovak Ore Mountains to be the products of the Beregsurány workshop and dated them to the period following the abandoning of the Blažice workshop (*Lamiová-Schmiedlová* 1969, 469, 471). Her hypothesis has probably been based on the late dating suggested by Dezső Csallány, however the strong relation towards the geographical foreground of the Dacian *limes*, which we can now start to draw up based on the stamped patterns of pottery fragments from Hungary is really remarkable. As a hypothesis, it is possible that the transfer of pottery technology did not reach the Košice Basin from the direction of the Sathmar region, but directly from the geographical foreground of the *limes*. For future research, it would be worth to test this hypothesis by the means of scientific examination as well.

*Barkóczi, L. 1988: Pannonische Glasfunde in Ungarn. Studia Archaeologica* 9.

*Blažejewski, A. 2014: The beginnings of the Vandals settlement in the Danube area. In: The Empire and Barbarians in south-eastern Europe in late antiquity and early middle ages. (Ed. S. Vitlyanov – I. Topalilov) Studia Academica Œumenensia* Vol. 1. 51-64.

*Bóna, I. 1993: A honfoglalás előtti kultúrák és népek. In: Szabolcs-Szatmár-Bereg megye monográfiája I. Történelem és Kultúra. Nyíregyháza* 63–138.

*Budinský-Krička V. 1963: Sídliisko z doby rímskej a zo začiatkov sťahovania národov v Prešove. Siedlung aus der römischen und der beginnenden Völkerwanderungszeit in Prešov. Slovenská Archeológia* 11/1 5–58.

*Cociş, S. 2004: Fibulele din Dacia Romană. The Brooches from Roman Dacia. Bibliotheca Ephemeris Napocensis 3.*

*Csallány D. 1966: Die Bereg-Kultur. Acta Antiqua et Arch. Szeged, 10. 87–88.*

*Csengeri P.–Pusztai T. 2008: Császárkori germán település a Hernád völgyében. A Herman Ottó Múzeum Évkönyve 47. 89-106.*

*Daróczi-Szabó M. 2009: Garadna-Elkerülő út 1. lelőhely (Garadna-Kovács tanya) germán állatsontjainak vizsgálata. A Herman Ottó Múzeum Évkönyve 48. 335–355.*

*Dobrzańska, H. 1990: Osada z późnego okresu rzymskiego w Igołomi, woj. krakowskie I–II. Wrocław–Warszawa–Kraków.*

*Dobrzańska, H. 2011: Roman Period Grey Pottery Production near Cracow: Geographical, Technological and Social Dimensions. In: Bemmam, J. – Hegewisch, M. – Meyer, M. – Schmauder, M. (eds): Drehscheibentöpferei im Barbaricum. Technologietransfer und Professionalisierung eines Handwerks am Rande des Römischen Imperiums. Akten der Internationalen Tagung in Bonn vom 11. bis 14. Juni 2009. Bonner Beiträge zur Vor- und Frühgeschichtlichen Archäologie 13. Bonn, 259–284.*

*Droberjar, E. 2012: Římské kolínkovité spony v Čechách. Römische Kniefibeln in Böhmen. (Archeologické výzkumy v jižních Čechách 25) České Budějovice 119–131.*

*Fényes, G. 2003: Untersuchungen zur Keramikproduktion von Brigetio. ActaArchHung 54. 101-163.*

*Filip, C. C. 2008: Ceramica ștampilată de la Porolissum. Die gestempelte Keramik von Porolissum. Cluj Napoca.*

*Giertlová-Kučerová, M. – Soják, M. 2005: Novšie nálezy severokarpatskej skupiny v povodí rieky Poprad. Spisy Archeologického ústavu AV ČR 38. 113–136.*

*Gindele, R. 2010: Die Entwicklung der kaiserzeitlichen Siedlungen im Barbaricum im nordwestlichen Gebiet Rumäniens. Satu Mare.*

*Gindele, R. 2013: Die Problematik der barbarischen Siedlungen im nord-westen Rumäniens zwischen der Gründung der Provinz Dakien und den Markomannenkriegen. Ephemeris Napocensis 23, 11–30.*

