

ECONOMIC HISTORY OF THE MEDIEVAL ISHMAELITE COMMUNITY OF HAJDÚBÖSZÖRMÉNY (12TH–13TH CENTURIES) AS REFLECTED IN THE ARCHAEOBOTANICAL RECORD

FERENC GYULAI¹ – LÁSZLÓ SZOLNOKI² – ÁRPÁD KENÉZ³ – ÁKOS PETŐ⁴

Archaeologists of the Déri Museum in Debrecen uncovered the remains of a 12th–13th-century settlement in the course of the excavation conducted on the outskirts of Hajdúböszörmény in 2011. Linguistic and archaeological studies had earlier suggested that a settlement of the so-called Ishmaelites of Nyír from the Árpád Period had lain in the town's northern part. Our research group, engaged in integrated archaeobotany at the Department of Nature Conservation and Landscape Ecology of Szent István University, contributed archaeobotanical evidence to bolster the supposition that the occupants of the medieval settlement had indeed been Muslim Ishmaelites.

FOREWORD

In 2011, the Directorate of the Hajdú-Bihar County Museums conducted three archaeological excavations in Hajdúböszörmény (Téglagyár Site 2), where the remains of a 12th–13th-century settlement yielding a rich array of finds were uncovered (Fig. 1).⁵ In addition to the high number of pottery and animal bones relative to the size of the investigated area, several hundred metal artefacts also came to light. Aside from clay vessels, knives, horseshoes, keys, and a variety of iron tools and implements, the

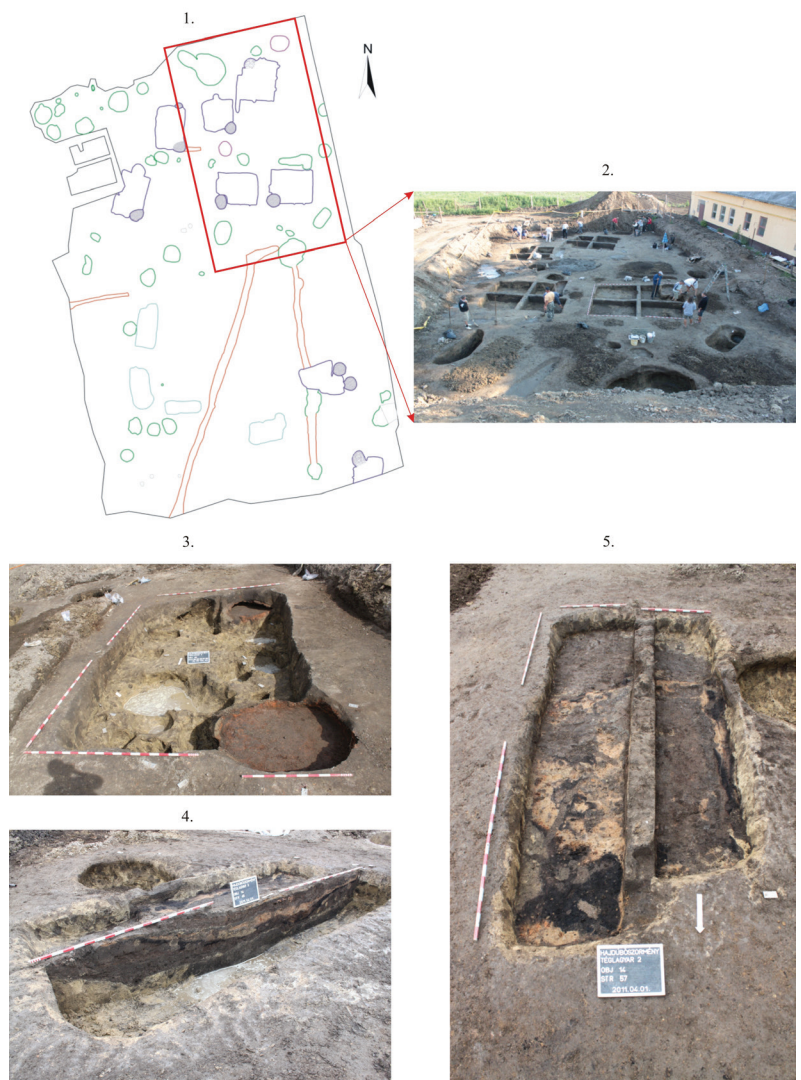


Fig. 1: Plan of the excavation at Hajdúböszörmény (1), view of the excavation (2), and typical settlement features (3–5) (courtesy of the Déri Museum, Debrecen)

¹ Department of Nature Conservation and Landscape Ecology, Faculty of Agricultural and Environmental Sciences, Szent István University

² Déri Museum, Debrecen

³ Independent archaeobotanical researcher

⁴ Department of Nature Conservation and Landscape Ecology, Faculty of Agricultural and Environmental Sciences, Szent István University

⁵ Ten large semi-subterranean houses, four semi-subterranean workshops, two open-air ovens, five ditch sections, three wells, roughly fifty pits, storage pits, and post-holes.



