

A NEWLY DISCOVERED KÜNZING-TYPE ROMAN DAGGER FROM THE *LIMES* OF DACIA POROLISSENSIS

MONICA GUI,* HOREA POP**

REZUMAT: Prezentul articol analizează un pugio de tipul Künzing descoperit recent într-o zonă situată în spatele sectorului de limes din fața complexului de la Porolissum. Cu această ocazie celelalte patru pumnale de același tip cunoscute din provincia Dacia au fost reluate și discutate într-un cadru mai amplu. Pe baza unor analogii foarte apropiate a fost posibilă datarea preliminară a piesei eventual în perioada antonină târzie, precum și atribuirea ei unui grup de pugiones care ar fi putut fi produse de către același atelier. Este de remarcat că prin formă, mărime și mai ales prin unele particularități de construcție, pumnalul de față își găsește paralele exacte în unele din speciemenele incluse în binecunoscutul depozit de obiecte de fier de la Künzing, din Raetia.

CUVINTE-CHEIE: pugio; pumnal roman de luptă; Dacia Porolissensis; echipament militar roman; depozitul de la Künzing.

ABSTRACT: This paper analyses a recently found Künzing-type pugio originating from an area situated behind the limes stretch in front of Porolissum, lacking a more exact discovery context. On this occasion, the other four daggers of this type previously found on the territory of Roman Dacia were readdressed and discussed in a larger context. Based on close analogies it was possible to tentatively date the new find to the late Antonine period, as well as to assign it to a group which might have been manufactured in the same workshop. Of special note is the fact that its overall shape, size and, more importantly, construction peculiarities are paralleled by some of the daggers included in the well-known Künzing iron hoard from Raetia.

KEYWORDS: pugio; Roman battle dagger; Dacia Porolissensis; Roman military equipment; Künzing hoard.

DISCOVERY

The dagger under study was found in 2017 by a metal detectorist in a forested area on the course of an old ridge road located within the boundaries of Mirșid village, Sălaj County. The authorities were immediately informed and the piece, following all due legal procedures, was handed over to the Zalău County Museum of History and Art, where it could be restored and studied by specialists and eventually displayed for the public.

When unearthed, the dagger was still in its sheath (Fig. 1/1), which makes it an extraordinary find for Roman Dacia. The weapon appears to have been found at a very shallow depth. The place of discovery, located well away from any archaeological site, was checked by H. Pop and E. Pripon from the Zalău Museum, who made a trail trench at the spot. They managed to recover a few more fragments from the dagger, but no traces of structures or of any other archaeological features were found. What we can say for sure is that the find spot is situated behind the stretch of *limes* comprising linear fortifications, *burgi* and watchtowers in front of *Porolissum*, fairly close to the Roman road exiting the province and entering *Barbaricum* (Fig. 1/2).¹ Consequently, this discovery can be related to the *limes*.

* National History Museum of Transylvania, Cluj-Napoca, e-mail: monica_gui@ymail.com

** Zalău County Museum of History and Art, e-mail: horeapopd@yahoo.com.

¹ For a recent overview of the research carried out since the latter half of the 19th century in this *limes* segment, see Cociș 2016.

DESCRIPTION AND CONSTRUCTION DETAILS

The *pugio* was nearly complete, with only a few small fragments missing and a little damage to the tip of the pommel (Fig. 2/2, Fig. 3). We were fortunate enough to examine the piece shortly after its discovery and to benefit from additional information revealed during the restoration process.² Therefore, all the construction details could be clearly observed.

Dimensions:³

Total L = 41 cm.

Blade: L (without tang) = 31 cm; max. W (in the shoulders / guard area) = 9.59 cm; waist W = 6.03 cm; max. W under waist = 7.21 cm.

Blade and handle:

The blade of this *pugio* is long, very broad, highly waisted and long-pointed. The midrib, although visible on both sides of the blade, is only slightly pronounced and flanked by very shallow grooves. As characteristic for this type, the shoulders are straight. The tang, forged together with the blade, is clearly flat. The iron grip plates are also entirely preserved and the method of attachment to the tang is obvious. We are dealing with a composite handle with diamond-shaped section, riveted to the blade. Evidently, the grip plates were not directly attached: the flat tang⁴ would have been sandwiched between a pair of organic pieces that followed its outline and only afterwards encased by the thin iron grip plates riveted into place (Fig. 4/1).⁵ Although bone examples are known, these organic components were probably often made of hardwood, thus explaining why they are not usually preserved.⁶ There is proof that the edges of this type of composite handle were at least sometimes sealed by thin metal laminas, possibly made from copper-alloy,⁷ but these fragile components are seldom preserved and our dagger does not display any such remains. The shoulders of the blade each exhibit a rivet, matching those seen on the grip plate guards. One more rivet hole can be seen on the tang, exactly at the point where it broke off, while another one passed through the pommel. The handle is provided in the middle with two almost triangular side expansions and ends with a crescent-shaped pommel, features seen in most *pugiones* of this type.

Seath:

Only the metal components of the sheath survived. Originally, the piece would have been fashioned from wood or leather, encased by iron edge-guttering and suspension plates.⁸ In our case, the front side of the sheath appears to be made from one piece with backwards turned edges and cut-out panels, with the chape ending in a small, spherical expansion. An X-ray carried out during restoration revealed a very specific design of this chape (Fig. 2/1–2). Further analyses pointed out traces of copper and zinc alloy in that area.⁹ This suggests that the chape terminal could have been supplemented with an annular insert made from another metal (Fig. 4/2). If so, this was undoubtedly made for aesthetic purposes, possibly contrasting silvery iron with golden brass.

² For the excellent restoration work carried out by E. Pripon from the the Zalău County Museum of History and Art see his report in Pripon 2018.

³ L = length, W = width.

⁴ Another variant of this type, which actually predominates in the Künzing hoard and in general, was provided with a rod tang and a fully organic handle; see Herrmann 1972, p. 11, Abb. 14; Reuter 1999, p. 121.

⁵ See Herrmann 1972, p. 11; Bishop, Coulston 2006, p. 83. Despite changes in design, the same basic construction principles were maintained for the handles from the 1st to the 3rd centuries AD.

⁶ Saliola, Casprini 2012, p. 52–53.

⁷ One of the few examples on which this feature can be seen is a Künzing-type dagger found in Spain. See Fernández Ibáñez 2011, p. 78–79.

⁸ Herrmann 1972, p. 12; Bishop, Coulston 2006, p. 164; Saliola, Casprini 2012, p. 70–73.

⁹ Pripon 2018, p. 765.

Although this type of sheath often consisted only in the outer iron face, ours seems to have been completed by two iron back plates. These were provided with a pair of extensions which were bent over and riveted to the front of the sheath, holding the suspension rings (Fig. 4/2).¹⁰ Although these expansions are today visible only on the mouth plates, the trace of a rivet on one of the medial plates confirms that they were also provided with suspension rings.

As we know from numerous representational evidence (and not only), although *pugio* sheaths were equipped with two pairs of suspension rings, one at the mouth and the other in the middle section, only the former was actually used for the suspension of the weapon from the waist belt.¹¹ Before the introduction of the *spatha*, which hung from the baldric on the left side, soldiers wore their sword on the right and their dagger on the left, contrary to officers, in whose case it was the other way around.¹² Until the middle of the 2nd century AD, *cingulum* fittings included belt plates provided with frogs for attaching the dagger with the help of leather straps.¹³ However, considering the dating of the Mirşid *pugio*, of interest is the suspension mode in use afterwards, which employed a pair of matching buttons (Fig. 8/1), seen in various openwork belt sets originating especially from the Middle Danube area.¹⁴

DATING AND ANALOGIES

Taking into account all its characteristics, the new *pugio* from Mirşid can be ascribed without doubt to the last type of battle dagger used by the Romans. This is known as the final/ late, C, or, most commonly, as the Künzing type. This type of dagger, with a blade comparatively larger than that of the previous types, also defined by the inverted T-shaped handle with crescent pommel and generally undecorated sheath with cut-out panels, was already in use in the Antonine period, though the exact moment of its introduction remains uncertain.¹⁵ This fact is proven by a series of discoveries from Antonine contexts, such as the handle from Bar Hill or the specimen from Inveresk, early examples which link 1st to 3rd century types.¹⁶ Despite the longer and wider blade, on the whole this type used less metal than its predecessors, mainly because of the much simplified sheath.¹⁷

