# ROMAN ARMY AND SALT EXPLOITATION IN DACIA

**Abstract:** The authors study the connections between salt resources, salt exploitation and Roman army in Dacia. Even though salt resources are attested almost across the entire province of Dacia (excepting perhaps the western part), the eastern part is the richest not only in salt deposits, but also salt springs. Salt was important not only for the troops (food — nutrition and preservation, hide and leather processing, horses' and other animals' alimentation), but also for the civilian population. The army needed salt not only for its own purposes, but for distributing it in the rest of the province. However, despite the important role of the army concerning the salt resources' protection, we have to pay attention also at he other missions the troops were charged with.

**Keywords:** Dacia, Roman army, salt exploitation, military camps, salt springs.

# 1. INTRODUCTION

n a study concerning the administration of the Dacian saltworks, D. Benea noted that the locations of salt exploitation are linked to the presence of the Roman army in the area, specifically to safeguard these resources.<sup>1</sup> She exemplifies with the military camps from Sânpaul (for the halite deposits from Mărtiniş), Sărățeni (for Sovata), Inlăceni (for Praid), Ilişua (for Domnești), Gherla (for Ocna Dejului), and Potaissa (for Turda).<sup>2</sup> These castra have been documented both archaeologically and epigraphically.<sup>3</sup>

The following is an analysis of the main military camps and forts, as well as of the mentions of soldiers in the saline areas, in order to see if we can connect the soldiers' presence with the safeguarding of the exploitations. Even though salt resources are attested almost across the entire province of Dacia (excepting perhaps the western part), the eastern part is the richest not only in salt deposits, but also salt springs. Salt was important not only for the troops (food — nutrition and preservation, hide and leather processing, horses' and other animals' alimentation), but also for the civilian population. The army needed salt not only for its own purposes, but for distributing it in the rest of the province. However, despite the important role of the army concerning the salt resources' protection, Benea's remarks on the army-salt resources connections must be verified. Some castra were important not only for this purpose, but especially for the defense strategy of the *limes*.

# Lucrețiu Mihailescu-Bîrliba

"Alexandru Ioan Cuza" University of Iaşi blucretiu@yahoo.com

# Andrei Asăndulesei

"Alexandru Ioan Cuza" University of Iaşi andrei.asandulesei@yahoo.com

DOI: 10.14795/j.v6i3.404 ISSN 2360 – 266X ISSN-L 2360 – 266X

<sup>&</sup>lt;sup>1</sup> BENEA 2007a, 42-43.

<sup>&</sup>lt;sup>2</sup> BENEA 2007a, 42.

<sup>&</sup>lt;sup>3</sup> S. more RECENTLY MATEI-POPESCU/ŢENTEA 2016, 10-11 (Sărățeni, Inlăceni), 13 (Sânpaul).

# 2. THE MILITARY CAMPS AND FORTIFICATIONS **NEXT TO SALT RESOURCES**

# 2.1. Ilișua-Orheiul-Bistriței-Domnești

Before addressing the camp of Inlăceni, we must take note of the inscription of the centurio regionarius attested at Domnești.4 I. Piso and G. Cupcea argue that the presence in this area of a regionarius was meant to protect the cattle herds roaming the pastures, as to prevent their raiding by brigands (local or from across the mountains), and that salt was abundant in Dacia.<sup>5</sup> The centuriones regionarii had police duties in areas belonging to the imperial fiscus, as asserted by N.B. Rankov.<sup>6</sup> Thus, at Dolna Verenica, in the rural hinterland of the city of Montana in Moesia Inferior, C. Iulius Saturninus, centurio regionarius is attested.<sup>7</sup> The area of Montana was, however, known for the gold and silver mines, assigned to the imperial fiscus.<sup>8</sup> In the case of the text from Domnești, Piso and Cupcea consider that besides these pastures and saltworks belonging to the fiscus, regio could have also designated the territory near the limes.9 Not far there were the castra from Orheiul Bistriței<sup>10</sup> and Ilișua.<sup>11</sup>. Accordingly, this centurio regionarius had police duties not only with regards to the pastures, but also the saltworks, because both sectors belonged to the fiscus. Besides them, the units from Orheiul Bistriței and Ilișua likewise probably contributed to the protection of the salt exploitations.