Fig. 2: Pottery from the assumed 12th–13th-century Ishmaelite settlement (courtesy of the Déri Museum, Debrecen)



Fig. 3: Coins found during the excavation (courtesy of the Déri Museum, Debrecen)

finds included also silver, copper, bronze and tin costume, and casket mounts as well as buckles, finger-rings, bracelets, lead weights, a Roman gemma, a small piece of gold and forty-eight coins, one of which was quite certainly a Byzantine, while the rest derived from the Hungarian kings Géza II, István III and Béla II (Figs 2–3). There was a strikingly high number of water-carrying vessels and flasks in the ceramic inventory. One of the flasks was possibly of Byzantine origin and another represents a quite unique form whose analogue is only known from Esztergom.

The over six thousand animal bones are dominated by domestic species; the proportion of wild animals is negligible. Roughly two-thirds of the identified fragments came from cattle and it is noteworthy that no more than three pig bones were found in the entire assemblage.⁶ The number and origins of the coins, the pottery types and the species composition of the animal bones differs markedly from the find material recovered at other late Árpád Period settlements.

INTRODUCTION

ISHMAELITES IN THE CARPATHIAN BASIN

The literary sources of the Árpád Period often mention Muslims living in the Carpathian Basin, who are variously called Ishmaelites, Saracenes, Káliz and Böszörmény. Hungarian historians have since long been preoccupied with the ethnic identification of the Muslims living in medieval Hungary, with their arrival to and settlement in the Carpathian Basin, and their role in economic life. According to György Györffy, Muslims, among them the Káliz and Alans, arrived to the Carpathian Basin in larger numbers with the Kabars. He identified the so-called Maghribites with Muslims.⁷ In the 10th century, the Volga Bulgars, Pechenegs, Cumanians and Jász made up the majority of Muslims arriving to the Hungarian Kingdom. In contrast, Károly Czeglédy argued that while a few Muslim groups may have migrated to the Carpathian Basin at the time of the Hungarian Conquest, their majority came after this period.⁸ In his view, the Káliz arrived in several successive waves, for example with the Pechenegs and the Cumanians. Károly Mesterházy contended that the archaeological material from Hajdúböszörmény and Berekböszörmény could be associated with the Volga Bulgars who had joined the Hungarian tribes.⁹

⁶ The pig remains thus account for 0.05% (!), which is well below the usual 10–15% typical for Árpádian Age villages.

⁷ Györffy, György: *Tanulmányok a magyar állam eredetéről* (Studies of the origin of the Hungarian state). A Magyar Néprajzi Társaság Könyvtára (Budapest: Akadémiai Kiadó, 1959), 168.

⁸ Czeglédy, Károly: Az Árpád-kori mohamedánokról és neveikről (About Árpád Period Muslims and Their Names). *Nyelvtudományi Értesítő* 70 (1970), 254–259.

⁹ Mesterházy, Károly: Izmaeliták, böszörmények, volgai bolgárok (Ishmaelites, Böszörmény, Volga Bulgars). In: *Hajdúsági Múzeum Évkönyve* I (Hajdúböszörmény, 1973), 37–48.

THE TESTIMONY OF THE WRITTEN SOURCES

Canon IX of the *Decretum* issued at the Synod of Szabolcs in 1092 mentions “merchants called Ishmaelites” and “money-changers known as Káliz”.¹⁰ King Kálmán’s laws of 1100 only recognised the Jewish faith aside from Christianity, and the kingdom’s official policy was the assimilation of the Muslims into the realm’s Christian population.¹¹ Despite these hardships, the Muslims of Hungary resisted assimilation in the 12th century and they even strengthened their positions.¹² Arriving to the medieval Hungarian Kingdom in 1150, Abu Hamid al-Garnati,¹³ the Moorish traveller from Andalusia, lived in the land for three years and then described in detail what he had seen in his works. He designated the Muslim diaspora, which openly professed its faith, living in the Hungarian Kingdom as *al-Maghrib*.¹⁴ His descriptions indicate that the Muslim community served the Christian population only in times of war.