The name of the type is derived from the well-known discovery of a large number of such daggers (i.e. 51 and around 29 sheaths) inside the auxiliary fort at *Quintana-Künzing* (Raetia), in one of the chambers of the *principia* or immediately next to it, in what was considered to be the eastern *armamentarium*.¹⁸ The burial of the iron hoard, which included, apart from the *pugiones*, other weapons, implements and utility items, was dated to the middle of the 3rd century AD.¹⁹ Whether or not the daggers were still in use at such a late date is debated, many scholars believing that the hoard consisted of old and obsolete weapons.²⁰ Another point of reference for the abandonment of the dagger as side arm of the Roman soldier may be suggested by belt fittings. The sets of *Rahmen-* or *Ringschnallencingula*, generalised by the first decades of the 3rd century AD²¹ no longer included fittings that could serve to the suspension of daggers.²² There are, however, some clues that may indicate daggers were still present at a rather

¹⁰ For the construction of sheaths, see Kavanagh, Quesada 2009, p. 342–344.

¹¹ Kavanagh, Quesada 2009, p. 347; Saliola, Casprini 2012, p. 69.

¹² Ubl 1994, p. 137, 140.

¹³ Bishop, Coulston 2006, p. 106–108; Fischer 2012, p. 59–61.

¹⁴ Fischer 2012, p. 61–66.

¹⁵ Reuter 1999, p. 121, 123; Bishop, Coulston 2006, p. 134.

¹⁶ Bishop, Coulston 2006, p. 134.

¹⁷ Reuter 1999, p. 121.

¹⁸ Herrmann 1969, p. 129; Herrmann 1972, p. 9.

¹⁹ Herrmann 1969, p. 129–130; Herrman 1972, p. 9–11.

²⁰ Reuter 1999, p. 122; Ubl 1994, p. 144; Fischer 2012, p. 69.

²¹ See Bishop, Coulston 2006, p. 182–183; Coulston 2007.

²² Fischer 2012, p. 66–68.

late date. For instance, a fragment of a dagger blade was found at *Dura Europos*,²³ and a complete specimen uncovered near Razgrad might be connected to the battle of Abritus (251 AD).²⁴ In any case, most experts agree that *pugiones* were still in service at least until the reign of Septimius Severus, and perhaps even under Caracalla.²⁵

The new *pugio* from Mirșid, with its 31 cm long blade and measuring a total of 41 cm, is quite sizable. It is not as big as some of the largest specimens from Künzing, but it is definitely within the large-sized spectrum of Roman daggers.²⁶ Furthermore, it has a very wide blade (reaching almost 9.6 cm in the guard area). The closest analogies in terms of general shape and size are some of the daggers from the Künzing hoard (Fig. 5/1).²⁷ A further detail that connects them is the construction of the chape. Regarding the sheaths found at Künzing, F. R. Herrmann noted: 'Ihre Spitze endet gewöhnlich mit einem Kopf, bei feinerem Stücken kann sie aber auch länger ausgezogen und mit Messingringen verziert sein.'²⁸ Clearly, the quotation refers to precisely the same detail which was observed during the restoration of the sheath of the Mirșid dagger (see above). From what we know so far, this type of sheath decoration, possibly employing brass rings, is encountered only in these two cases, in Dacia and Raetia.

Other analogous finds from a nearer geographical area include the well-known dagger with sheath from Tuchyňa (Slovakian *Barbaricum*) (Fig. 5/4),²⁹ whose blade is 32 cm long and 7.6 wide, and the one from Nagybereki-Szalacska (Hungary) (Fig. 5/5),³⁰ of approximately the same size (31 × 8 cm). These appear to be late Antonine, the one from Hungary being probably lost during the time of the Marcommanic wars.³¹ In fact, because of the great resemblance between the pieces from Tuchyňa and Szalacska, Zs. Mráv hypothesised that they could have been manufactured by the same workshop which supplied the central Danubian armies with daggers.³² Another similar dagger comes from Široka (Croatia) and was attributed to the 3rd century.³³ We should note that our *pugio* is extremely similar to all these, except for the larger width of the blade in the shoulder area, which makes its waist appear more pronounced. We can see this outline, for instance, in the *pugio* from Cophthall Court (London), slightly smaller (Fig. 5/3) and dated to the 3rd century AD.³⁴ The decoration of the sheath though is different.

The main problem with the Künzing-type daggers is that many of them come from undated contexts³⁵ and this is also the case of the one from Mirșid. As mentioned above, there are questions even regarding the nature of the Künzing hoard, dated during the fall of the *limes*. Experts generally agree that this type was in use during the Antonine period and until the first decades of the 3rd century AD, but its characteristics did not change significantly during this interval. Consequently, unless found in a clear, dated context, these daggers cannot be dated more accurately. Therefore, we cannot put an exact date on this newly discovered *pugio*, but if the overall size and shape of the blade can be taken as guides, then it is more likely to belong to the late Antonine period, if not to the beginning of the 3rd century AD.

²³ James 2004, p. 148–149, no. 522.

²⁴ Radoslava, Dzanev, Nikolov 2011, p. 44, Cat. 47; see also Mráv 2015, p. 109, n. 8.

²⁵ Ubl 1994, p. 144; Reuter 1999, p. 121–122; Bishop, Coulston 2006, p. 164; Fischer 2012, p. 68–69; Saliola, Casprini 2012, p. 23–24; see also Mráv 2015, p. 109.

²⁶ According to Herrmann 1972, p. 11 the average length of the Künzing daggers was 40 cm and the average length of the blades was 28 cm, while the largest specimens (four) measured between 42.7 and 48.9 cm.

²⁷ See Herrmann 1969, Abb. 3/6–7; Herrmann 1972, Abb. 17.

²⁸ Herrmann 1972, p. 12.

²⁹ Krekovič 1994, p. 220–219, Fig. 7/14; Bishop, Coulston 2006, p. 134–135, Fig. 80/2–3.

³⁰ Mráv 2015, p. 108–114.

³¹ See Mráv 2015, p. 110, 114. Cf. Krekovič 1994, p. 220 who, based on the analogy with the Künzing *pugiones*, dates the find from Tuchyňa to the 3rd century.

³² Mráv 2015, p. 110.

³³ Kolak 2010, p. 256, no. 7.

³⁴ Bishop, Coulston 2006, p. 164. For the illustration of the dagger, see Spencer 1961, p. 215.

³⁵ See the comprehensive catalogue in Saliola, Casprini 2012.

OTHER KÜNZING TYPE DAGGERS FROM DACIA

A few other daggers of this type have been previously found on the territory of the Dacian province. However, none of these was complete with sheath.

In terms of geography, the closest is the *pugio* found in one of the barracks of the Roman auxiliary fort at Buciumi, Sălaj County, (Cat. 1, Figs. 6/1–2, 7/4),³⁶ on the northern frontier of Dacia Porolissensis. Unfortunately, although discovered in the course of archaeological excavations, the piece is not stratified and thus cannot be dated based on context. Consequently, several dating variants have been proposed, without any one being more secure than the other. Based on the similarity with some of the daggers from Künzing, L. Petculescu cautiously suggested a 3rd century dating.³⁷ Others instead saw it as an earlier, 2nd century dagger, something of a link with the later ones.³⁸ A side by side comparison of the Buciumi and Mirșid daggers (see Fig. 8/2) reveals that, although almost identical in terms of shape and construction, the former is much smaller, more slender and elegant, so an earlier 2nd century date appears more likely. It must be noted that the fact that it has a central triangular expansion on just one of the sides of the handle is most likely due to some damage it suffered and not because it was built that way.

