

ABOUT A ROMAN *PILUM* FOUND IN ARDEU*

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Abstract: *An iron object discovered in the 2002 research campaign, on the plateau of the Dacian fortress in Ardeu, is the subject of this work. The piece represents a fragment of a pilum – the spear characteristic to the Roman heavy infantryman. Such artifacts are rare in archaeological finds in the Dacian environment. Its presence in Ardeu, in the level of destruction of the most important construction investigated in that place, seems to be related to the confrontations that ended with the destruction of the Dacian ensemble. The mentioned events probably took place at the beginning of the 2nd century AD.*

Keywords: *Roman weapons, pilum, Dacian wars, Transylvania.*

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O RIMSKOM *PILUMU* PRONAĐENOM U ARDEU

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Apstrakt: *Tema ovog rada je jedan gvozdeni predmet pronađen tokom istraživanja dačke tvrđave u Ardeu 2002. U pitanju je fragment piluma-koplja karakterističnog za teško naoružanu rimsku pešadiju. Ovakvi predmeti su retki nalazi u dačkom okruženju. Prisustvo piluma u ruševinskom sloju najvažnije konstrukcije u Ardeu čini se da stoji u vezi sa sukobima koji su se završili uništenjem dačkog kompleksa. Pomenuti događaji verovatno su se odigrali početkom II veka nove ere.*

Ključne reči: *rimsko oružje, pilum, dački ratovi, Transilvanija.*

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1. THE PLACE AND CONTEXT OF DISCOVERY

Cetățuia in Ardeu is an archaeological site that has attracted the attention of different researchers since the 19th century (Téglas 1882; Téglas 1885; Téglas 1888; see also Ferencz 2012). However, more intensive, systematic investigations have been organized only at the beginning of the third millennium, when some of the research results have also been published consistently¹. Located on the southern area of the Apuseni Mountains, on the outskirts of the Ardeu village, Balșa commune, in Hunedoara County, the site is composed of the hill named Cetățuie by the locals, as well as a series of eastward and southward terraces going up on the Ardeu valley (Ferencz et al. 2016, 265–267). Archaeological materials belonging to several historical times have been identified (Ferencz et al. 2016, 266, Fig. 2), but the surrounding landscape was organized systematically



Figure 1. Aerial view of the “Cetățuie” hill with the main components of the site (photo Z. Czajlik, after Ferencz et al. 2016b).

¹ A list of the published articles about the results of the investigations conducted at Ardeu and the discovered artefacts can be found in Ferencz 2012, 71, note 3, with an updated list in Mustața and Ferencz 2016, 11; other studies were published more recently.

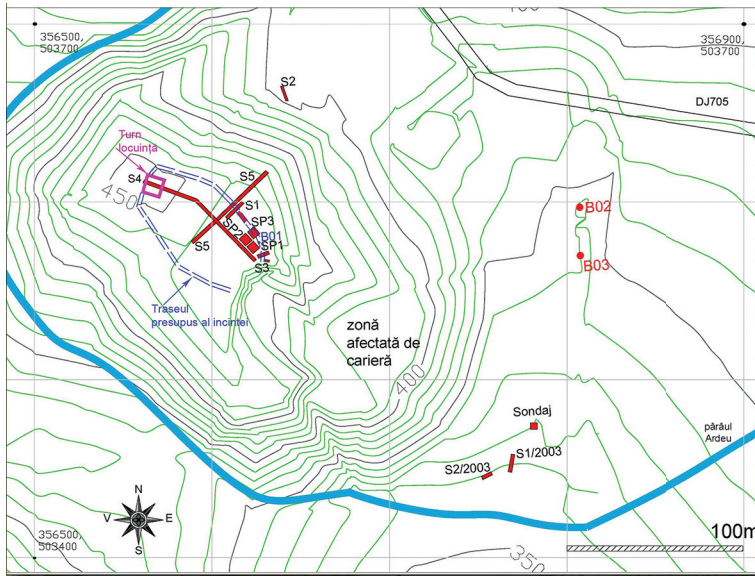


Figure 2. Archaeological excavations on the upper plateau in Ardeu (plan made by Maria Magdalena Ștefan – S. C. Domain Digital 2004).

and coherently (Fig. 1) only during the Dacian Kingdom, when the intensity of habitation also increased.