The Muslim communities serving the sovereign that kept their faith a secret were known as Khwarezmians. The Muslims serving and fighting in Géza II’s army are mentioned twice by Ioannes Kinnamos,¹⁵ the Byzantine Emperor Manuel Comnenus’ private secretary in his *Epitome rerum ab Ioanne et Alexio Comnenis gestarum*, a work covering the empire’s history between 1118 and 1180.¹⁶ The *Registrum Varadiense* of the Várad Chapter speaks about the Ishmaelites of Nyír (*Ishmaelitae de Nyr*) three times.¹⁷ The Ishmaelites of Pest, mentioned by the Anonymous Chronicler, also crop up in other sources, for example in 1213, when they are described as Saracens (*proventus Saracenorum de Pest*).¹⁸

Under the reign of András II, the Jews and the Ishmaelites were repeatedly prohibited from holding the offices of counts of the Treasury (*comes camerae*), mint-masters and money-changers (*monetarius*), salt intendants (*salinarius*) and tax-collectors (*tributarius*). This prohibition appears in the Golden Bull, in its renewal and in the Oath of Bereg of 1233.¹⁹ In 1221, Pope Honorius II implored the Queen of Hungary not to permit Christians to be the slaves of Muslims.²⁰

THE LINGUISTIC RECORD

One of the crucial points was the correlation between Ishmaelite and Böszörmény. The first convincing proof of their identical meaning comes from the Beszterce glossary drawn up in 1395: *izmaelita, besermen országa* [country of the Ishmaelite, the Böszörmény].²¹ Linguistic scholarship in the early 20th century con-

¹⁰ Závodszy, Levente: *A Szent István, Szent László és Kálmán korabeli törvények és zsinati határozatok forrásai (Függelék: A törvények szövege)* (Sources of Laws and Conciliar Decisions in St. Stephen, St. Ladislaus and Kálmán’s Age [Appendix: The text of the laws]). (Pápa: Jókai Mór Városi Könyvtár, 2002), 215.

¹¹ Szovák, Kornél – Veszprémy, László – Balogh, József – Szentpétery, Imre – Bartoniek, Emma – Deér, József – Domanovszky, Sándor – Jakubovich, Emil – Juhász, László – Madzsar, Imre – Pais, Dezső – Pukánszky, Béla: *Scriptores rerum Hungaricarum I–II. (Tempore ducum regumque stirpis arpadianae gestarum)* (Budapest: Nap Kiadó Bt., 1999), 1352.

¹² Erdélyi, László – Sörös, Pongrác: *A pannonhalmi Szent-Benedek-rend története I–XII* (History of the Pannonhalma Order of St. Benedict) (Budapest: Stephaneum Nyomda, 1902–1916).

¹³ He uses the expression *Unkūriyya* for the Hungarian Kingdom.

¹⁴ The expression *Maghribite* used by György Györffy can be derived from this expression.

¹⁵ Ioannis Cinnami or Ioannes Kinnamos

¹⁶ Moravcsik, Gyula: *Az Árpád-kori magyar történet bizánci forrásai* (Byzantine Sources of Hungarian History in the Árpád Period) (Budapest: Akadémiai Kiadó, 1988), 364.

¹⁷ Karácsonyi, János – Borovszky, Samu: *Registrum Varadiense ex aminum ferri candentis ordine chronologico digestum, descripta effigie editionis a. 1550 illustratum, sumptibusque Capituli varadiensis* (Budapest: Hornyánszky Viktor, 1903).

¹⁸ Fejér, Géza: *Codex Diplomaticus Hungariae ecclesiasticus ac civilis. vols I–XI* (Budae, 1829–1844).

¹⁹ Hóman, Bálint – Szekfű, Gyula: *Magyar Történet I* (History of Hungary I) (Budapest: Királyi Magyar Egyetemi Nyomda, 1928).

²⁰ Székely, György (ed.): *Magyarország Története II. Előzmények és magyar történet 1242-ig* (History of Hungary II. Antecedents and Hungarian History up to 1242) (Budapest: Akadémiai Kiadó, 1987), 888.