There is a dagger currently in the collection of the National Hungarian Museum (Cat. 2, Fig. 7/2) for which the only known geographic indication is Transylvania, so it could be either from Dacia Superior or Porolissensis. Notwithstanding its deteriorated blade, it stands out because of its unusually large and oddly shaped handle: the central knob is missing and the pommel is irregular, somewhat spherical, possibly as result of a defect or damage. It is nevertheless classified as a Künzing-type *pugio*³⁹ and, in fact, similar handles can be seen on some of the specimens included in the Künzing hoard (Fig. 5/2).

Two other daggers are known from Dacia Inferior. The one from Racovița (Cat. 3, Figs. 6/3, 7/1), Vâlcea County, was discovered in what was believed to be the *horreum* of the auxiliary fort.⁴⁰ It was dated based on the similarity with the one from Buciumi (despite being larger) again between the middle of the 2nd and the middle of the 3rd centuries AD, possibly restricted to the 3rd century.⁴¹ In fact, it appears to be extremely similar to the one from Mirșid (Fig. 8/2), and even more so to those from Tuchyňa, Szalacska and Široka mentioned above. Unfortunately, the blade is damaged in the area of the shoulders, so we cannot determine exactly how wide it was. Moreover, from the published information and drawings it is impossible to make out the way the grip was assembled, but we can presume it was of the same construction as our *pugio*, since the ones with a rod tang were provided with a completely organic handle (see above).

The *pugio* from Desa (Cat. 4, Fig. 7/3), Dolj County, kept in a private collection, was never published and only a very short description and thumbnail photograph were available.⁴² Therefore, some caution is advisable.⁴³ The discovery circumstances remain unknown. All we can say is that a Roman fort and a settlement are known to have functioned in the area of Desa, which is across the Danube from

³⁶ Chirilă et al. 1972, p. 60, no. 1, pl. 57; Petculescu 2005, p. 408, no. 5, Fig. 1/5.

³⁷ Petculescu 2005, p. 406.

³⁸ Saliola, Casprini 2012, p. 22; See also Bishop, Coulston 2006, p. 88.

³⁹ Mráv 2015, p. 115–116, Fig. 6.

⁴⁰ Vlădescu 1983, p. 181; cf. Marcu 2009, p. 216–217 who doubts the identification of the building with a *horreum*, suggesting a storage or *fabrica* instead. Besides the *pugio*, several other pieces of equipment had been found there.

⁴¹ Petculescu 2005, p. 407.

⁴² Saliola, Casprini 2012, p. 113, no. 40, p. 106, A1/40.

⁴³ There is no mention in Romanian literature of this find. One should also note that there appears to be some confusion in Saliola and Casprini regarding specimens from Romania, probably arising from the use of only secondary (admittedly more accessible) sources. For instance they mention two daggers, of types II and III respectively, from Buciumi, but surely the type II (Saliola, Casprini 2012, p. 123, no. 186) is a mistake; no such discovery was ever made at Buciumi or in Romania for that matter.

Ratiaria.⁴⁴ Judging from its approximate scale, in terms of blade length and width this specimen comes closer to the Buciumi *pugio*, even though it is 2 cm longer (Fig. 8/2).

Aside from these daggers, some fragmentary sheaths belonging to the same type were also found. One was discovered during rescue excavations in *Apulum* – Alba Iulia (Cat. 5, Fig. 7/5), in what appears to be a private home located in the *canabae* of the legionary fortress. Based on the archaeological inventory, the edifice was dated between the end of the 2nd and the first half of the 3rd centuries AD.⁴⁵ In this case it is not hard to imagine that the piece was in possession of a veteran.

Another badly preserved sheath fragment comes from the *basilica* of the *principia* of the legionary fortress at *Potaissa* – Turda (Cat. 6, Fig. 7/6). Since *legio V Macedonica* arrived in Dacia after the Marcomannic wars, the find was assigned to the interval between 170 and 270 AD.⁴⁶

A somewhat atypical chape originates from *Drobeta* (Cat. 7, Fig. 7/7), but the exact find circumstances are unknown. The piece is decorated with incised dots and circular perforations. What is most unusual is that it was made from copper-alloy, not iron. Based especially on the decoration it was dated towards the middle of the 3rd century AD and a possible production somewhere on the *limes* of Moesia Superior was suggested.⁴⁷

COMMENTS AND CONCLUSIONS

Although, apart from the Mirșid dagger, four more Künzing-type *pugiones* were found in Roman Dacia, none of them contributes to the dating and use interval of the type. Quite surprisingly, despite the fact that two of the daggers were unearthed during archaeological excavations (i.e. at Buciumi and Racovița), they were dated solely based on analogies, without further clues drawn from their archaeological context, a context which remains very approximate. Their size alone (see Fig. 8/2), although it could be an indication for dating, with the larger and cruder specimens being later than the smaller, does not have a secure chronological value.

It is clear that all these pieces, including the one ‘from Transylvania’,⁴⁸ originate from areas with military activity. However, in lack of an accurate context it is impossible to even attempt an explanation as to how all these complete daggers ended up in the archaeological record. It is even harder for the Mirșid dagger, found together with its sheath. All we can do is speculate on the circumstances. When it comes to large and costly weapons such as swords, daggers, helmets etc., and especially complete and functional pieces, the possibility of an accidental loss is almost always excluded.⁴⁹ In fact, a study conducted on the state and discovery circumstances of 1st century Roman daggers reached the conclusion that most of the complete specimens, found with their sheaths, can be regarded as votive depositions, also pointing out that daggers in general hardly appear anywhere else than in connection to military bases.⁵⁰ However, the authors of the cited paper admit that 1st century *pugiones*, with their beautifully decorated sheaths, were marks of prestige and possibly even of rank and that, furthermore, the offering of weapons by soldiers and veterans faded after the 1st century AD.⁵¹ Consequently, their conclusion may not apply to the 3rd century weapons. Nevertheless, even if its material worth decreased, the battle dagger was still very important to soldiers and, as such, could constitute an appropriate offering made in a liminal space i.e. the *limes* separating the Roman world from *Barbaricum*. Then again, even if improbable,

⁴⁴ Tudor 1968, p. 230, 277.

⁴⁵ See Bounegru 2007.

⁴⁶ Petculescu 2005, p. 407.

⁴⁷ Petculescu 2005, p. 407.

⁴⁸ See Mráv 2015, p. 115.

⁴⁹ Thiel, Zanier 1994, p. 59.

⁵⁰ See Thiel, Zanier 1994.

⁵¹ Thiel, Zanier 1994, p. 68–69.

it was still not impossible for a soldier to have lost his *pugio* on patrol or on some other mission on the frontier.⁵² For the moment there are no clues to tip the scale in favour of any of the two interpretations (loss or ritual deposition).

A further point can be made on the production of these daggers. Similarities between various specimens found in different places have been pointed out, as well as what appears to be a rather sudden mass-production of this simplified type. All this suggests the existence of a number of common *fabri-cae* supplying the Roman army with state-issued *pugiones* and working according to provincial or even Empire-wide standards well before the time of Diocletian.⁵³ From the data we have so far, considering all the details and characteristics, it seems highly probable that the dagger from Mirșid was produced in the same workshop as at least some of the ones found in the Künzing hoard. Moreover, the five type III *pugiones* from Dacia can be tentatively assigned to three groups: the first comprises the Buciumi (Cat. no. 1, Figs. 6/1–2, 7/4) and Desa (Cat. no. 4, Fig. 7/3) daggers, which could to be the earliest, the second those from Mirșid (Figs. 2–3) and Racovița (Cat. no. 3, Figs. 6/3, 7/1), possibly of a somewhat later date, and the third just the atypical find from Transylvania (Cat. no. 2, Fig. 7/1). Furthermore, as discussed above, the Racovița dagger and possibly also the one from Mirșid could be paired with those from Tuchyňa, Szalacska and Široka. Of course, no definite conclusions regarding a possible common origin can be drawn in lack of more in-depth examinations.

The fact that before the actual restoration of this newly found dagger XRF and other analyses were carried out to determine, among others, its chemical composition is commendable.⁵⁴ Thus it can become a point of reference for future studies. One can only hope that other pieces found hereafter will benefit from thorough investigations. In this way we could find out more about the supply patterns of the Roman army in Dacia with military equipment.