*Gindele, R. 2014: Die Siedlung in Moftinu Mic – Merli tag. Probleme im Zusammenhang mit den Markomannenkriegen in den Siedlungen im Nordwesten Rumäniens. In: Archäologische Beiträge. Gedenkschrift zum hundertsten Geburtstag von Kurt Horedt. (Hrsg: Cociş, S.) Patrimonium Archaeologicum Transylvanicum, Volume 7. Cluj-Napoca 139–152.*

*Gindele, R. 2015:* Die römerzeitlichen Barbarensiedlungen von Livada/Ciuperceni–PV-Anlage GPSP Solaris und Supuru de Sus–Togul lui Cosmi. Neue Angaben bezüglich der rechteckigen Gruben mit gebrannten Wänden aus dem 2. - 5. n. Chr. im oberen Theiß-Becken. *Dacia* 59, 83-126.

*Gindele, R. 2015b:* Roman Period Barbarian settlements in Partium (Northwestern Romania). *Hungarian Archaeology online*. Spring

*Gindele, R.–Istvánovits, E. 2009:* Die römerzeitliche Siedlung von Csengersima-Petea. Satu Mare.

*Gindele, R.–Istvánovits, E. 2011:* Die römerzeitlichen Töpferöfen von Csengersima-Petea. Satu Mare.

*Godłowski, K. 1984:* „Superiores Barbari“ und die Markomannenkriege im Lichte archäologischer Quellen. *Slovenská Archeológia* 32/2, 327–346.

*Gudea, N. – Filip, C. 1997:* Die gestempelten Gefäße von Porolissum II. Die gestempelten Gefäße aus dem Kastell auf dem Hügel Pomet. *Vasele ștampilate de la Porolissum II. Vasele ștampilate din castrul roman de pe vârful dealului Pomet. Acta Musei Porolissensis* 21, 9–220.

*Gyalai, A. Zs. 2009:* Garadna-Elkerülő út, 1. lelőhely terra sigillata leletanyaga. *A Herman Ottó Múzeum Évkönyve* 48, 357–366.

*Hullám, D. 2012:* A Przeworsk-kultúra hamvasztásos temetkezéseinek időrendi vizsgálat a Kárpát-medence északkeleti részén. In: *Hadak Útján XX. A Népvándorlások Fiala kutatóinak XX. Összejövetelének konferencia-kötete.* (Szerk.: Petkes Zs.) Budapest–Szeged 2010. október 28-30. Budapest, 83–97.

*Istvánovits, E.–Kulcsár, V. 2017:* Sarmatians. History and Archaeology of a forgotten People. *Monogr. des RGZM Band* 123.

*Jurečko, P. 1982:* Výskum v Trstenom pri Hornáde. Grabung in Trstené pri Hornáde. *AVANS (Archeologické výskumy a nálezy na Slovensku)* 1981, 138–140.

*Jurečko, P. 1983:* Príspevok k riešeniu problematiky osídlenia východného Slovenska v dobe rímskej. *Historia Carpatica* 14, 277–384.

*Kaczanowski, P. 1995:* Klasyfikacja grotów broni drzewcowej kultury przeworskiej z okresu rzymskiego. *Klasyfikacja Zabytków Archeologicznych* I.

*Kaminská, L. 2005: Dve fázy osídlenia z doby rímskej v Čičarovciach. Zwei Besiedlungsphasen aus der römischen Kaiserzeit in Čičarovce. Východoslovenský Pravek 7, 57–82.*

*Kobály, J. 1997-1998: A przeworsk kultúrához tartozó harcossírok és fegyverleletek Kárpátalján. A Jósa András Múzeum Évkönyve 39-40, 113-134.*

*Korom A. 2015: A pesti-síkság barbaricumai lelőhelyeinek pecsételt kerámiatípusai. Stamped pottery types from the Barbaricum sites of the Pest Plain. In: Türk A. (szerk.), Hadak Útján XXIV. A népvándorlás kor fiatal kutatóinak XXIV. Konferenciája. Esztergom, 2014. november 4–6. 1. Kötet. Conference of Young Scholars on the Migration Period November 4–6, 2014, Esztergom Volume 1. Budapest–Esztergom, 165–204.*