²¹ Benkő, Lóránd (ed. in chief): *A magyar nyelv történeti-etimológiai szótára I* (Historical-Etymological Dictionary of the Hungarian Language I) (Budapest: Akadémiai Kiadó, 1967).

vincingly demonstrated that Ishmaelites were called Böszörmény in Hungarian.²² The Arab word *Muslim*²³ was transformed into Böszörmény through Turkish, Mongolian and Slavic mediation. It was believed at the time that the name itself probably did not denote a separate ethnic group, although this is contradicted by Plano Carpini's report that Khan Ögödei sent Batu against the "land of the Böszörmény"²⁴ and that a population group called *bisermen* lived among the Votiak (Udmurt).²⁵

THE ARCHAEOLOGICAL RECORD

Until 1979, there were no archaeological finds that could be linked, even indirectly, to the medieval Muslims of Hungary. That year, Ildikó M. Antalóczy uncovered a few settlement features of an Árpád Period village at Hajdúböszörmény.²⁶ The exhibition opened in the Hajdúság Museum in 1992 presented the results of the excavation through the finds from the site.²⁷ The archaeological evidence strongly suggested that the settlement of the Ishmaelites of Nyír mentioned in the *Regestrum Varadiense* could be identified with the remains of the Árpád Period settlement uncovered at the Hajdúböszörmény-Téglagyár site.²⁸

A settlement and burial ground excavated by Orosháza yielded additional details about the Muslim population of the medieval Hungarian Kingdom.²⁹ The household pottery types uncovered on the settlement clearly indicated that the dietary habits of the settlement's occupants differed substantially from the period's general dietary culture, i.e. from that of the Christian population, while finds of scale pans attested to a community engaged in trading activities.³⁰

²² Melich, János: Néhány magyar népnévről. A szerecseny és a böszörmény (About some Hungarian peoples' names. The Saracen and the Böszörmény). *Magyar Nyelv* 5 (1909), 385–393.

²³ Meaning a follower of Islam

²⁴ Györffy, György: *Napkelet felfedezése. Julianus, Plano Carpini és Rubruk útjelentései* (Discovering the Orient. Julian, Plano Carpini and Rubrik's Travel Reports) (Budapest: Gondolat Kiadó, 1965).

²⁵ Czeglédy, Károly: Az Árpád-kori mohamedánokról és neveikről (About Árpád Period Muslims and Their Names). *Nyelvtudományi Értesítő* 70 (1970), 254–259; Schünemann, Konrad: Ungarische Hilfsvölker in der Literatur des deutschen Mittelalters. *Ungarische Jahrbücher* 4 (1924), 99–115; Hrbek, Ivan: Ein arabische Bericht über Ungarn. *Acta Orientalia* 5 (1955), 205–230.

²⁶ M. Antalóczy, Ildikó: A nyíri izmaeliták központjának, Böszörmény falunak régészeti leletei I. (Archäologische Funde im Dorf Böszörmény, dem Zentrum der Ismaeliten in der Nyír I.) *Hajdúsági Múzeum Évkönyve* 4 (1980), 131–170.

²⁷ Hajdú, Zsigmond – Nagy, Emese Gyöngyvér: A nyíri izmaeliták központjának, Böszörmény falunak régészeti leletei II. (Die Archäologischen Funden des Dorfes Böszörmény, des Zentrums der Ismaeliten der Nyírgegend II.) *Hajdúsági Múzeum Évkönyve* 9 (1999), 31–68.

²⁸ Szabó, László: Megjegyzések a „böszörmények” kérdéséhez a Hajdúböszörmény határában talált Árpád-kori falu régészeti leletei alapján (Comments on the question of “Ishmaelites” on the basis of Árpád Period archaeological finds recovered from the outskirts of Hajdúböszörmény). *Debreceni Déri Múzeum Évkönyve* (2002–2003), 73–108.

²⁹ Rózsa, Zoltán – Balázs, János – Csányi, Viktor – Tugya, Beáta: Árpád Period Muslim Settlement and Cemetery in Orosháza. *Hungarian Archaeology*, 2014/Autumn, 1–7. (last accessed 18.04.2016).