CATALOGUE – LATE/ FINAL/ KÜNZING-TYPE ROMAN DAGGERS FROM DACIA

Complete daggers

1. Find spot: Buciumi (Sălaj County) auxiliary fort, barracks no. 5 (Figs. 6/1–2, 7/4).

Description:⁵⁵ almost complete, but without sheath; broad, waisted blade with reduced midrib flanked by two grooves; hilt with central knob, ending in a crescent-shaped pommel; total L = 37.5 cm; blade L = 26 cm; blade W = 6.7 cm; handle L = 12.5 cm.

Storage: County Museum of History and Art, Zalău, inv. no. CC 96/1969.

Literature: Chirilă et al. 1972, 60, no. 1, Pl. 57; Petculescu 2005, 408, no. 5, Fig. 1/5; Saliola, Casprini 2012, 115, no. 73.

2. Find spot: Transylvania, unknown circumstances (Fig. 7/2).

Description: almost complete, but without sheath; broad, waisted blade with chipped edges and midrib without side grooves; straight handle, without central expansion, ending in a rounded, spherical pommel, perhaps initially heart-shaped, but slightly deformed; total L = 39 cm; blade L = 24.2 cm; blade W = 8.5 cm; handle L = 14.65 cm.

Storage: National Hungarian Museum, Budapest, inv. no. 54.16.16.

Literature: Archaeológiai Értesítő 19, 1899, 366; Mráv 2015, 114–116, Fig. 6.

⁵² Another very interesting find originating from roughly the same area, only outside the known line of fortifications, is an inscribed copper alloy *pilum* collet (see Deac, Pop 2019). Unfortunately this is also a stray piece.

⁵³ Reuter 1999, p. 122–123.

⁵⁴ See Pripon 2018, Figs. 4–5.

⁵⁵ All the pieces are made from iron, unless stated otherwise.

3. Find spot: Racovița (Vâlcea County) auxiliary fort, *horreum* (?) (Figs. 6/3, 7/1).

Description: almost complete, though the shoulders of the blade are missing, as well as the sheath; broad, waisted blade with midrib; hilt with central expansion and crescent-shaped pommel; total L = 41.3 cm; blade L = 30 cm; blade W = 7.2 cm.

Storage: National Military Museum, Bucharest, inv. no. 37967.

Literature: Vlădescu 1983, 181, fig. 119; Petculescu 2005, 408–409, no. 6, Fig. 2/6.

4. Find spot: Desa (Dolj County), unknown circumstances (Fig. 7/3).

Description: almost complete, but without sheath; broad, waisted blade with midrib; handle with central expansion ending in a crescent-shaped pommel; total L = 39.5 cm; blade L = 27 cm; blade W = 6.9 cm.

Storage: private collection.

Literature: Saliola, Casprini 2012, 113, no. 40.

Dagger sheath fragments

5. Find spot: *Apulum* – Alba Iulia (Alba County), civilian habitation (*canabae*?), inside a chamber from a partially unearthed house (Fig. 7/5).

Description: partially preserved *pugio* sheath (the upper part, with the mouth plates is missing); dated between the end of the 2nd and the middle of the 3rd centuries AD; no exact dimensions or detailed description were provided; approx. preserved L = 25 cm; the circular chape terminal appears to be flat.

Storage: The National Museum of Unification, Alba Iulia.

Literature: Bounegru 2007, 164, Pl. 7/7.

6. Find spot: *Potaissa* – Turda (Cluj County) legionary fortress; *basilica* from the *principia* (Fig. 7/6).

Description: fragmentary triangular scabbard chape ending in a pseudo-spherical expansion, heavily corroded; dated c. 170–270; L = 7.3 cm; approx. W = 5.5 cm.

Storage: Turda Town Museum.

Literature: Petculescu 2005, 409, no. 7, Fig. 2/7.

7. Find spot: *Drobeta* – Drobeta-Turnu Severin (Mehedinți County), unknown circumstances (Fig. 7/7)

Description: copper alloy triangular scabbard chape ending in a spherical expansion; wavy central edge of exterior face, decorated with incised circles with central dot and under it three circular holes; dated to mid–3rd century AD.

Storage: Museum of the Iron Gates Region, Drobeta-Turnu Severin, inv. no. II 9275.

Literature: Petculescu 2005, 409, no. 8, Fig. 2/8.

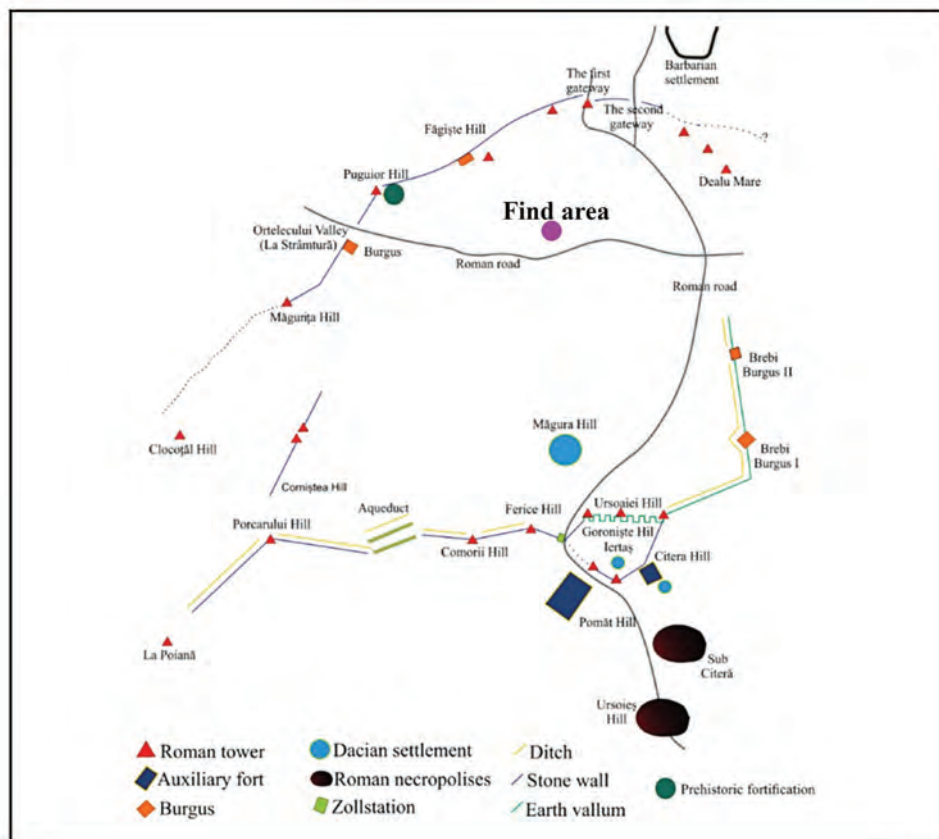
BIBLIOGRAPHY

- | | |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bishop, Coulston 2006 | M. C. Bishop, J. C. N. Coulston, <i>Roman Military Equipment from the Punic Wars to the Fall of Rome</i> , Oxford, 2006. |
| Bounegru 2007 | G. Bounegru, <i>Un edificiu de epocă romană descoperit la Apulum</i> , in: <i>Apulum</i> 44, 2007, p. 157–173. |
| Chirilă et al. 1972 | E. Chirilă, N. Gudea, V. Lucăcel, C. Pop, <i>Castrul roman de la Buciumi: Contribuții la cercetarea limesului Daciei Porolissensis</i> , Cluj, 1972. |
| Cociș 2016 | H. Cociș, <i>Linear Fortifications on the North-Western Frontier of Dacia Porolissensis. An Overview</i> , in: V. Bârcă (ed.), <i>Orbis Romanus and Barbaricum. The Barbarian around the Province of Dacia and Their Relations with the Roman Empire</i> , Cluj-Napoca, 2016, p. 41–75. |
| Coulston 2007 | J. C. N. Coulston, <i>Culture and Service: the Depiction of Soldiers on Funerary Monuments of the 3rd century AD</i> , in: L. de Blois, E. Lo Cascio (eds.), <i>The Impact of the Roman Army (200BC</i> |

