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Study of faunal remains from the Dacian settlement of Alunu – *Terasa Dacică* 1, Boșorod commune, Hunedoara County

Georgeta El Susi, Cristian Oprean

Abstract: The faunal material presented here was yielded by the archaeological excavations conducted in a house with appurtenances located on *Terasa Dacică* 1, nearby the Dacian fortress of *Piatra Rosie*. Out of the four excavated areas (F6, C7, C10 and D10), 295 mammal bones were collected, of which 170 determinable and 125 indeterminable. Wild species are present in a percentage of 2.94%, including four red deer bones and a boar tooth. The domesticate segment sums up 165 remains (97.06%), of which 75 belong to pig (44.12%), 45 (26.47%) caprines (26.47%), 42 bovids (24.71%) and three from horse (1.76%). In terms of minimum number of individuals (MNI) pig prevails (38.89%), followed by sheep and caprines (30.55%), bovids (22.22%) and horse (2.78%). In small ruminants, the juveniles/ subadults/ adults ratio is of 36.36/ 27.27/36.36%. It seems that the terrace inhabitants bred many goats, especially for dairy. In sheep, slaughtering for meat prevailed, except though for lamb. Sheep older than one year were mainly slaughtered. Therefore, the juveniles – subadults ratio is maximal, of 85.7%, compared to the small proportion of adults. Slaughtering was made slightly under one year, with the prevalence of animals that had reached a certain body weight, in the case here, between 1–3 years. In bovids, the juveniles/ subadults/ adults relation amounts to 37.5/25/37.5%, which confirms the prevailing use of the species for meat consumption, secondarily for dairy. Since the great majority of bones are strongly fragmented and originate from body mass immature individuals, metric data are few. Measurements of bovids, pig and caprines belong to the lower variation sequence, specific to populations with gracile skeleton. The Dacian inhabitancy frames in the group of a pig and small ruminants focused diet economy, with modest input of cattle. Likely, climate disfavoured these as well. Hunting is economically insignificant.

Keywords: Piatra Roșie; La Tène habitation; animal husbandry; age profiles; hunting.

The investigation of the terrace called Terasa dacică 1, located in the unincorporated area of Alunu village (Bosorod commune), nearby the Dacian fortress of *Piatra Roșie*¹ was initiated in 2014. Respective fortress is part of the system of fortifications and settlements from the Orăștie Mountains, grouped around the Dacian capital of Sarmizegetusa Regia. It lays in the Sureanu Mounatains, south-west the Royal fortress, on a rocky massif surrounded by a steep landscape (Fig. 1). Recent archaeological data suggest that over the course of the last years prior the Daco-Roman



Fig. 1. Mapping of some Latène sites used for comparison:
1- Alunu; 2- Hunedoara-Sâmpetru; 3- Piatra Craivii; 4- Şimleu-Cetate; 5- Sighişoara-Wietenberg; 6- Săvârşin; 7- Pecica.

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¹ Ferencz, Roman 2016, 118.

wars, respective terrace was occupied by a house and several appurtenances². The 2015–2017 archaeological excavations also yielded a sample of 295 animal bones, whose discussion is object herein.

Spatial distribution of bones

The faunal material has been retrieved from four areas, noted F6, C7, C10 and D10, its distribution throughout respective contexts being inserted in table 1. In F6 and C7, below the vegetal layer and disturbed by farming works, the upper part of a floor used during the period of the Dacian kingdom³ was investigated. From F6 respectively, were collected a lower molar – M_3 of a 3–4 years old goat and a distal tibia of a pig, slaughtered over two years. The same development performed in order to level and extend a former terrace, ran also in area C7⁴. From pit no. 2/sp.7/ C5 come a pig mandible and three indeterminable fragments. Respective posthole, according to archaeological data, was part of the loadbearing structure of one/some buildings⁵; the faunal material comes from the filling earth. Overall, from the perimeter of C7 were collected 61 animal bones distributed as follows: 16 remains, the great majority cephalic elements (class A) and metapodials (class E)⁶ come from seven pigs, of which one was slaughtered under two months, another between 8–10 months, four between 1–2 years and one between 3–5 years⁷. The eight cattle bones come from the skeletons of two specimens, slaughtered under 2–2.5 years, over 3–4 years. From small ruminants were determined 14 fragments ascribed to a specimen slaughtered between 10–12 months and three adults. Their remains are mainly from skull and distal limb parts (Tab. 2). A tooth fragment survived from horse. There were no bones of wild species identified in respective excavated area. In addition, two indeterminate bones were recovered, likely still from mentioned species.