³⁰ ‘On the basis of the data suggesting a large number of animals slaughtered at a young age, one of the Islamic world's important celebrations also comes into the picture. Eid al-Adha (the Feast of the Sacrifice) is connected to Ramadan, following it by 70 days, so its date varies from year to year. According to religious prescriptions, on this day young animals – primarily cattle, sheep or goats – of flawless quality are sacrificed. The small ruminants with a fall-spring mortality and the calves butchered for the most part in spring-summer “fit together” in a way, and form a profile that corresponds to Islamic religious prescriptions.’ Rózsa, Zoltán – Balázs, János – Csányi, Viktor – Tugya, Beáta: Árpád Period Muslim Settlement and Cemetery in Orosháza. *Hungarian Archaeology*, 2014/Autumn, 1–7. (last accessed 18.04.2016).

METHODOLOGICAL CONSIDERATIONS

In order to gain an insight into the dietary habits, the households and the economy of the settlement's one-time occupants, we systematically collected anthropogenic sediment samples³¹ from the excavated archaeological features. We found plant macrofossils in almost all of the samples, whose weight totalled 187 kg.³² However, the distribution of the remains was quite uneven: some features yielded a higher number, while others a low number of remains.³³

RESULTS OF THE ARCHAEOBOTANICAL ANALYSES

A total of 2705 charred grains of 49 plant species and seven food remains were recovered. The plant remains predominantly came from cultivated species as well as from weeds and taxa of natural and human environment. The plant remains are presented according to their human exploitation: cereals,³⁴ followed by weeds,³⁵ vegetables,³⁶ fruit-³⁷ and fibre plant remains,³⁸ the remains of wild fruits collected from the surrounding land,³⁹ and the taxa representing the natural vegetation.⁴⁰

In terms of the number of remains, the dominant species was barley (704 pieces), followed by rye (698 pieces) and common wheat (293 pieces), then millet (35 pieces) (*Fig. 4*) and oat (14 pieces). Stray finds of emmer wheat (4 pieces), an ancestral species whose remains were also identified, add a rather archaic hue to the assortment of cereals. Barley played an important role in the occupants' life: it was suitable both for fodder and for human con-



Fig. 4: Millet (Panicum miliaceum L.)
(photo: Dr. Gábor Turcsányi)



Fig. 5: Seed and flower of small-seeded lentil (Lens microsperma Medik.) (photo: Dr. Gábor Turcsányi)

³¹ For a discussion of anthropogenic sediment and its definition as used in household archaeology, see Pető, Ákos – Kenéz, Árpád: Geoarchaeological and Archaeobotanical Methods in Activity Area Analysis. *Hungarian Archaeology*, 2015/Winter, 1–14. (last accessed February 01.02.2016).

³² The twenty-three samples collected from the settlement features were wet-sieved using a series of sieves. The weight of the samples collected from the more shallow, 0.15–0.30 m deep features such as houses, several pits, and the ovens ranged between 500 and 3000 g. In contrast, the samples from the wells always exceeded 10 kg.

³³ The full numerical statistics of the archaeobotanical material is not included here; however, it must be noted that the number of remains ranged between 2 and 624, while the number of remains per kilogram of anthropogenic sediment ranged between 0.5/kg and 106/kg. The highest value was represented by Feature 148, a pit, the lowest by Feature 187, a well.

³⁴ 8 species, 2538 grains.

³⁵ 13 species, 63 seeds/grains.

³⁶ 4 species, 24 seeds.

³⁷ 2 species, 2 seeds.

³⁸ 1 species, 1 seed.

³⁹ 3 species, 4 seeds.

⁴⁰ 17 species, 40 seeds/grains.



Fig. 6: Watermelon seed (*Citrullus lanatus* [Thunbg.] Mats. et Nak.) (photo: Dr. Zoltán Szabó)

sumption, at least judging from the fact that multi-rowed barley – probably six-rowed (131 pieces) and two-rowed (65 pieces) – could be distinguished among the well-preserved hulled barley grains. We also identified two-rowed naked barley (38 pieces), a species also known from earlier periods, mainly from prehistory, which could be used for preparing various dishes without the need for hulling.

The high number and wide range of weeds are a reflection of the local cultivation of the above cereal species. Their overwhelming majority represents weed species found beside cereals sown in autumn: fool's parsley, common corn-cockle, common wild oat, brome, rye brome, black-bindweed, charlock, annual woundwort, common vetch, cow wheat, and common melilot. The range of weeds accompany-

ing spring-sown cereals, to which the weed species of stoop crops can be assigned as well, is much lower: flax, poison dandelion or cockle and hooked bristlegrass, and garden huckleberry can be tentatively assigned to this category too. The wheat rachis fragments that remain after threshing are an indication that the cereals grown near the settlements were processed locally.