*Kotigorsko, V. G. 1995: Ținuturile Tisei Superioare în veacurile III. î.e.n. – IV. î.e.n. (Perioadele La Tène și romană). Biblioteca Thracologica 11 București.*

*Kotigorsko, V. G. 1997: Stamped ceramics of the Upper Tisza Region. Acta Musei Porolissensis 21, 800–808.*

*Lamiová-Schmiedlová, M. 1963: Dve sídliská z doby rímskej na východnom Slovensku. Slovenská Archeológia 11/1, 59–86.*

*Lamiová-Schmiedlová, M. 1969: Römerzeitliche Siedlungskeramik in der Südostslowakei. Slovenská Archeológia 17-2, 403–502.*

*Lamiová-Schmiedlová, M. 2000: Zriedkavé výzdobné motívy na neskororímskej keramike na východnom Slovensku. Seltene Verzierungsmotive auf spätkaiserzeitlicher Keramik in der Ostslowakei. Sborník Prací Filozofické Fakulty Brněnské Univerzity Studia Minora Facultatis Philosophicae Universitatis Brunensis 5, 15–24.*

*Lamiová-Schmiedlová, M.–Tomášova, B. 1995: Töpferöfen von der Wende des 4/5 Jh. in Ostrovany, Bezirk Presov. In: Kelten, Germanen, Römer in Mitteldonaugebiet von Ausklang der Latène-Zivilization bis zum 2. Jh. Brno–Nitra, 121–127.*

*Loskotová, Z. 2011: Die Töpferöfen der Przeworsk-Kultur in der Umgebung von Opava. In: Bemmann, J. – Hegewisch, M. – Meyer, M. – Schmauder, M. (eds): Drehscheibentöpferei im Barbaricum. Technologietransfer und Professionalisierung eines Handwerks am Rande des Römischen Imperiums. Akten der Internationalen Tagung in Bonn vom 11. bis 14. Juni 2009. Bonner Beiträge zur Vor- und Frühgeschichtlichen Archäologie 13. Bonn, 241–257.*

*Luštiková, L. 2013: Šebastovce-Barca, keramika doby rímskej. Šebastovce-Barca, Keramik der Römerzeit. ŠtudZvest (Študijné zvesti Archeologického ústavu Slovenskej Akadémie vied) 54, 91–110.*

*Madyda-Legutko, R. – Tunia, K. 2008: Late Roman and Early Migration Period in Polish Beskids, Mts., Carpathians. Settlement Aspect. In: (Niezabitowska-Wisniewska, B. – Juściński, M. – Łuczkiwicz, P. – Sadowski, S. eds): The Turbulent Epoch. New materials from the Late Roman Period and the Migration Period. Monumenta studia gothica 5. Lublin, 227–248.*

*Madyda-Legutko, R. – Judyta Rodzińska-Nowak, J. 2012: Interkulturelle Beziehungen der Bevölkerung der Przeworsk-Kultur in der Karpatenzone am Übergang von der frühen zu der jüngeren römischen Kaiserzeit am Beispiel des Gräberfeldes von Prusiek, Fst. 25, Gde. Sanok. Interkulturní vztahy lidu Przeworské Kultury v Karpatské oblasti na přelomu starší a mladší doby římské na příkladu pohřebiště v Prusieku, lok. 25, obec Sanok. Přehled výzkumů 53-1, 75–87.*

*Madyda-Legutko, R. – Judyta Rodzińska-Nowak, J.– Zagórska-Telega, J. 2013: New data concerning the cultural situation in the basin of the Upper San River during the Roman Period Új adatok a Felső-San-vidék római kori kulturális helyzetéhez. A Jósa András Múzeum Évkönyve 55, 409–422.*

*Masek Zs. 2012: Római császárkori települések Kántorjánosi és Pócspetri határában. Kaiserzeitliche Siedlungen in den Gemarkungen von Kántorjánosi und Pócspetri. In: Ante viam stratam. A Magyar Nemzeti Múzeum megelőző feltárásai Kántorjánosi és Pócspetri határában az M3 autópálya nyírségi nyomvonalán. (Szerk.: Szabó, Á. – Masek Zs.) Budapest, 179–342.*