Traces of a rectangular structure were outlined in area C10, whose elevation was made of timber, with the "foot" set on a stone basis. A series of postholes belonged to the same construction⁸. The largest part of the faunal material comes from respective investigated area. It consists of 186 fragments, of which 85 are indeterminable flakes, 101 being ascribed to five domesticate and two wild. Most bones come from pig. The 44 fragments were ascribed to five specimens slaughtered below two months, between 16–18 months, 20–24 months, 2–3 years and 3–5 years.

The distribution of the species material on body regions is relatively equal, classes A-D prevailing by 25–30%. Only class E amounts to less elements (18%). It seems that the distal parts of feet, including phalanges and metapodials were consumed, comparative to other species. Cattle, with 29 fragments rank second, coming in a 40% proportion from class E. These are diaphyseal fragments of metapodials, tarsals, phalanges; only two bones were identified from skull. Bovid material comes from the skeleton of at least four individuals, slaughtered between 10–12 months, 24–26 months, 28–30 months and 3.5–4 years.

Out of the 23 fragments ascribed to small ruminants, 10 come from sheep, four from goat and nine were not specifically ascribed. The great majority of caprine bones are from the skeleton of an animal slaughtered between 24–30 months. Among goat bones was identified a he-goat horn, 215 mm long and (BA/BB/C) base measurements of 31/24/109 mm (Fig. 7/a). The item is of type *prisca*, not very robust, being common to the Dacian sites mentioned here. Cutmarks, for the removal of the frontal horn, are visible by its base. Respective male was around 3–4 years, the slaughtering age being established in correlation with the material from the other appurtenances. The nine small ruminant bones un-ascribed specifically (ovicaprids) come from an exemplar of 4–5 years and another of 10–12 months. From a horse was identified a kneecap fragment and a broken upper molar. From a 4–5 years⁹ boar survived an upper canine and from cervid two metapodial flakes.

² Ferencz, Roman 2019, 261.

³ Ferencz, Roman 2019, 260.

⁴ Ferencz, Roman 2019, 260.

⁵ Ferencz, Roman 2019, 261.

⁶ A-head, B-spine, C, D-limb proximal parts, E-limb distal extremities. Parts with high food intake value, B, C, D; with small food intake (A) or any, E. cf. Reitz, Wing 2008, 217.

⁷ In order to assess slaughtering ages were used the tooth eruption charts of Schmid (1972) and wear of Horard-Herbin (1997).

⁸ Ferencz, Micle 2019, 3.

⁹ According to a 1.17 value of the shape coefficient of the upper canine; Cotta 1982, 372.

Area D10 is connected to the previous, the floor level being identified in both. From this context were recovered only 46 fragments, of which 28 indeterminable. 14 bones belong to domesticated pig, seven to ovicaprids, five to bovids and two to cervids. The majority of fragments are from the skeleton of specimens identified in the sample from C10. In addition, there are bones from other two domesticated swine, aged between 21–23 months and 24–30 months; two cows were slaughtered under 24–30 months and between 5–6 years and three small ruminants were slaughtered under 16–18 months (two) and between 24–30 months. From D10/trench 20 comes an astragalus (likely of goat) with finishing/

use prints on the distal part of the lateral side. Possibly, the bone was used for smoothening (pottery?) (Fig. 8).

Overall, out of the four areas were collected 295 mammal bones, of which 170 determinable and 125 not specifically ascribed. Wild species are present in a percentage of 2.94%, including four red deer bones and one tooth of wild boar. The domesticated segment totals 165 remains (97.06%), of which 75 come from pig (44.12%), 45 (26.47%) ovicaprids (26.47%), 42 bovids (24.71%) and three from horse (1.76%). In terms of the minimum number of individuals (MNI) domesticated swine prevails by 38.89%, followed by sheep and caprines with 30.55%, bovids with 22.22% and horse with 2.78% (Tab. 1, Fig. 2).