The settlement's rich supply of plants was based not only on the diversity of cereals, but also on a developed vegetable cultivation in the form of horticulture. In addition to ancient small-seeded lentil (9 pieces) (Fig. 5), we also identified seeds of archaic field pea (11 pieces). Finds of watermelon seeds (2 pieces) (Fig. 6) and cabbage seeds (2 pieces) are among the earliest representatives of these species from the Carpathian Basin.

We also identified the remains of cultivated fruits: an almost completely intact large thin-shelled walnut and half of a sour cherry shell. The samples also yielded seeds of wild fruits such as mulberry (1 piece), blackthorn (1 piece), and blackberry (2 pieces). The above list of food and crop plants is rounded off by hemp (1 seed).

We used a so-called plant sociological and ecological system based on the habitat-requirements of various species for the eco-sociological assessment of the plant remains.⁴¹ Taking the habitat grouping of the identified species as a starting point, the samples yielded a high proportion of meadow and pasture species. The seeds of chickpea milkvetch, honeywort, wild carrot, meadow fescue, common henbit, hop clover, ribwort plantain, sheep's sorrel, and wall germander quite certainly originated from the pastures where the livestock were pastured or from the hay fed to animals that came from these pastures.

The number of ruderals from the one-time settlement was also quite high. These ruderals, or trampling-tolerant species, came from the immediate environs of the houses, from the roadside, ditch banks and animal pens: cockspur, lamb's quarters, creeping thistle, wall barley, danewort, elderberry, and cheeseplant.

One of the main goals of our research was the identification of the Muslim Ishmaelites. In addition to the animal bone assemblage, the number and composition of the plant remains as well as of the food remains can be regarded as quite distinctive and as differing substantially from the archaeobotanical material of the Árpád Period villages inhabited by a Christian population. Several types of dishes could be prepared from the cultivated plants as shown by the recovered food remains that came from meaty porridges, millet porridge, flatbread, bread, groats porridge, small cakes, and the like.

⁴¹ Jacomet, Stefanie – Brombacher, Christoph – Dick, Martin: Archäobotanik am Zürichsee. *Zürcher Denkmalpflege. Monographien* 7 (1989), 348; Ellenberg, Heinz: Zeigerwerte der Gefäßpflanzen Mitteleuropas. *Scripta Geobotanica* 9 (1979), 97.

CONCLUSION

The composition of the archaeobotanical assemblage from the Hajdúböszörmény settlement indicated the plant remains of a closed community since the material differed substantially from the plant cultivating traditions of other Árpád Period settlements (Fig. 7).⁴² We could distinguish several traits that were only typical for this settlement and, consequently, of the Böszörmény community living here:

- (1) We found fewer cereal species and the composition of the species also differed. Similarly to the period's other sites, barley was the dominant cereal species at Hajdúböszörmény too. The proportion of two-rowed hulled and two-rowed naked barley was higher than at other Árpád Period sites. The strikingly high number of rye grains was also quite unusual and a trait specific to this site.
- (2) Although there were no differences in terms of legumes (lentils, pea), the species composition of vegetables differed: cabbage and watermelon have been attested at this site only.
- (3) Among the fruit species, walnut and sour cherry have not yet been encountered on other Árpád Period sites.
- (4) The hemp seed, which appears to have been used as a drug owing to its charred condition, has to date only been attested on this site. While hemp seeds used for relieving pain and for their narcotic effect abound in the archaeobotanical assemblages of the Hungarian Conquest period,⁴³ this plant disappeared from among the plant finds of later periods, after the ancient Hungarians had converted to Christianity.
- (5) The wild fruits collected in the settlement's broader area (mulberry, blackthorn, and blackberry) too differ from the species occurring on other Árpád Period settlements.