- AD 476). *Economic, Social, Political, Religious and Cultural Aspects*, Leiden/ Boston 2007, p. 529–561.
- Deac, Pop 2019 D. Deac, H. Pop, *An Inscribed Pilum Collet from Dacia Porolissensis*, ZPE 211, 2019, p. 224–226.
- Fernández Ibáñez 2011 C. Fernández Ibáñez, *Un puñal militar de época romana hallado junto a la ciudad de Iuliobriga*, in: *Cuadernos de Campoo* 8, 2011, 76–98.
- Fischer 2012 Th. Fischer, *Zur Dochlauhängung im späten 2. Und frühen 3. Jahrhundert n. Chr.*, in: P. Jung, N. Schücker (eds.), *Utere felix vivas. Festschrift für Jürgen Oldenstein*, Bonn, 2012, p. 59–70.
- Herrmann 1969 F. R. Herrmann, *Der Eisenhortfund aus dem Kastell Künzing/Quinata. Vorbericht*, in: *Saalburg Jahrbuch* 26, 1969, p. 129–141.
- Herrmann 1972 F. R. Herrmann, *Die Ausgrabungen in den Kastell Künzing/Quinata*, Kleine Schrifte zur römischen Besetzungsgeschichte Sudwestdeutschland 8, Stuttgart, 1972.
- James 2004 S. James, *Excavations at Dura-Europos 1928–1937. Final Report VII. The Arms and Armour and other Military Equipment*, Oxford, 2004.
- Kavanagh, Quesada 2009 E. Kavanagh de Prado, F. Quesada Sanz, *Pugio Hispaniensis between Celtiberia and Rome. Current research and analysis of the construction of the sheaths*, in: Á. Morillo, N. Hanel, E. Martín (eds.), *Limes XX. Proceedings of the 20th International Congress of Roman Frontier Studies. Leon, 2006*, *Anejos de Gladius* 13, Madrid, 2009, p. 339–350.
- Kolak 2010 T. Kolak, *Military dagger (pugio)*, in: I. Radman-Livaja (ed), *Finds of the Roman Military Equipment in Croatia*, Zagreb, 2010, p. 256, no. 7.
- Krekovič 1994 E. Krekovič, *Military equipment on the territory of Slovakia*, in: *Journal of Roman Military Equipment Studies* 5, 1994, p. 211–225.
- Marcu 2009 F. Marcu, *Organizarea internă a castrelor din Dacia*, Cluj-Napoca, 2009.
- Mráv 2015 Zs. Mráv, *Egy Künzing-típusú római csatatór (pugio) Nagybereki-Szalacsckárol (Somogy-Megye)*, in: *Res Militares Antiquae* II, Szeged, 2015, p. 107–123.
- Petculescu 2005 L. Petculescu, *Daggers in Roman Dacia*, in: C. Mușețeanu, M. Bărbulescu, D. Benea (eds.), *Corona laurea: studii în onoarea Luciei Țeposu Marinescu, Târgoviște*, 2005, p. 405–412.
- Pripon 2018 E. Pripon, *Materie și materiale. Restaurarea unui pugio cu teacă*, in: S. Forțiu (ed.), *Arheovest VI in memoriam Marian Gumă. Interdisciplinaritate în Arheologie*, Szeged, 2018, p. 763–771.
- Radoslava et al. 2011 G. Radoslava, G. Dzanev, N. Nikolov, *The Battle at Abritus in AD 251: Written Sources, Archaeological and Numismatic Data*, in: *Archaeologia Bulgarica* 15/3, 2011, p. 23–49.
- Reuter 1999 M. Reuter, *Späte Militärdolche vom Typ Künzing. Anmerkungen zur Datierung und Verbreitung*, in: *Journal of Roman Military Equipment Studies* 10, 1999, p. 121–124.
- Saliola, Casprini 2012 M. Saliola, F. Casprini, *Pugio – Gladius brevis est. History and technology of the Roman battle dagger*, BAR IS 2404, Oxford, 2012.
- Spencer 1961 B. W. Spencer, *Two Additions to the London Museum*, in: *Transactions of the London and Middlesex Archaeological Society* 20, 1961, p. 214–217.
- Thiel, Zanier 1994 A. Thiel, W. Zanier, *Römische Dolche – Bemerkungen zu den Fundumständen*, in: *Journal of Roman Military Equipment Studies* 5, 1994, p. 59–81.
- Tudor 1968 D. Tudor, *Oltenia romană*, București, 1968.
- Ubl 1994 H. Ubl, *Wann verschwand der Dolch vom römischen Militärgürtel?*, in: C. von Carnap-Bornheim (ed.), *Beiträge zu römischer und barbarischer Bewaffnung in den ersten vier nachchristlichen Jahrhunderten*, Lublin/ Marburg 1994, p. 137–144.
- Vlădescu 1983 C. M. Vlădescu, *Armata romană în Dacia Inferior*, București, 1983.



1



2

Fig. 1. 1. The Roman dagger from Mirșid before restoration (photo: Zalău County Museum of History and Art).
 2. The area in which the *pugio* was found (marked with purple) related to the *limes* (after Cociș 2016, Pl. XIV).