The archaeological research campaign carried out during 2002 was the longest, lasting from August to October. The main objective of that campaign was to evaluate the potential of the site. The excavation involved a series of trenches which were meant to determine the general stratigraphy of the site (Fig. 2).

Within trench S IV M, traces of the most important structure have been identified on the upper plateau of the hill. They belonged to a so-called tower-house which was most likely the residence of the local chieftain. The construction was located on a rocky hilltop that dominates the entire area (Fig. 3). An archaeological layer consisting of an accumulation of various materials, including building materials and many artefacts, has been investigated at the foot of the rocky hilltop, to the southwest. The respective archaeological layer narrows from the foot of the rocky hilltop to the southwest (Ferencz et al. 2003). Numerous traces of fire have been observed on this layer, including fragments of burnt beams, burnt daub from the walls etc. The layer is compact and seems to have been formed in a short period of time, resulting from the destruction of the tower-house during a devastating fire (Ferencz et al. 2003; Ferencz 2005, 374; Ferencz 2014, 125).

Among the objects discovered within this layer is a fragment of a heavy javelin (*pilum*) head, specific to the weaponry used by the Roman infantry. The object was found in square no. 4 of the aforementioned section, at a depth

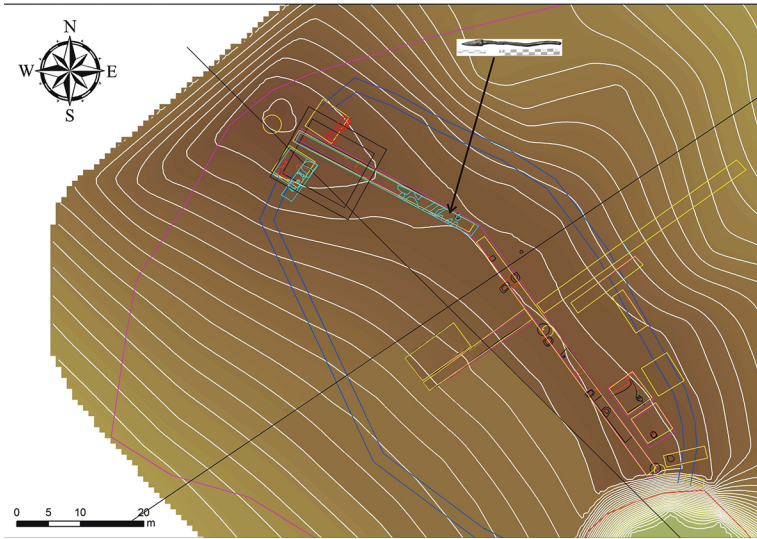


Figure 3. Plan of the upper plateau of the Cetățuie hill in Ardeu, with the main trenches. The arrow indicates where the pilum head was discovered (plan made by A. Hegyi 2017).

of 0,20m from the surface. The accumulation of construction debris above it indicates that it was already discarded in place before the collapse of the building. The artefact is preserved in the collections of the Museum of Dacian and Roman Civilization in Deva (Inv. No. 40330).

2. DESCRIPTION OF THE ARTEFACT

The fragmentary javelin head is made of iron. The slightly bent shank has a round cross-section (with a 4mm diameter), with one broken end; the preserved length is of 128mm. The total preserved length of the javelin head is of 165mm. The tip has a pyramidal shape with the length of 37mm and the base width of 9mm. The artefact is well preserved (Fig. 4).



Figure 4. Iron pilum head found in Ardeu (photo I. V. Ferencz)

3. PARALLELS AND DATING

The *pilum* was a representative weapon of the military equipment of the Roman legions. For this reason, it was depicted on various stone monuments, being also described by several ancient authors (Bishop 2017, 8–9). Perhaps the most explicit and plastic description of the way it was used in combat is provided by Julius Caesar (*B.G.* 1.25). Both the design and dimensions of the *pilum* had changed over time, but its basic morphological details remained essentially the same, including a tip, a shaft and an attaching system which could have been a tang or a socket (Marchant 1991, 176).