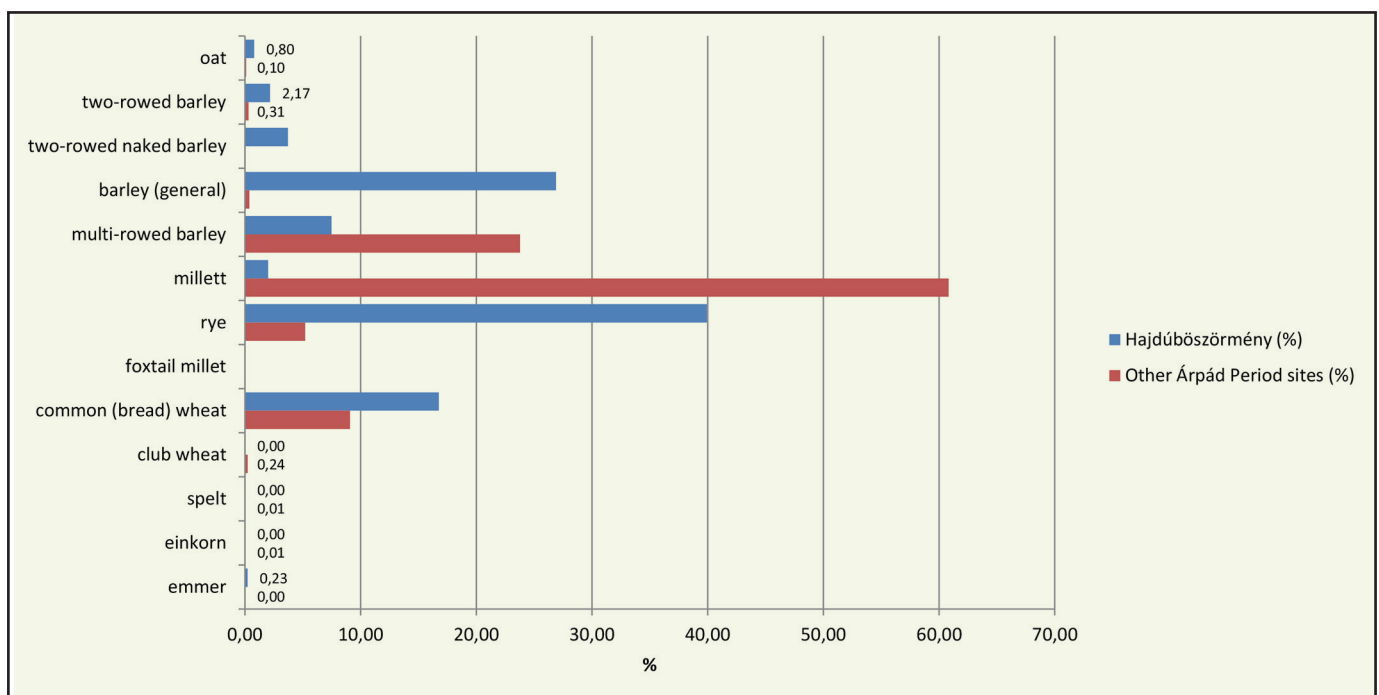


Fig. 7: Relative frequencies of cereal remains of Árpád Period and of Hajdúböszörmény

⁴² Cegléd-Madarászhalom, Győr-Gabona Square, Győr-Szeszgyár, Rákoskeresztúr-Újmajor, Kapuvár-Feketevár, Esztergom-Kossuth Street, Vác-Széchenyi Street, Vác-Piac Street, Lébény-Billedomb, Szerbmonostor, Debrecen-Kölcsey Cultural Centre, Ebes-Zsong-völgy

⁴³ E.g. Edelény-Borsodi-földvár.

RECOMMENDED LITERATURE

MESTERHÁZY, KÁROLY

Izmaeliták, böszörmények, volgai bolgárok (Ismaeliten, Bösörmenien, Wolgabulgaren). *Hajdúsági Múzeum Évkönyve I.* (1973), 37–48.

M. ANTALÓCZY, ILDIKÓ

A nyíri izmaeliták központjának, Böszörmény falunak régészeti leletei I (Archäologische Funde im Dorf Böszörmény, dem Zentrum der Ismaeliten in der Nyir). *Hajdúsági Múzeum Évkönyve IV.* (1980), 131–170.

SZABÓ, LÁSZLÓ

Megjegyzések a „böszörmények” kérdéséhez a Hajdúböszörmény határában talált Árpád-kori falu régészeti leletei alapján (Anmerkungen zur Böszörmény-Frage auf Basis der archäologischen Funde eines im Weichbild von Hajdúböszörmény entdeckten arpadzeitlichen Dorfes). *Annales Musei Debreceniensis de Friderico Deri nominanti* (2002–2003), 73–108.

RÓZSA, ZOLTÁN – BALÁZS, JÁNOS – CSÁNYI, VIKTOR – TUGYA, BEÁTA

Árpád Period Muslim Settlement and Cemetery in Orosháza. *Hungarian Archaeology*, 2014/Autumn, 1–7. (last accessed 18.04.2016).