The general distribution of bones by body regions differ significantly from species to species. Thus, in the case of large animals, namely bovids, predominate small fragments of the appendicular skeleton (classes C-E) with 71.43%; spine elements represent 19.05% and teeth only 9.52%, as also mirrored in the small number of identified specimens (Fig. 2). In the case of domesticated pig prevail maxillary remains with 32%, spinal elements (especially rib fragments) represent 24% and the proximal appendicular skeleton, 25.33%. Distal feet parts amount to a total of only 18%. In small ruminants dominate distal



Fig. 2. The distribution of species in different contexts as fragments (NISP) and individuals (MNI) at Alunu.



Fig. 3. Cattle, pig and sheep/ goat body parts distribution in Alunu.

extremity bones with 40% and classes C, D (fleshy feet parts) with a total of 29%. Spinal remains and teeth represent approximately 31% (Tab. 2; Fig. 3). From horse were found isolate teeth and in the case of red deer, metapodial fragments.

Age profiles

Since teeth are insufficient in almost all cases, except for pig, we used suture degrees of long bones¹⁰ in MNI estimates. Based on pig teeth, well represented (Fig. 6/a), 14 exemplars were identified, of which only two were slaughtered below 6 months (14.29%), three between 8–16 months (21.42%), seven between 16–36 month (50%) and two over three years (14.29%) (Tab. 4, Fig. 4). Therefore,

¹⁰ Udrescu *et al.* 1999.



Fig. 4. Cattle, pig and sheep/ goat age profiles in Alunu.

the juveniles – subadults ratio is maximum, of 85.7% compared to the small proportion of adults¹¹. Slaughtering was carried out slightly below a year, with the prevalence of animals that had reached a certain body mass, in our cases, between 1–3 years. The large percentage of pig remains is indicative of existing advantageous climate conditions for maintaining high natural growth rates. Likely, this was a readily available meat source, also easy to breed over the course of the year.

Out of the 11 presumed small ruminants, three are goat, four sheep and four not specified as species (Tab. 3; Fig. 4). Overall, 36.36%

are juveniles, slaughtered under 18 months. Among, one was under 6 months, two between 10–12 months and one below 16–18 months. Subadults sum up 27.27%; out of the three specimens, one was sacrifice between 18–24 months and two between 2–2.5 years. The group of adults represents 36.36%,



Fig. 5. The percentages of species in Latène sites from Transylvania.

including an animal slaughtered between 3–4 years and two between 4–6 years. It seems that the terrace inhabitants raised many goats, especially for dairy. The steep terrain in the area favoured easy management. In sheep, slaughtering for meat prevailed, however lambs were less slaughtered. Sheep over one year were mainly slaughtered. Adding the number of specifically un-ascribed exemplars as well, one obtains a larger percentage (64%) of body mass immature specimens slaughtered for meat.

Out of eight cattle, three were slaughtered below 24–30 months, two between 26–30 months, one around 3–3.5 years and two over this limit. In this species too, establishment of slaughtering ages was made based on long bones suture degrees, teeth being deficient. The juveniles/ subadults/ adults ratio has a value over 37.5/25/37.5%, thus confirming the prevailing use of the species for meat, secondarily for dairy by-products (Tab. 4, Fig. 4). The absence of mature specimens is also justified by the fact that the faunal lot rather mirrors the ratio of species in the meat diet, and only indirectly their secondary use (milk, skins, reproduction). The small percentage of cattle in the diet economy may be explained by the following: respective community did not afford to farm (consume)

¹¹ Forest 1997, 951–958.



Fig. 6. Pig remains. a-teeth, b-tibia.

a larger number of cattle, likely not even husbandry conditions were propitious for the management of a too consistent livestock, therefore other meat and milk sources were used (pig, sheep, goat); or, their remains did not reach respective archaeological deposition, being disposed of elsewhere owing to their nature of large bones.