*Matei, A. V. 1997: Die Töpferöfen für graue stempelverzierte Keramik aus Zalău. Cuptoarele pentru ars ceramică cenușie ștampilată descoperite la Zalău. Acta Musei Porolissensis 21, 367–455.*

*Matei, A. V.–Stanciu, I. 2007: Vestigii epoca Romană (sec. II-IV. P.Chr.) în spațiul Nord-Vestic al României. Funde der römischen Kaiserzeit (2-4. Jh. N. Chr.) im Nordwestgebiet Rumäniens. Zalău-Cluj-Napoca.*

*Miklósity, Sz. M. 2009: Római kori pecsételt kerámia Biatorbágy-Kukorica dűlő lelőhelyről. Stamped pottery from the Roman Period at Biatorbágy-Kukorica dűlő. In: K. Ö. Sz. Évkönyv Budapest, 223–251.*

*Nagy, A. 2017: Resatus and the stamped pottery. Aquincum Studies 1. Budapest*

*Nagy A. – Szakmány Gy. 2015: Savariában talált rhodosi amphorák petrográfiai elemzése. Petrographic analysis of rhodian amphorae from Savaria. Archeometriai Műhely XII/3, 177–187.*

*Olędzki, M. 1999: The Upper Tisza Basin in the Roman Period. Remarks on Settlement and Cultural Changes. In: Tejral, J. (Hrsg.): Das mitteleuropäische Barbaricum und die Krise des römischen Weltreiches im 3. Jahrhundert. Brno, 105–136.*

*Olędzki, M. 2014:* The Przeworsk culture and the problem of dating of the beginnings of the Blažice–Bereg culture. Kultura przeworska a zagadnienie datowania początków kultury Blažice-Bereg. In: Balázs Komoróczy (ed.) Sociální diferenciacie barbarských komunit ve světle nových hrobových, sídlištních a sběrových nálezů (Archeologie barbarů 2011). Soziale Differenzierung barbarischer Gemeinschaften im Lichte der neuen Grab-, Siedlungs- und Lesefunde (Archäologie der Barbaren 2011) Brno, 317–334.

*Olędzki, M. 2017:* The problems connected with the identification and localisation of the Suebian tribe of Buri. *Ephemeris Napocensis* 27, 187–196.

*Pastor, J. 1960:* Sídlisko v Blažiciach. *Archeologické Rozhledy* 12, 800–810.

*Peškar, I. 1972:* Fibeln aus der römischen Kaiserzeit in Mähren. Praha

*Pintye G. 2010:* Császárkori településrészlet Beregből: Mol 49. lelőhely (Beregdaróc-Zsid). *Gesta* 9, 98–152.

*Prohászka P. 2006:* Das vandalische Königsgrab in Osztrópataka. *Monumenta Germanorum Archaeologica Hungariae* 3. Budapest

*Quast, D. 2006:* Wanderer zwischen den Welten. Die germanischen Prunkgräber von Stráže und Zakrów. *RGZM Monographien* Bd. 6.

*Salamon, Á. 1966:* Észak-Magyarország császárkori történetének kutatása. *Antik Tanulmányok* 13, 84–87.

*Salamon, Á. 1970:* Zalkod–Jakab domb. Kaiserzeitliche Siedlung. *Antaeus* 1, 143–144, Taf. 31.

*Soós, E. 2011:* Császárkori ipari (?) tevékenység nyomai a Hernád völgyében The signs of roman age industry in the Hernád-valley. *Archeometriai Műhely* 2011/4, 329–336.

*Soós, E. 2014:* Garadna–Kastély zug. A római császárkori germán településrészlet újraértékelése. Garadna–Kastély zug. Reassessment of a germanic settlement from the Roman Age. *Communicationes Archaeologicae Hungariae* 121–152.