Modern typological analyses have taken into account first the system of attaching the metal head to the wooden shaft and second, the shape of the tip, and the shape and length of the shank (Horvat 2002, 129). However, the lower part of the javelin head from Ardeu is missing. Taking into account the preserved elements, the artefact in question seems to belong to the category of heavy *pila* used in Late Republican times (Bishop 2017, 16). Weapons of this kind were characterized by longer and thinner shanks, in comparison with those of earlier dated *pila*, also having small, pyramidal shaped heads (Bishop 2017, 16; Bishop and Coulston 1993, 50). More specifically, the artefact can be classified among the *pila* belonging to the so-called Renieblas type, named after the specimens found in the Roman *castra* in the area of Numantia (Bishop and Coulston 1993, 51, Fig. 21/1, 5) and at Cáceres el Viejo (Bishop and Coulston 1993, 51, Fig. 21/2), in Spain (Bishop 2017, 16; Bishop and Coulston 1993, 50). The type was dated to the 2nd century BC, but similar weapons were also used intensively during the 1st century BC (Bishop 2017, 16), as in the case of the finds from Caminreal (Bishop 2017, 17, no. 1–2, 7).

Similar javelins are also known in the upper Rhine area, in the inventory of some Roman *castra*. Among the best-known examples are three *pila* discovered by Christoph Albrecht in 1938 (Bishop 2017, 18). These are also present in Augusta Raurica, where 11 fragments of *pila* heads were unearthed up to 1999 (Deschler-Erb 1999, 19). Some of them offer good parallels for the javelin head from Ardeu (Deschler-Erb 1999, Taf. 3/37, 42–43, 45 și 47). At Augst, the majority of the discovered *pila* are dated to the first half of the 1st century AD, and then the number of finds gradually decreased (Deschler-Erb 1999, 79).

Some other analogies also come from Windisch, the ancient Vindonissa (Unz and Deschler-Erb 1997, 19–20; Taf. 15/219, 221–222, 225, 227, 229–232), where several Roman military units were stationed, and some of them were later engaged in Trajan's Dacian campaigns (for example, Legio XI Claudia and Legio XIII Gemina: Strobel 1984, 85–99; Matei-Popescu 2007).

Among the Roman weaponry discovered in the Dacian hillforts, there is only one other *pilum*. This is better preserved, having a socketed attachment and a leaf-shaped flat tip (Petculescu 1998, 263, Pl. 1/3). In his analysis of the Roman weaponry from the pre-Roman Dacian environment, Liviu Petculescu

has suggested that the javelin in question more likely belonged to a Roman soldier than to a Dacian warrior (Petculescu 1998, 271). A number of details observed on this occasion seem to suggest that the artefacts in question are most probably original Roman weapons, excluding the possibility of local imitations (Petculescu 1998, 269).

Regarding the chronology of Roman weaponry discovered in pre-Roman Dacian contexts, the same researcher has noted that two supply periods can be distinguished north of the Danube. During the first half or even the first quarter of the 1st century AD, the discoveries are extremely scarce. The vast majority of these weapons arrived in Dacia in the third quarter of the 1st century AD (Petculescu 1998, 271). At the same time, they are very rarely discovered in contexts dated to the 2nd century AD in the Roman province of Dacia (Fodorean 2017 72, 77, no. 38, 214, pl. XXXV/5; Deac and Pop 2019).

4. DISCUSSION

The javelin head from Ardeu comes from the bottom of an archaeological layer formed after the collapse of the most important construction identified so far on the upper plateau (Ferencz and Căstăian 2019). Numerous traces of burnt building materials and large fragments of walls illustrate the violent end of the structure. From this context come a series of artefacts dated to the end of the 1st century or the beginning of the 2nd century AD (Ferencz 2005; Ferencz 2010; Mustață and Ferencz 2016, 27, Catalogue no. 5).