Metric assessments

Since the great majority of bones are strongly fragmented and come from immature individuals from body mass point of view, metric data are also few. In general, metric data of bovid, pig and ovicaprid bones belong to the lower variation sequence specific to populations with gracile skeleton and small size. We mention that cattle farmed in the La Tène settlements of Transylvania and Banat were of small sizes, their size varying between 101-124.7 cm, with an average of 113 cm (n = 21). The height at withers of females oscillated between 101-114.5 cm (average = 109.4 cm; n = 10), while that of bulls between 105.1-124.7 cm (average = 114.9 cm; n = 8). For castrated specimens, values of 117-123 cm (n = 3) were recorded. In hill and mountain areas a type of short cattle¹² was bred. Since the majority of La Tène settlements from mentioned regions lay in highlands, this bovid type was prevalent. The few metric data of small ruminants evidence a type of more robust caprines than sheep, however not very tall (Fig. 7/b). Based on the sheep material from the Dacian sites of Transylvania and Banat, a size variation of 51.4-68.1 cm was established, with an average of 60.7 cm (n = 33). Goat sizes vary between 59.8-67.7 cm, with an average of 63.3 cm (n = $6)^{13}$. The teeth of domesticated pig is gracile, likely their build was not very robust either. Regarding the height at withers, values comprised between broad limits were registered, the average commonly exceeding 70 cm¹⁴.

¹² El Susi 2021, 142.

¹³ El Susi 2021, 143.

¹⁴ El Susi 2021, 143.



Fig. 7. Small ruminants remains. a-horn core from he-goat, b-metapodials from sheep/ goat.

Percentage evaluations

According to the percentage evaluations of identified species, the following may be specified: hunting was practiced occasionally, even though the surrounding environment provided plenty natural resources. Likely, red deer and boar were somewhat important in the diet. Regardless, the lot is scarce and subject to interpretation. Pig, sheep and goat fulfilled a prevailing role in nutrition, cattle farming being secondary.

In table 5 we inserted the taxa percentages in some of the Dacian sites from Transylvania, where faunal studies were carried out. Except the settlement of Pecica, located in the Mureș meadows (the Banat sector), the other lie in hill and mountain areas. It must be specified from the very start that the great majority of samples contain under 900 fragments, except the lots of Şimleu-*Cetate* with 4700 bones and Sighișoara-*Wietenberg* with 1450 (Tab. 5). Obviously, lot sizes count very much in obtaining valid results. Likely, owing to insufficient samples, environmental factors do not seem to influence much the faunal composition. For instance, at Pecica, in the lowlands, hunting is well represented, summing up 36.12%¹⁵. Instead, in the Alunu, Piatra Craivii and Sighișoara-*Wietenberg* settlements, located in highlands, hunting has a small percentage, between 3–7%. Only in the plentiful material of Şimleu-*Cetate*, game bones represent 33.3%¹⁶, a percentage somewhat close to facts. In the Hunedoara-*Dealul Sâmpetru* lot, wild mammals have a significant share of 15.83%¹⁷, while at Săvârșin only 13.39%¹⁸. Hunting was practiced for raw materials (fur, skins, bone, antler), to remove undesired actions, for amusement and less for dietary purposes.

¹⁵ Haimovici 1969, 407.

¹⁶ El Susi 2009, 105, tab. 2.

¹⁷ El Susi 2007, 120, tab. 1.

¹⁸ El Susi 2021, 147.

Pig exploitation was dominant in Dacian nutrition. Easy to farm, regardless the geographical area, these represented a readily available meat source. In almost all mentioned settlements pig bones predominate, in percentages varying between 31-44%. Only at Săvârșin, cattle prevail by 40.7%, yet even there pig percentages are high, 31.3%¹⁹. The cattle - small ruminants ratio is different in each site. Thus, at Alunu and Hunedoara-Sâmpetru, respective mammal groups are similarly frequent: 24.7:26.47%, respectively 19.7:16.9%²⁰. In the remainder of the settlements, cattle percentage values range between 19–31% (Fig. 5). Horse was rarely, accidentally used in diet. Its percentages are small, between 1-3%, except at Hunedoara-Sâmpetru²¹ and Pecica, with ca. 9%²² and Simleu-Cetate with 4.9%²³. Chicken bones were identified only at Simleu²⁴ and Pecica; most definitely, it had a larger contribution in nutrition. Data on fishing and molluscs fishing are insufficient.