In this respect, I am not very sure if D. Benea's hypothesis on role of Inlăceni camp as defending the salt resource from Domnești can be accepted without doubt. Ilișua was for a long time known as a camp for ala I Tungrorum Frontoniana, 12 but the recent researches and reassessments made especially by S. Nemeti<sup>13</sup> leads us to assume that the salt resources' defense came second. The scope of the defense system seems to concern more the northern part of the province rather than the salt resource.

Closer to Domnești is the fort from Orheiul Bistriței (see Fig. 1). The unit stationed in the fort was very likely *cohors I Hispanorum milliaria equitata*. <sup>14</sup> The only inscriptions are in fact stamps of this cohort. In our opinion, the fort from Orheiul Bistriței not only ensured the control of the Rodna pass, but it also controlled the exploitation of salt resources from Domnesti. The archaeological researches revealed two construction phases, one in the Trajanic period and the other during Hadrian's or Antoninus' reign. 15 It seems that

- <sup>4</sup> PISO/CUPCEA 2014, 115-123.
- <sup>5</sup> PISO/CUPCEA 2014, 121-122.
- <sup>6</sup> RANKOV 1983, 55-56. See also SPEIDEL 1984, 185-188; HERZ 2011, 307; FUHRMANN 2012, 222-223; IVANOV/LUKA 2015, 205-206.
- <sup>7</sup> CIL XIII 12380.
- <sup>8</sup> S. more recently IVANOV/LUKA 2015, 245, with bibliography.
- <sup>9</sup> PISO/CUPCEA 2014, 119-120.
- 10 At Orheiul Bistriței camped cohors I Hispanorum (SPAUL 2000, 109-110; PETOLESCU 2002, 111-112). For the camp itself, s. MARCU 2009, 86-87. More recently, with bibliography MATEI-POPESCU/ŢENTEA 2016, 9.
- <sup>11</sup> S. especially PROTASE/GAIU/MARINESCU 1997, 45-47, MARCU 2009, 78-85 (for the ala I Tungrorum Frontoniana); for the civilian settlement (Arcobadara or Arcobara), s. especially NEMETI/BĂRBULESCU 2006-2007, 107-118; NEMETI/BĂRBULESCU 2010, 446-455; NEMETI 2014, 79-133.
- <sup>12</sup> See especially PROTASE 1985, 249-253; PROTASE 2010, 163-170; DANA/ GAIU 2016, 257-267.
- 13 NEMETI/BĂRBULESCU 2006-2007, 107-118; NEMETI/BĂRBULESCU 2010, 446-455; NEMETI 2014; see also PISO 2006-2007, 163-166.
- <sup>14</sup> PISO/DEAC 2016, 44-1-3, 45-1 (204-206).
- 15 See MATEI-POPESCU/ŢENTEA 2016, 9, with bibliography,

in all cases, the presence of auxiliary units on the eastern limes of Dacia is in connection with both frontier defense and salt resources' protection.

# 2.2. Sovata-Sărățeni-Praid-Inlăceni

The epigraphic file from Sărățeni consists in tilestamps belonging to cohors I Alpinorum<sup>16</sup> and several private inscriptions.17 The private inscriptions are fragmentary and do not provide a full image of the persons who raised them. The tile stamps prove without a doubt the presence of *cohors* I Alpinorum. The cohort stayed in a fort, rectangular with rounded corners, built on the right bank of the Târnava Mică River. The last coin was from Gordian III, but this does not mean that the fort was not occupied later. 18 The role of the camp from Sărățeni was to defend the eastern limes of the province and the salt resources from Sovata (see Fig. 2).