*Soós, E. 2014b:* Adatok a barbaricum-i bepecsételt díszítésű kerámia elterjedési köréhez. Garadna–Elkerülő út 1. lelőhely pecsételt töredékei — The distribution of stamped pottery in the Barbaricum. The stamped pottery fragments from Garadna-Bypass, Site 1. In: *Avarok pusztái. Régészeti tanulmányok Lőrinczy Gábor 60. születésnapjára. Avarum Solitunides. Archaeological studies presented to Gábor Lőrinczy on his sixtieth birthday.* (Szerk: Anders, A. – Balogh, Cs. – Türk, A.) *Opitz Archaeologica* 6. MTA BTK MÖT Kiadványok 2. Budapest, 183–192.

*Soós, E. 2015: A Hernád-völgy településtörténete a Kr. u. 1-4/5. században. Doktori disszertáció ELTE BTK Történelemtudományi Doktori Iskola, Budapest*

*Soós, E. 2016: Settlement history of the Hernád Valley in the 1<sup>st</sup> to 4/5<sup>th</sup> centuries AD (Thesis abstract). Dissertationes Archaeologicae Ser. 3. No. 4, 449–466.*

*Soós, E. 2017: Przeworsk település részlete a Zemplén lábánál. Adatok a Przeworsk-kvád kapcsolatokhoz (Settlement Remains of Przeworsk Culture in Zemplén Mountains (northern Hungary). New Data about Przeworsk-Quad Relations) In: Merva Szabina (eds): Hadak útján XXII. A népvándorlaskor fiatal kutatóinak XXII. konferenciája. Visegrád, 2012. október 2–4. (Assembly of Young Scholars on the Migration Period XXII Visegrád, October 2–4, 2012) ALTUM CASTRUM. A visegrádi Mátyás Király Múzeum füzetek 9. (Szerk./Ed. Merva Sz.) Visegrád, 17–56.*

*Švaňa, K. 2011: The influence of Roman provincial pottery manufacture on the production of the Suebic wheel-made pottery. Anodos 10/2010, 283-294.*

*Szebenyi T.- Fintor K.- Raucsik B.- Bozsó G. – Tóth M. 2014: Archeometriai vizsgálatok Üllő 5. lelőhelyről származó pecsételt töredékeken. Archaeometric analysis of potsherds with stamped ornamentation from Üllő 5. Archeometriai Műhely XI/1, 39–46.*

*Vaday, H. A. 1989: Die sarmatischen Denkmäler des Komitats Szolnok. Ein Beitrag zur Archäologie und Geschichte des sarmatischen Barbaricums. Antaeus 17-18.*

*Vakulenko, L. 2008: The eastern Carpathians in the Late Roman Period. Acta Archaeologica Carpathica XLII-XLIII, 141–183.*

*Varsik, V. 2011: Germánske osídlenie na východnom predpolí Bratislavy. Sídlišká z doby rímskej v Bratislave-Trnávke a v okolí. Archaeologica Slovaca Monographiae Tom. XVIII. Nitra.*

*Végh K. 1964: Koracsászárkori település maradványa a miskolci Szabadság téren. Frühkaiserzeitliche Siedlungsreste auf dem Szabadság tér in Miskolc. The relic of a settlement from the late period of the empire (Miskolc). A Herman Ottó Múzeum Évkönyve 4, 45–62.*

*Végh K. 1975: Régészeti adatok Észak-Magyarország I-IV. századi történetéhez. Archaeologische Beiträge zur Geschichte Nordostungarn im I-IV. Jh. u Z. A Herman Ottó Múzeum Évkönyve 13-14, 65–130.*

*Végh K. 1985: Császárkori telep Észak-Magyarországon. Kaiserzeitliche Siedlung in Nordungarn. Archaeologische Beiträge 112, 92–108.*



*Végh K. 1989: Császárkori telep Miskolc-Szirmán. Kaiserzeitliche Siedlung in Miskolc-Szirna. A Herman Ottó Múzeum Évkönyve 27, 463–500.*

*Végh K. 1999: Császárkori telep Szirmabesenyőn. Eine Siedlung aus der Kaiserzeit in Szirmabesenyő. A Herman Ottó Múzeum Évkönyve 37, 181–223.*