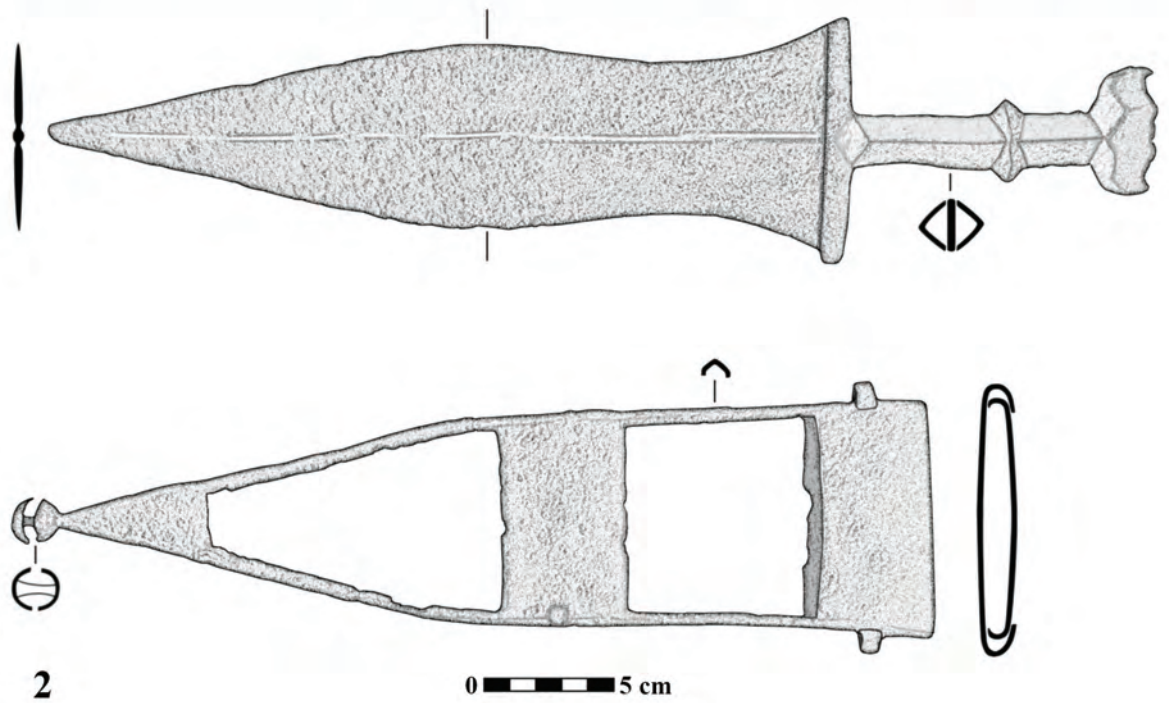
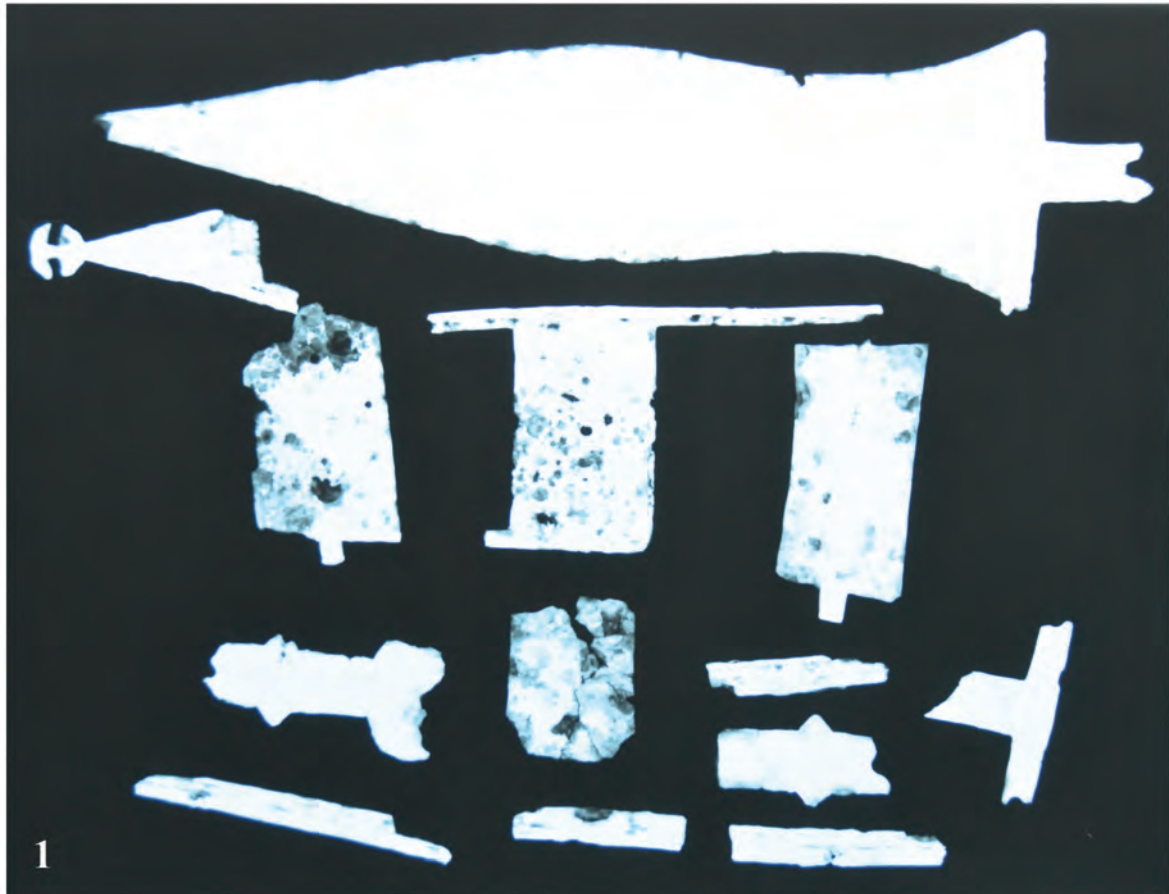


Fig. 2. 1. X-ray of the dagger prior to restoration (Pripon 2018, Fig. 3). 2. Drawing of the Mirșid pugio.



Fig. 3. Photograph of the Mirșid *pugio* (photo: Zalău County Museum of History and Art).

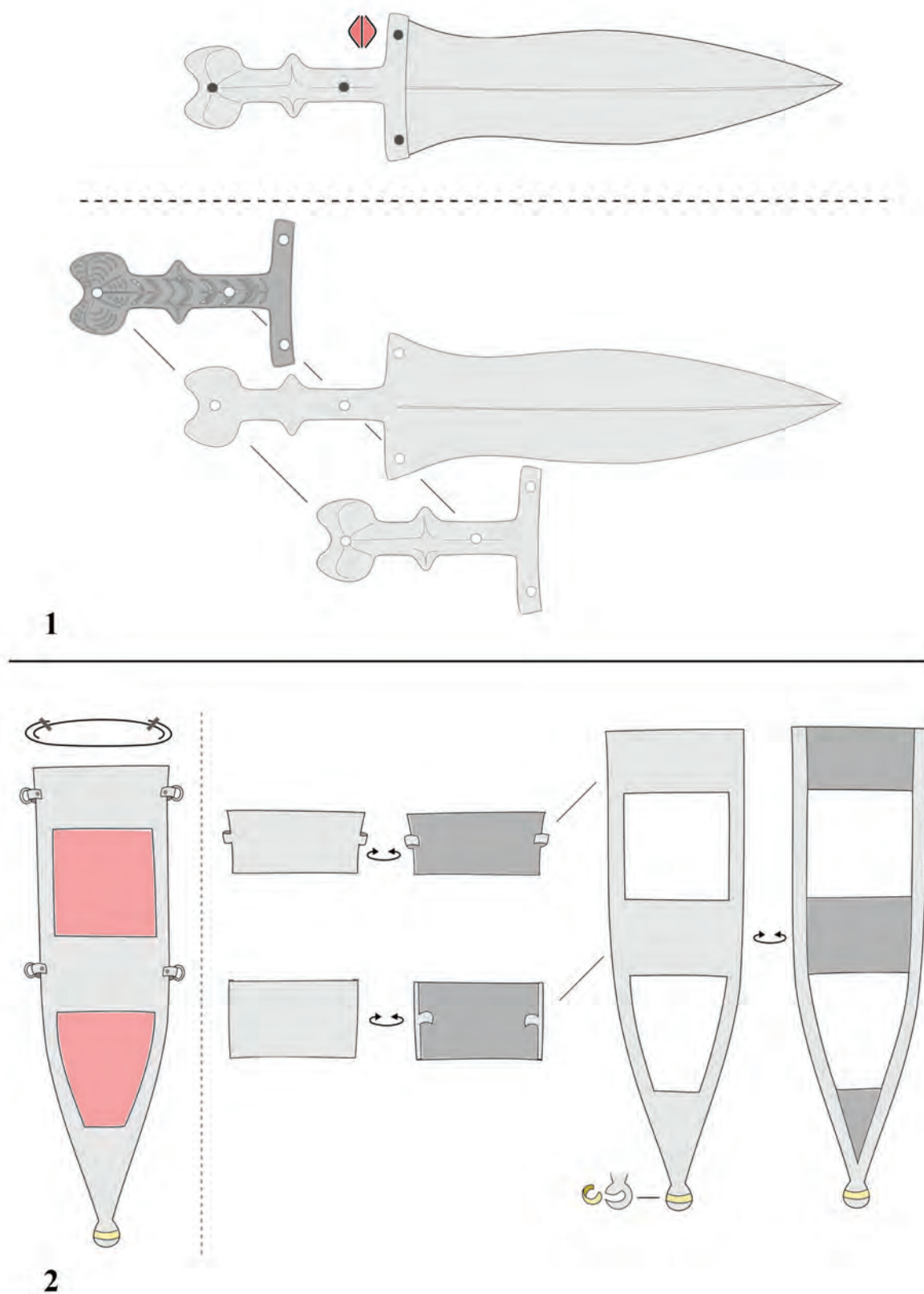


Fig. 4. 1. Diagram of the blade and handle: top – assembled dagger; bottom – assembly (the organic elements are not illustrated). 2. Diagram of the sheath: right – assembled sheath; left – assembly (grey – iron; red – organic components; yellow – brass).