The fort of Inlăceni is better known in the archaeological literature. It was built in order to control the roads along both of the Târnava rivers. Archaeologists have identified three phases of construction at Inlăceni. The first works (140 × 142 m) were mostly carried out under Trajan; in this sense, D. Isac presumed it was built by the XIII Gemina legion. The second phase consisted of a fort of irregular rectangular layout with rounded corners (142 × 146 m), which has been dated to the end of Hadrian's reign or at the beginning of Antoninus' rule. The third phase witnessed a reconstruction of the fort, which has been dated to Caracalla's rule. 19 The vicus militaris was situated next to the fort, but only geomagnetic prospections were carried out in this area.20 Inlăceni accommodated many auxiliary units, like the cohors VIII Raetorum c. R. eq. torq., 21 cohors III Hispanorum.<sup>22</sup> Brick-stamps of cohortes I Alpinorum<sup>23</sup> and II *Gallorum*<sup>24</sup> were also found. The position of the camp and its location facing both the salt exploitations points (Sovata and Praid) lends credence to the view of F. Matei-Popescu and O. Tentea that the units accommodated at Inlăceni were meant to control and defend the roads along the Târnava rivers.<sup>25</sup> On the other side, the camp of Sărățeni was situated closer both to Sovata and Praid, for which reason we believe that the units stationed at Sărățeni were meant to protect the salt exploitation. Nonetheless, their role of overall defense of the roads of eastern Dacia cannot be denied.

# 2.3. Sânpaul—Ocland-Mărtinis

The salt resources from Sânpaul are very rich. Salt springs exploited in the La Tène have been identified by Harding and Kavruk, who also hold that the Iron Age exploitation could have been continued in the Roman period.<sup>26</sup> Geophysical surveys made by the same authors in the Sânpaul area led them to conclude that on the road

- <sup>16</sup> IDR III/4, 213, 1-5.
- <sup>17</sup> IDR III/4, 206-210.
- <sup>18</sup> See MATEI-POPESCU/ŢENTEA 2016, 10, with bibliography: DUDĂU 2006, 133.
- 19 ISAC 2006-2007, 141-42.
- POPA et al. 2010, 112.
- <sup>21</sup> IDR III/4, 263. See also PETOLESCU 2002, 119-120, no 54.
- <sup>22</sup> IDR III/4, 265, 271-275, 288-278, 280-281, 283-285, 301.
- <sup>23</sup> IDR III/4, 299.
- <sup>24</sup> IDR III/4, 300.
- <sup>25</sup> MATEI-POPESCU/ŢENTEA 2016, 10.
- <sup>26</sup> HARDING/KAVRUK 2013, 43.

to Ocland there was the Roman mining exploitation, though no investigations have been made to confirm it.27 The dating of timber samples pointed not to the Roman era, but to the Iron Age.<sup>28</sup> Even though the authors do not specify which period of the Iron Age is concerned, we hold the opinion that it refers to the La Tène period, preceding the Roman conquest. The Roman fort of Sânpaul was built near the Vlăhița pass. It was rectangular with round corners.<sup>29</sup> Brick stamps of the n(umerus) M(aurorum) S(---)were found at Sânpaul.30 The epigraphic file from Sânpaul is not very rich, but the most important inscription was set up by Iulius Omucio, actor and freedman of the conductor C. Iulius Valentinus. 31 The activity of the actor and some other votive altars consecrated to Iupiter Optimus Maximus et Iuno Regina<sup>32</sup> suggested that next to the camp was a civil settlement, more likely a military vicus. The dedications to Iupiter and Iuno are not rare in the rural milieu. Analyses for this type of vota in Moesia Inferior proved that most of inscriptions consecrated to these divinities were erected in the rural communities. 33 In Dacia, Iupiter and Iuno appeared often in the context of the Capitoline Triad,<sup>34</sup> but as a couple, the deities are also attested in the villages of the province.<sup>35</sup> The civil settlement of Sânpaul accommodated also offices of the clerks of salt administration. The resources were surely defended by the units stationed in the camp. Besides, these units had an important strategic role, that to control and defend the Vlăhița pass.<sup>36</sup>

At Ocland, not very far from Sânpaul, a fortlet (20×20 m) was identified.<sup>37</sup> F. Matei-Popescu and O. Tentea noted that the small fort accommodated probably wooden barracks.<sup>38</sup> An altar at Crăciunel (a village of Ocland) was set up by Aelius Valerianus, beneficiarius consularis, with his son Valerianus.39 I think that Matei-Popescu and Tentea assumed correctly that there was a statio beneficiarii controlling the road, 40 but that confirms the information provided by Harding and Kavruk, who speak about a Roman salt exploitation on the road from Sânpaul to Ocland. 41