Although the faunal material of Alunu is statistically insignificant, it has the merit of



Fig. 8. Goat (?) talus with worn surface.

introducing in scientific circulation additional zooarchaeological insight on the Dacian sites from Transylvania. In this state of research, we highlighted species important from dietary point of view and their exploitation models. Most definitely, future research shall put forward additional information that would clarify many aspects by either confirming or invalidating our suppositions regarding paleoeconomy data and its evolution in the region's La Tène period (and not only).

Features	Sp. F6	Sp. C7	Sp. C10	Sp. D10	NISP	%	MNI	%
Sus domesticus	1	16	44	14	75	44.12	14	38.89
Capra hircus	1	5	4	3	13	7.65	3	8.33
Ovis aries		5	10	1	16	9.41	4	11.11
Ovis/Capra		4	9	3	16	9.41	4	11.11
Bos taurus		8	29	5	42	24.71	8	22.22
Equus caballus		1	2		3	1.76	1	2.78
Domestics	2	39	98	26	165	97.06	34	94.44
Cervus elaphus			2	2	4	2.35	1	2.78
Sus scrofa			1		1	0.59	1	2.78
Wilds			3	2	5	2.94	2	5.56
Total identified	2	39	101	28	170	100	36	100
Small flakes		18	74	15	107			
Large flakes		4	11	3	18			
Total sample	2	61	186	46	295			

Table 1. Distribution of species as number of fragments (NISP) and individuals (MNI) in th	ne site
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²² Haimovici 1969, 407, tab. 5.

²⁴ El Susi 2009, 105, tab. 2.

¹⁹ El Susi 2021, 147.

²⁰ El Susi 2007, 120, tab. 1.

²¹ El Susi 2007, 120, tab. 1.

²³ El Susi 2009, 105, tab. 2.

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Features	Sp. 6	Sp. 6	Sp. 7	Sp. 7	Sp. 7	Sp. 7	Sp. C10	Sp. C10
Species	Pig	Goat	Cattle	Pig	Ovic.	Horse	Cattle	Pig
Neurocranium/ ossa	0			0				0
corni								1
Viscerocranium				2				2
Dentes sup.				2	2		1	1
Mandibula			1	3				4
Dentes inf.		1		2	1	1	1	3
Atlas							1	
Vertebrae				1			3	1
Costae			1				2	11
Scapula							2	3
Humerus					1		2	
Radius			1				1	
Ulna								1
Carpalia							1	
Metacarpus			1		2		1	
Polyis					1		1	3
Femur							1	4
Tibia patella	1		1				2	- - -
Tibla, patella							2	2
Calcanous				1			2	1
Matatawaya			1	1	2		2	1
Transal:			1		3		3	Z
larsalla					4		1	
Phalanx 1					4			1
Phalanx 2								
Phalanx 3			1	1			1	
Metapodalia			1	4			1	3
Total	1	1	8	16	14	1	29	44
Continued								
Features	Sp. C10	Sp. C10	Sp. C10	Sp. C10	Sp. D10	Sp. D10	Sp. D10	Sp. D10
Species	Ovic.	Horse	Red deer	Wild pig	Cattle	Pig	Sheep/g	Red deer
Neurocranium/ ossa	1							
corn1								
Viscerocranium								
Dentes sup.	1	1		1		3		1
Mandibula					1	1	1	
Dentes inf.	1							
Atlas	1							1
Vertebrae	1				1	2		
Costae	4					3		
Scapula	1					2		
Humerus					1		1	
Radius	1							
Ulna						1		
Carpalia								
Metacarpus	2				1		1	
Pelvis	1					1		
Femur	1					1	1	
Tibia, patella	5	1			1			
Talus							1	
Calcaneus	1							
Metatarsus							2	

Table 2. Distribution of bones according to body parts.

Features	Sp. C10	Sp. C10	Sp. C10	Sp. C10	Sp. D10	Sp. D10	Sp. D10	Sp. D10
Tarsalia								
Phalanx 1	1							
Phalanx 2	1							
Phalanx 3								
Metapodalia			2					
Total	23	2	2	1	5	14	7	2

Table 3. Age profiles of small ruminants.