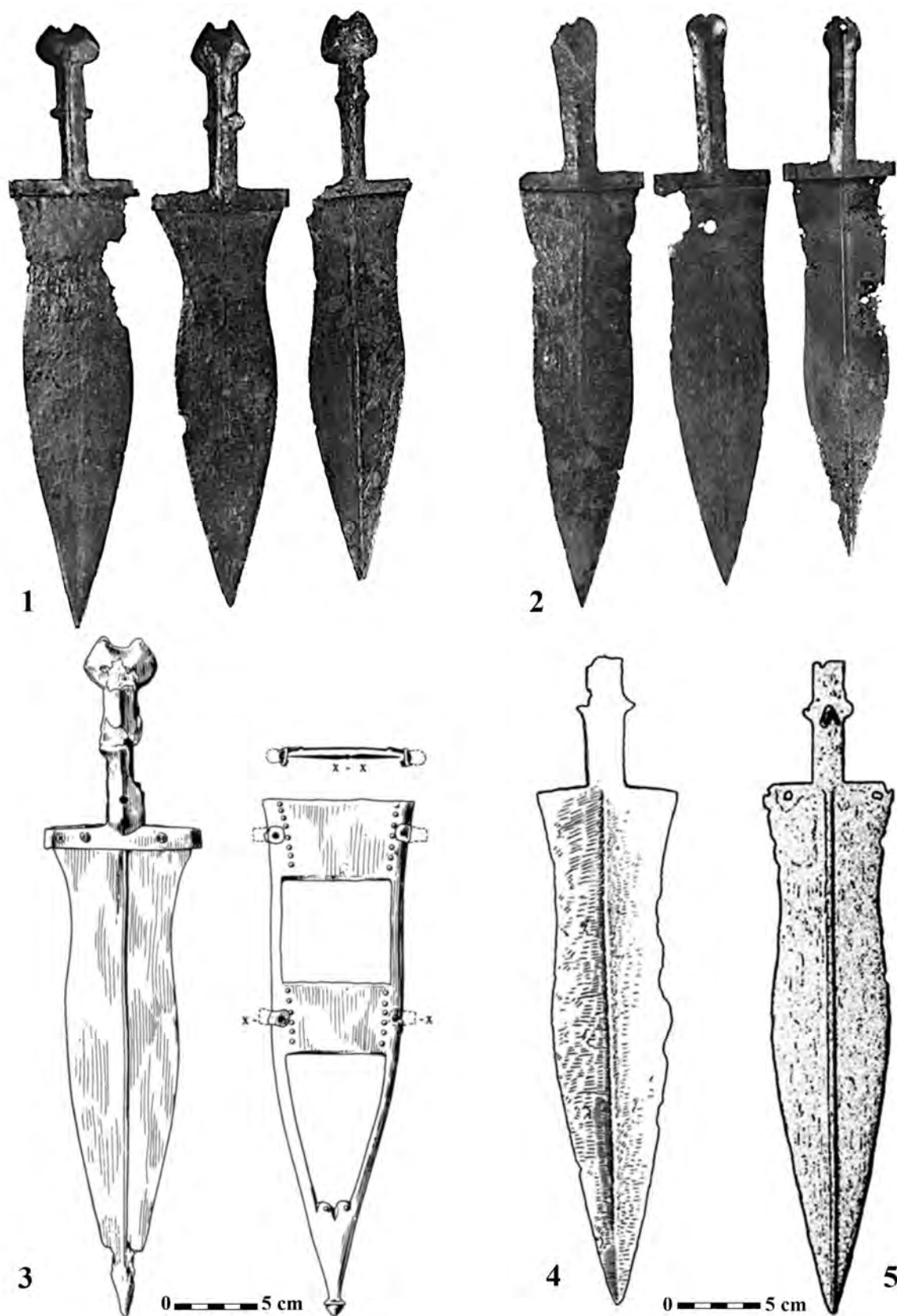


Fig. 5. 1–2. Daggers from the Künzing hoard (Herrmann 1972, Abb. 17, Abb. 15), not to scale; 3. Dagger with sheath from Copthall Court, London (Spencer 1961, 215, Fig. 1). 4. Dagger from Nagybereki-Szalacska and 5. Dagger from Tuchyňa (Mráv 2015, Fig. 4).

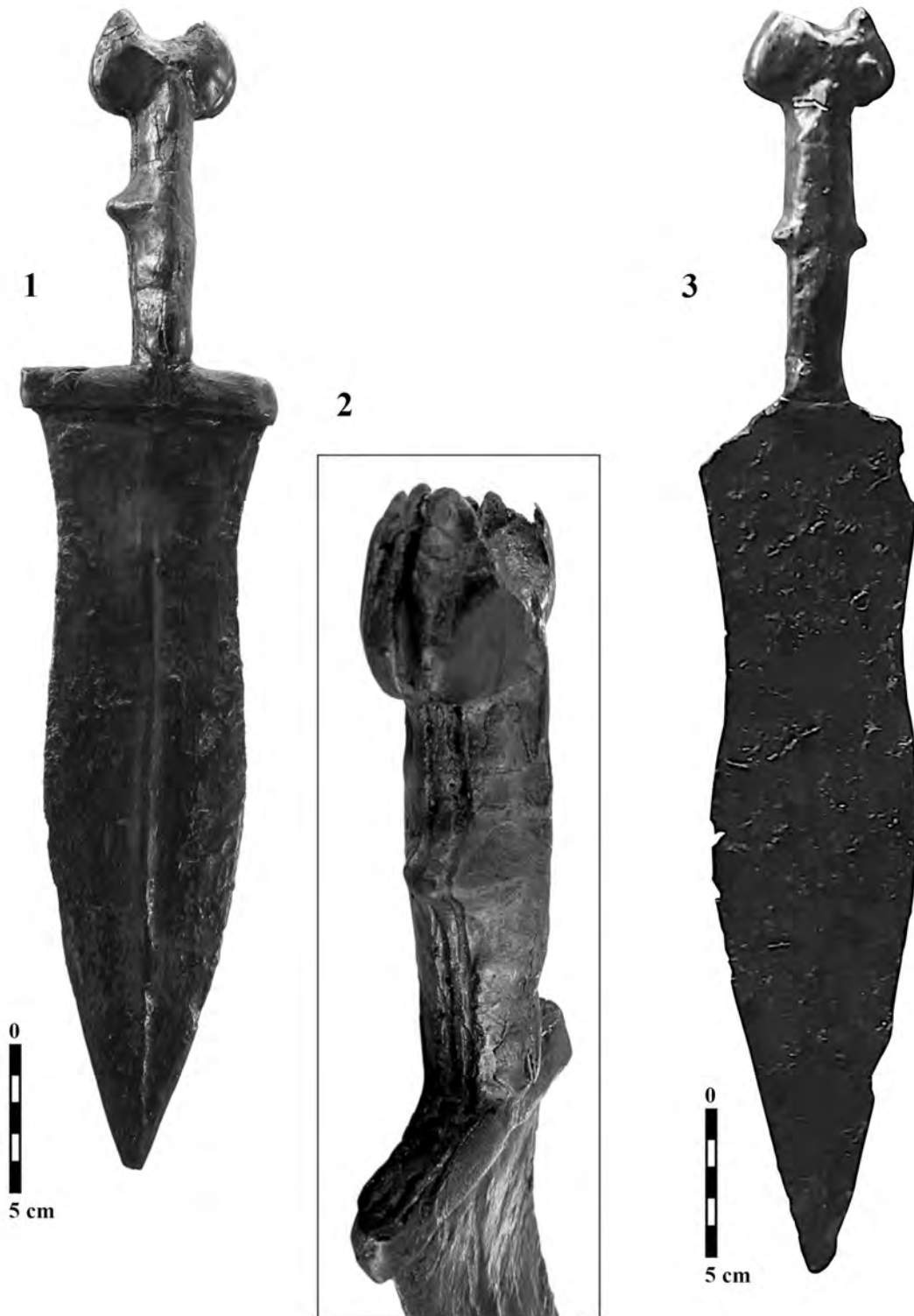


Fig. 6. 1. Buciumi dagger and 2. Handle detail, not to scale (photo: Zalău County Museum of History and Art).
3. Racovița dagger (photo: M. Gui, by kind permission of The National Military Museum in Bucharest).