To this dossier we can add two other inscriptions found in the village of Mărtiniș (see Fig. 3). A. Harding and V. Kavruk carried out investigations which proved the existence of a salt spring at Mărtiniș (which definitely functioned in the Roman era). 42 More recent non-intrusive surveys have confirmed the existence of more salt springs

in the Mărtiniș area. 43 One text represents the epitaph of Aurelius, Severus, decurio very likely in an auxiliary unit accommodated in Sânpaul.44 He was commemorated by Aurelius Qui[intianus?], a relative (son?) or a comrade. The gentilicium Aurelius without a praenomen indicates a post-212 dating. Another inscription, today lost, was erected for the safeguard of Alexander Severus.<sup>45</sup> The dedicant is unknown, but it is not excluded it could be a member of an auxiliary unit, as well as the unit as common dedicator itself.

Thus, the importance of the Sânpaul-Ocland zone with respect to salt resources has, besides the archaeological testimony, epigraphic and archaeological confirmations. The field researches identified an auxiliary fort at Sânpaul, a fortlet and a statio beneficiariii in the village of Ocland. The inscriptions revealed a conductor of the saltworks and his actor, as well as military presence in the fort of Sânpaul and in Mărtinis area.

# 2.4. Olteni

Several salt springs have been identified at and around Olteni.46 A military fort was built on a high terrace of the river Olt (Fig. 4). Two phases were identified, one under Trajan, and the second, in stone (142 × 92, 5 m), under Hadrian. 47 The fort is trapezoid in shape and with rectangular towers. The strategic role of the fort was in connection with the defense of Tușnad pass and the Olt valley. The epigraphic material consists in many brick stamps. One of them belonged to the legio IIII Flavia and it can be put in relationship with the presence of units belonging to this legion in the Trajanic phase of construction. In the collection of the Székely National Museum in Sfântu Gheorghe there are 51 tile- and brick-stamps with the name of a cohort coming from a Roman grave dating at the end of the 2<sup>nd</sup> c.beginning of the 3rd c. AD.48 The lecture of the unit's name has originated some controversies. N. Gostar<sup>49</sup> and C. C. Petolescu<sup>50</sup> have read *cohors II Bessorum*. However, a ligature can be observed at the letter E. A ET or EL can be read. A. Bordi and R. Zăgreanu have recently proposed the solution cohors III B(a)etasianorum or B(a)etica,<sup>51</sup> following N. Gudea.<sup>52</sup> We do not think, from a visual investigation of high-quality photographs of the stamps, that they concern cohors II Bessorum. Even cohors IIII B(a)etasiorum or IIII B(a)etica are hard to accept, because of the lack of occurrences, we cannot ignore the hypothesis advanced by F. Matei-Popescu and O. Tentea according to whom, in the 3rd c., the presence of units still unknown in Dacia should be taken into account.53 The lecture *c*(*ohors*) *IIII Bel*(*garum*) seems more plausible.

Another inscriptions found in Olteni is a property

<sup>&</sup>lt;sup>27</sup> HARDING/KAVRUK 2013, 43.

<sup>&</sup>lt;sup>28</sup> HARDING/KAVRUK 2013, 47. See also HARDING 2015, 216; HARDING

<sup>&</sup>lt;sup>29</sup> GUDEA 1997b, 61. see also MATEI-POPESCU/ŢENTEA 2016, 13, with bibliography.

<sup>&</sup>lt;sup>30</sup> IDR III/4, 254.

<sup>&</sup>lt;sup>31</sup> IDR III/4, 248.

<sup>32</sup> IDR III/4, 247, 249.

<sup>33</sup> MIHAILESCU-BÎRLIBA 2014, 303-306; MIHAILESCU-BÎRLIBA 2015, 439-445.

<sup>34</sup> IDR III/5, 195-199, 215Ş ILD 195 etc.

<sup>35</sup> Arcobadara (Ilișua): CIL III 7627 (GAIU/ZĂGREANU 2011, 74, no I.2.8; NEMETI 2014, 117, no 11.); Micia (IDR III/3, 94).