Stage	Age (months)	Goat	Sheep	Ovic.	Total
juvenile-36.36%	0-6			1	1
	10–12			2	2
	< 16–18	1			1
subadult–27.27%	18–24		1		1
	24–30		2		2
adult–36.36%	36-48	1			1
	48–72	1		1	2
	> 18-24		1		1
	TOTAL	3	4	4	11

Table 4. Age profiles of pig and cattle.

Stage/ pig	Age	Total	Stage/ cattle	Age (months)	Total
infans-14.29%	0–6	2	juvenile–37.5%	10-12	1
juvenile-21.42%	8–10	1		<24-30	2
	12–14	1	subadult–25%	24–26	1
	14–16	1		28–30	1
subadult–50%	16–18	2	adult–37.5%	42-48	1
	20–24	3		>42-48	1
	24–36	2		48-72	1
adult-14.29%	42–72	2		TOTAL	8
	TOTAL	14			

Table 5. The percentages of species in La Tène sites from Transylvania.

Taxon	1	2	3	4	5	6	7
Sus domesticus	44.12	37.2	43.22	31.3	41.19	31.3	25.88
Bos taurus	24.71	19.79	30.95	19.3	28.95	40.7	19.41
Ovis/Capra	26.47	16.89	21.06	10.9	16.7	11.65	9.43
Equus caballus	1.76	9.5		4.9	1.6	2.96	9.16
Wild mammals	2.94	15.03	5.1	33.3	6.7	13.39	27.12
Domestic mammals	97.06	84.17	95.23	66.7	89.13	86.61	72.88
Canis familiaris		0.79		0.3	0.69		9
Total sample	295	533	546	4,710	1.450	890	450

1- Alunu; 2- Hunedoara- *Sâmpetru*; 3- Piatra Craivii- *Terasa Bănuțului*; 4- Șimleu- *Cetate*; 5- Sighișoara- *Wietenberg*; 6- Săvârșin; 7- Pecica

Measurements

Horn cores

Feature	OC	BA	BB	BC	Taxon
C10/C21	215	30	20,5	109	Goat

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Metacarpus

Feature	Вр	Dp	Bd	Dd	Taxon
C10		18,5			Goat
C10/C20	21	15			Sheep
S7/C2			23	12	Sheep
S7/C2			24	16	Sheep
S7/C1				24	Cattle

Metatarsus

Feature	Dp	Bd	Dd	Taxon
S7/C2	16,5			Goat
D10/C20		29		Goat
S7/C2		23,5	14	Sheep
S7/C6				Sheep

Talus

Feature	GLl	GLm	Bd	Taxon
D10/C20	31,5	30	20,5	Goat
D10/C8			21	Pig

Teeth

Feature	M ³	M ₃	Taxon
S6/C2	19	_	Goat
C10/C20	17		Sheep
C10/C10	28		Pig
D10/C25	30		Pig
S7/C15	31		Pig
S7/C25		19	Goat
D10/C5		34	Pig