The fragmentary state of the *pilum* and its association with this layer of destruction could suggest that its presence is related to the confrontations which led to the end of the hillfort. Since this kind of weapons is specific to the Roman infantry, it could be perhaps presumed that a *vexillatio* of a Roman legion was involved in the siege and final assault at Ardeu. In this context, it should be noted that the artefact is part of a series of other artefacts from the same level of destruction of the hillfort (Ferencz 2005; Ferencz 2010; Mustață and Ferencz 2016, 27, Catalogue no. 5; Ferencz and Socol 2015, 185; Ferencz et al. 2016, 272).

5. CONCLUDING REMARKS

The *pilum* head found in Ardeu is the second known specimen found inside a Dacian fortification. Its presence in the layer of destruction of the most important building located on the acropolis of the settlement at Ardeu is not accidental. The artefact most likely belonged to a soldier from the Roman infantry who actually participated in the siege and final assault of the Dacian

fortification. These military events probably took place during Traian's second Dacian campaign in 106 AD. The context of discovery seems to also indicate that the last line of resistance was concentrated at the foot of the rocky hilltop on which the residence of the Dacian chieftain once stood.

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About a Roman *pillum* found in Ardeu

Summary

Cetățuia in Ardeu is an archaeological site that has been attracting attention of researchers since the 19th century. Placed on the South of the Apuseni Mountains, on the outskirts of the village of Ardeu, Balșa commune, Hunedoara county the site is composed of the hill named by the inhabitants Cetățuie, as well as from a series of terraces arranged to the east and south, up to the valley of the Ardeului Valley. Although materials from several historical epochs have been identified, in the era of the kingdom if he benefited from the most complex arrangements and lived with the highest intensity.

The archaeological research campaign carried out during 2002 was the longest, from August to October. The objective of that campaign was to evaluate the potential of the site. A series of trenches were drawn up in order to determine the general stratigraphy. Within the trench called SIV M 'the traces of the most important edifice on the upper plateau of the hill were identified – the house belonging of a Dacian noble – a so called tower house. The construction was located on the surface of a hummock that dominates the entire area. And at the base of this hummock, an archaeological layer formed by the accumulation of various materials was investigated (building materials but also different kind of artifacts) which narrows as they move away from the base of this upland. Numerous traces of fire were present in this layer (fragments of burnt beams, clay from walls burnt etc.). The whole level is compact and seems to have formed in a short period of time, being the result of the demolition of the tower-house, following a devastating fire.

Among the objects discovered there is a fragment of a javelin (heavy *pilum*), specific to the weaponry of the Roman infantry. The object was found in square 4 of the respective section, at a depth of 0,20m from the current level of the ground. And the accumulation above shows that it arrived at that place before the collapse of the building. It is kept in the collections of the Museum of Dacian and Roman Civilization in Deva (Inv. No: 40330).

It is made of iron and is kept fragmentary. The rod is round in section (4mm diameter), it is broken at one end, slightly bent and has a preserved length of 128mm. The total length kept is of 165mm. The spearhead has a pyramidal shape with a length of 37mm and the base side of 9mm. It is well preserved.

The specimen from Ardeu comes from the base of an archeological level formed after the collapse of the most important construction identified so far on the upper plateau. Numerous traces of burnt building materials and large

pieces of wall illustrate the violent end of the building. From the same level come a series of whole or fragmentary objects whose dating is at the end of the 1st century AD or at the beginning of the 2nd century. Its fragmentary state of preservation, and the association with that level of destruction, make us believe that its presence is related to the struggles that led to the end of the ensemble. Being the fragment of a piece of weapon specific to the Roman infantryman, we think that it is not exaggerated to suppose that a *vexilatio* of legionaries was involved in the final siege and assault. It would be risky to go further with the supposition in trying to identify the military unit involved in those events only on the basis of the data available to us. However, it should be mentioned that previously other artifacts have been published that we consider to be related to the moment when the hillfort was destroyed.

The *pilum* head found in Ardeu is the second known specimen in a Dacian fortification. Its presence in the level of destruction of the most important building located on the acropolis of the settlement of Ardeu, we think is not accidental. We believe that the artifact belonged to a heavy Roman infantryman who actually participated in the siege and assault of the Dacian fortification from that place. Those events probably took place during Traian's second Dacian campaign, in 106 AD. The location of the object can also signal that the last resistance of the defense was concentrated at the base of the Dacian noble palace.