<sup>&</sup>lt;sup>36</sup> I totally agree here with MATEI-POPESCU/ŢENTEA 2016, 13.

<sup>&</sup>lt;sup>37</sup> RAJH 167, 388.

<sup>&</sup>lt;sup>38</sup> MATEI-POPESCU/ŢENTEA 2016, 15.

<sup>&</sup>lt;sup>39</sup> IDR III/4, 256 (CBI 5390).

<sup>&</sup>lt;sup>40</sup> MATEI-POPESCU/ŢENTEA 2016, 15.

<sup>41</sup> HARDING/KAVRUK 2013, 43.

<sup>42</sup> HARDING/KAVRUK 2013, 43.

<sup>&</sup>lt;sup>43</sup> Information A. Asăndulesei.

IDR III/4, 259.

<sup>&</sup>lt;sup>45</sup> IDR III/260.

BUZEA/(CHIRICESCU) DEÁK 2008, 47, 53.

See especially VLADESCU 1983, 118, no 28; GUDEA 1997b, 61, no 37; BUZEA/(CHIRICESCU) DEÁK 2008, 62-64; SZÉKELY 1978-1979, 55-75; SZÉKELY 1993, 279-282; SZÉKELY 2012, 142-149; MATEI-POPESCU/ ŢENTEA 2016, 13.

<sup>&</sup>lt;sup>18</sup> BORDI/ZĂGREANU 2010, 201-204. See also IDR III/4, 318.

<sup>&</sup>lt;sup>49</sup> GOSTAR 1966, 178-179.

<sup>&</sup>lt;sup>50</sup> PETOLESCU 2002, 85.

 $<sup>^{51}</sup>$  BORDI/ZÅGREANU 2010, 200; see the English version BORDI/ ZĂGREANU 2011, 131-144.

<sup>&</sup>lt;sup>52</sup> GUDEA 2001, 55-60.

<sup>&</sup>lt;sup>53</sup> MATEI-POPESCU/ŢENTEA 2016, 13.

mark on a bronze molding. It belonged to Candidus, from the centuria of Maximus.54 These property marks are originating exclusively from the military milieu.<sup>55</sup> Vegetius reports that equipment marking was mandatory for legionnaires.<sup>56</sup> In this case, we cannot speak about a centuria of a legion, but of the cohort accommodated in Olteni. However, the soldiers could have owned their equipment and weaponry.<sup>57</sup> The text proves once again the military presence at Olteni.

Like in the previous cases, the strategic role of the auxiliary unit was in connection with the protection of salt resources.

# 2.5. Ocna Dejului-Sic-Cojocna-Gherla

The first three places, Ocna Dejului, Sic and Cojocna, were known for the salt resources (see Fig. 5).58 Since 142–143, Gherla was home to the ala II Pannoniorum, 59 but stamps of the ala I Batavorum were also found. 60 Next to the camp there was a civil settlement, the military vicus. Both the camp and the vicus have not actually been investigated systematically. The book published by D. Protase, N. Gudea and R. Ardevan presents however the results of the archaeological investigations since the beginning to the end of the  $20^{\text{th}}$  century.  $^{61}$  The volume shows the main results from the excavations in the military camp and all type of findings.<sup>62</sup> The earth- and the timber-phase of the Roman fort dated, after the authors, approximately 106-140, while the stone phase started at the end of Hadrian's reign or the beginning of Antoninus' reign. 63 That corresponds with the dating of the inaugural inscription set up in 142-143.64 Another stone phase (only repair works), according to the authors, dates from the beginning of the 3rd<sup>65</sup> c. The vicus, even if it was not systematically investigated, provided finds which proved that the settlement was rather important in the area. The problem with the epigraphic material is that (save for a few samples) it is difficult to establish the origin of the inscriptions (camp or civilian settlement). We present the texts in which we can assume a military presence at Gherla, from which a connection (though indirect) can be made with the protection of salt resources situated not far from the camp, among which the most important were those from Ocna Dejului. However, I think that the main role of the auxiliary unit accommodated there was to control the road that connected Napoca to Porolissum, but the defense of the saltworks was not overlooked.