Tibia

Feature	Bd	Dd	Taxon
S6/C2	29	22	Pig

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Abbreviations

AB	Analele Banatului, I-IV 1928–1931; S.N. I 1981-, The Museum of Banat/The National Museum of Banat, Timisoara.
АСТА	Yearbook of the Székely Museum in Csík and the Székely National Museum, Miercurea
ActaArchHung	Acta Archaeologica Academiae Scentiarum Hungaricae Budanest
۸É	Archaeologiai Értogită Budanost
Acta Uistorica	Acta Universitatia Szagadiangia (Szagad)
ArchUung	Archaeologia Hungarica
Archital	Archaelogia Hullgarica.
	Arrieologia Medievala. Mitteilungen des Keiserlich Deutschen Archaeologischen Institute Athenische
Alvi	Abteilung (Athenische Mitteilungen) Athen (1876-)
ΔΝΛΝΛ	Acta Moldaviae Meridionalis (Vaslui)
AMN	Acta Musei Nanocensis The National History Museum of Transvlvania Clui – Nanoca
AMP	Acta Musei Porolisensis, County History and Art Museum of Zalău
ArhMold	Arbeologia Moldovei Jasi
BCH	Bulletin de Correspondence Hellénique Paris 1 (1877-)
BerRGK	Berichte der Römisch-Germanischen Kommission Roman-Germanic
Demon	Commission. Frankfurt am Main.
EphNap	Ephemeris Napocensis, Cluj-Napoca.
CCA	Cronica Cercetărilor Arheologice din România, Ministry of Culture.
CCCA I	M. J. Vermaseren, Corpus cultus Cybelae Attidisque (CCCA), I. Asia Minor, Leiden, New York, København, Köln, 1987.
CIG	Corpus Inscriptionum Graecarum, I-IV, (ed. A. Boeckh), Berlin, 1828–1877.
CIL	Corpus Inscriptionum Latinarum, consilio et auctoritate Academiae litterarum regiae Borussicae editum. (1863-).
Dacia	Dacia. Recherches et découverts archéologiques en Roumanie, S.V. L-XII: N.S. Revue d´archéologie et d´hictoire ancienne. L. 1957 si urm. Vasile Pârvan
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DAGR	Dictionnaire des Antiquités grecques et romaines, I-X, sous la direction de Ch. Daremberg et E. Saglio, Paris, 1877–1929.
DolgSzeged	Dolgozatok a Szegedi Josef Tudomanyegyetem Archaeologiai Interzetbol (I, 1925XIX, 1943).
IGB V	Inscriptiones Graecae in Bulgaria repertae, (ed. Georgi Mihailov), vol. V: Supplementum, addenda et corrigenda. Sofia, 1997.
IGDOP	Inscriptions grecques dialectales d'Olbia du Pont, (ed. L. Dubois), Genève, 1996.
IGRR IV	Inscriptiones Graecae ad Res Romanas Pertinentes, IV (ed. G. Lafaye), Paris, 1927.
ISM I, II	Inscriptiones Scythiae Minoris – Inscripțiile din Scythia Minor, I: Histria și împrejurim- ile (ed. D. M. Pippidi), Bucharest, 1983; II: Tomis și teritoriul său, (ed. Iorgu Stoian), Bucharest, 1987.
LIMC	Lexicon Iconographicum Mythologiae Classicae, I–VIII + index vol., (eds. J. Ch. Balty, E. Berger, J. Boardman, Ph. Bruneau, F. Canciani, L. Kahil, V. Lambrinoudakis, E. Simon), Zürich, München, Düsseldorf, 1981–1999.
LSJ	Liddell H. G., Scott R., Jones H. S., A Greek-English Lexicon, with a revised supplement. Oxford, 1996.
MAA	Monumenta Avarorum Archaeologica.
ОМ	Orbis Mediaevalis.
PBF	Prähistorische Bronzefunde, München.

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RA	Revue Archéologique, Paris (1844-).
RAC	Rivista di archeologia cristiana, Rome (1924-).
RevBistr	Revista Bistritei, Bistrița-Năsăud Museum Complex, Bistrița.
RH	Revue historique, Paris, (1876-).
RIG	Recueil d'inscriptions grecques, par Ch. Michel, Bruxelles, 1900.
Sargetia	Sargetia. Acta Musei Devensis, Deva.
SCIV(A)	Studii și Cercetări de Istorie Veche, tom 1–25, Bucharest, 1950–1974; începând din 1974 (tom 25): Studii și Cercetări de Istorie Veche și Arheologie, Bucharest.
SCN	Studii și Cercetări de Numismatică, Bucharest.
SEG	Supplementum epigraphicum graecum, Lugdunum Batavorum, Leiden, 1923–1971; Alphen aan den Rijn 1979–1980; Amsterdam, 1979–2005; Boston, 2006
StCl	Studii Clasice, Bucharest.
Syll ³	Sylloge inscriptionum Graecarum, (3rd edition), (ed. W. Dittenberger), 1915–1924.
Terra Sebus	Terra Sebus, Sebeș.
ThesCRA	Thesaurus Cultus et Rituum Antiquorum, I–V + index vol., (eds. J. Ch. Balty, J. Boardman, Ph. Bruneau, R. G. A. Buxton, G. Camporeale, F. Canciani, F. Graf, T. Hölscher, V. Lambrinoudakis, E. Simon), Basel, Los Angeles, (2004–2006).
UPA	Uiversitätsforchungen zur Prähistorischen Archäologie, Institut für Ur-und Frühgeschichte der Universität Kiel.
ZSA	Ziridava. Studia Archaeologica, Arad Museum, Cluj-Napoca.