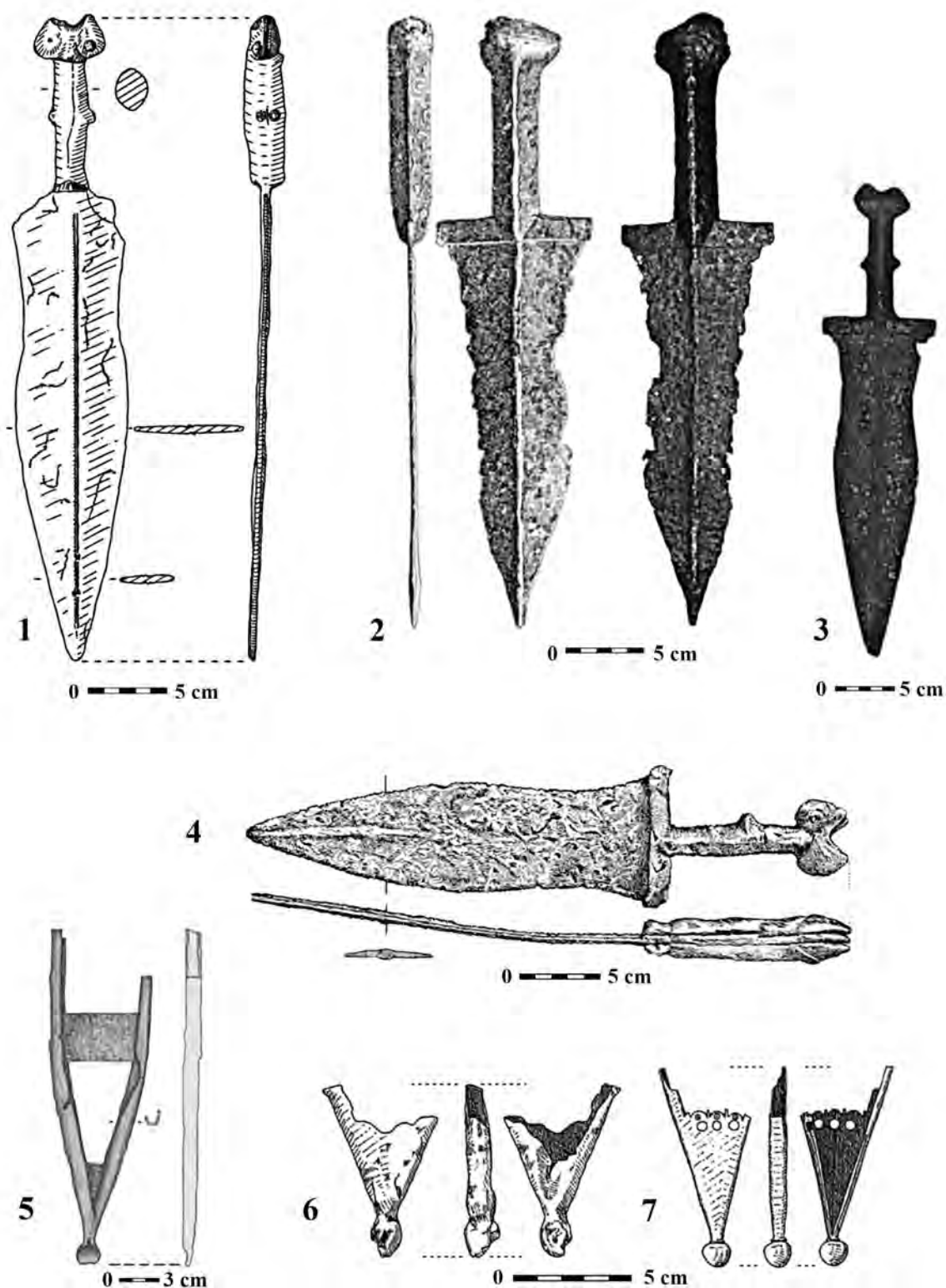


Fig. 7. 1. Racovița dagger (Petculescu 2005, Fig. 2/6); 2. Dagger from Transylvania (Mráv 2015, Fig. 6); 3. Desa dagger (Saliola, Casprini 2012, no. 40); 4. Buciumi dagger (Chirilă et al. 1972, Pl. 57); 5. Dagger sheath from *Apulum* (Bounegru 2007, Pl. 7); 6.-7. Dagger sheaths from *Potaissa* and *Drobeta* (Petculescu 2005, Fig. 2/7-8).

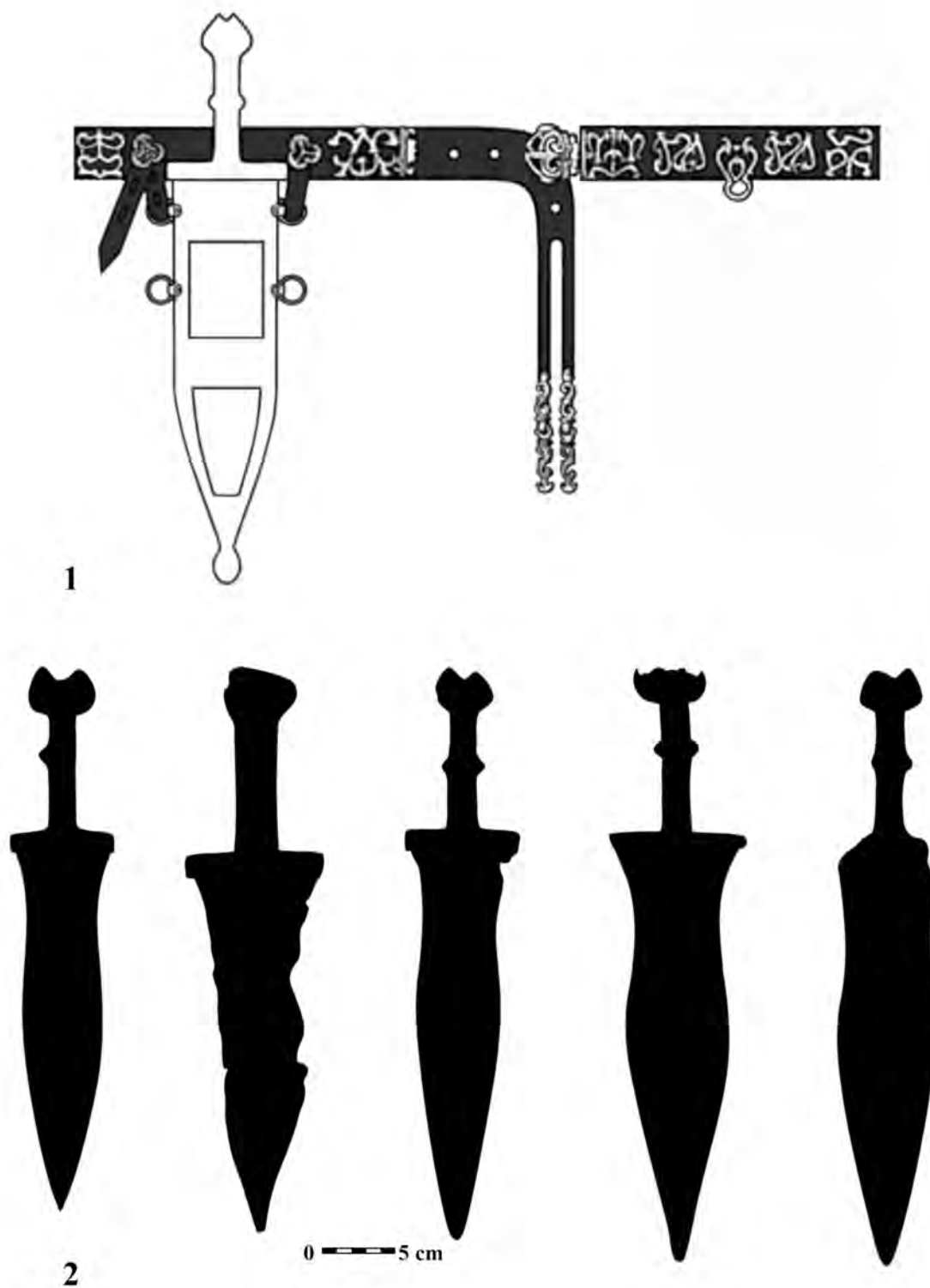


Fig. 8. 1. Dagger suspension system (Fischer 2012, Abb. 8a); 2. Comparison of the daggers from Dacia, from left to right: Buciumi, Transylvania, Desa, Mirșid, Racovița.