The presence of the *ala II Pannoniorum* is attested by many tile- and brick-stamps, <sup>66</sup> but there are other epigraphic evidences mentioning soldiers and commanding-ranked men of the unit. We mention in this regard simple equites, like Roemetalces, commemorated by the imaginifer Brisenus (both having a Thracian origin), 67 Ulpius Boniatus, 68 another soldier whose name is not preserved,69 the decuriones M. Aurelius [---] and M. Aurelius Secundinus<sup>70</sup>, an anonymous immunis, 71 the stator Aurelius Tato 72, the signifer Dines (another Thracian)73 and the equestrian praefecti alae Tannonius Maximus<sup>74</sup>, C. Caelius Salvianus<sup>75</sup> and M. N(...) Lucretianus.76 The texts also mention two veterans, a former *imaginifer*, Aelius Ana[---],<sup>77</sup> and an *ex-decurione*, Septimius Pisusus. $^{78}$  The soldiers bore Thracian names (likes Roemetalces, Brisenus, Dines, Pisusus) or Celtic names (like Boniatus). The name of Tato is present in both the Illyrian and Celtic space. 79 Hercules Magusanus is a Germanic deity, adored in the Batavian milieu.80 In our opinion, the context shows that Aurelius Tato belongs to the Batavian community: this rests not only on the record of Hercules Magusanus,81 but also on the presence of ala I Batavorum at Gherla, attested by brick stamps. Other inscriptions mention civilians and probably originate from the military vicus. However, taking into account the names of some individuals, it is very likely that they are related with the soldiers or with the veterans. More specifically, there are persons who bear Thracian, Illyrian and Celtic names, like Aurelius Diaies and Aurelius Ditugentus,82 Scenobarbus Dasi,83 Aelia Deccia and Aelius Consius.84

In conclusion, the military presence is not attested only by tile- and brick-stamps, but also by stone inscriptions mentioning soldiers or veterans of the ala II Pannoniorum. As pointed out before, the salt exploitations at Ocna Dejului, Sic and Cojocna were protected by the soldiers of this unit, but the main task of the ala was the control of the road Napoca-Porolissum. Of course, the salt transportation on this road was included in the unit's missions. Moreover, the salt was used for the army's needs, too.

# 2.6. Potaissa (Turda)

Potaissa is known in literature as the camp of legio V Macedonica after the beginning of Marcomanic wars (most probably 168-170 AD).85 Of course, the legion, first dislocated for these wars, was accommodated in Potaissa

<sup>&</sup>lt;sup>54</sup> IDR III/4, 319.

<sup>55</sup> See for example, a property mark from Moesia Inferior published by RUBEL 2008, 1-8 (see also MIHAILESCU-BÎRLIBA 2011, 100-101).

<sup>&</sup>lt;sup>56</sup> Vegetius 2, 8.

<sup>&</sup>lt;sup>57</sup> BISHOP/COULSTON 2006, 242; MANNING 2014, 15.

<sup>&</sup>lt;sup>58</sup> WOLLMANN 1996, 242.

<sup>&</sup>lt;sup>59</sup> AE 1906, 112,

<sup>60</sup> PISO/DEAC 2016, 13-1-4.

 $<sup>^{\</sup>rm 61}$  PROTASE/GUDEA/ARDEVAN 2008, 16-23.

<sup>62</sup> PROTASE/GUDEA/ARDEVAN 2008, 24 SQQ.

<sup>63</sup> PROTASE/GUDEA/ARDEVAN 2008, 24-41.

<sup>&</sup>lt;sup>64</sup> AE 196, 112.

<sup>65</sup> PROTASE/GUDEA/ARDEVAN 2008, 41.

<sup>66</sup> CIL III 1633-3. See especially ARDELEANU, ZĂGREANU 2010, 489-500.

<sup>&</sup>lt;sup>67</sup> I prefer the lecture of PISO (2013a, 46-47).

<sup>68</sup> PISO 2013a, 47-48.

CIL III 12542; ZĂGREANU 2007, 259-260.

<sup>&</sup>lt;sup>71</sup> ILD 593.

<sup>&</sup>lt;sup>72</sup> ILD 590.

<sup>&</sup>lt;sup>73</sup> ILD 594.

<sup>&</sup>lt;sup>74</sup> CIL III 83b. I prefer the new lecture of PISO 2013b, 172-174, following the new photos.

<sup>75</sup> ILD 586.

CIL III 12540; ILD 587.

<sup>&</sup>lt;sup>77</sup> Lupa 11360.

<sup>&</sup>lt;sup>78</sup> ILD 588.

 $<sup>^{79}\,</sup>$  CIL III 2749; AE 1981, 670; CIL XIII 5027, 130131-1-2, 13032. See also

<sup>80</sup> See especially CIL VI 31162, but also CIL XIII 8010, 8075, 8492, 8610, 8771, 10027-212c; AE 1971, 282; 1977, 570; 1994, 1282, 1284.

<sup>81</sup> See also VARGA/SĂSĂRMAN 2012, 94. For the cult of Hercules Magusanus in German provinces, see ROYMANS 2009, 219-238; ROYMANS 2010, 200-202, 238, 242 etc.

<sup>82</sup> CIL III 835.

<sup>83</sup> PROTASE 1968, 339-341.

<sup>84</sup> CIL III 1608. See especially ARDEVAN/ZĂGREANU 2005, 257-264.

<sup>85</sup> BĂRBULESCU 2012 ,1997 ,1994 ,1987; PÎSLARU 2009.

in order to defend the northern frontier. The legion also protected the salt rock deposits from Turda, situated in the proximity. Before the 5<sup>th</sup> Macedonica legion came to Potaissa, the settlement was a vicus, as it is indirectly proved by an inscription erected by two magistri.86 The dedication to Terra Mater also suggests a mining activity, but we shall speak later about the dedications to this deity. However, the military presence at Potaissa consists not only in the mentions of the legio V Macedonica. Brick-stamps with the name of the legio  $\it XIII \, Gemina \, were \, also \, found.^{87} \, One \, of \, them \, attests \, the \, name$ of Aurelius Menander.88 This magister figlinae is mentioned on the stamps of two bricks from Salinae<sup>89</sup>. Normally, the main discoveries with his name come from Apulum and its environs90, but there are another stamps found at Ulpia Traiana Sarmizegetusa, 91 Sebeș, 92 and Micia 93. From the onomastics, the bricks probably date from the 3<sup>rd</sup> century, in any case after 212. The other brick does not bear any name, but a presence before the coming of the legio V Macedonica at Potaissa is not excluded. However, these stamps clearly prove the short stay of sub-units belonging to the 13th Gemina legion. I cannot prove (because there is no dating argument to find) if one brick is dated before the Marcomanic wars, but if it is so, one of the reasons of this military presence is the defense of salt deposits from Potaissa (Fig. 6).

The dislocation of the 5th Macedonica legion near the salt deposits was in connection not only with the defense of the exploitation, but also with the food supply of the army. The deposits are among the richest in Transylvania and the extracted salt was sufficient for an entire legion. Its supplying was easier givben that the deposits were next to the camp.

# 2.7. Războieni (Ad Vatabos) and Salinae (Ocna Mures)

Războieni, situated 5 km north-east from Ocna Mures, but on the other bank of the Mures River, was the camp of the ala I Batavorum miliaria. 94 The unit controlled not only the saltmines from Ocna Mures, but also the riverine circulation (Fig. 7).95 The researches carried until a few years ago produced few results, and the historical interpretations were cautious and hesitant.96 The camp was partially excavated in 1995-1996.97 I. A. Oltean provided the aerial photos of the military *vicus* and of the camp. <sup>98</sup> V. Rusu-Bolindet and C. Onofrei published a small sample of the pottery assemblage found in both castra and the civilian settlement. 99 Recent archaeological investigations confirmed the presence of

86 ILD 500.

this military unit and of the civilian settlement. 100 Brand new geomagnetic surveys proved that the camp's surface was ca. 5.2 ha. 101 These investigations revealed the *principia*, the barracks, the praetorium and the horreum. 102 The stratigraphy of the camp was not clear from the geomagnetic prospections, nor the gate and tower construction works. 103 The surveys showed that a barrack room accommodated eight men; a corresponding number of horses were in the stables situated next to the barracks. 104 West from the camp, a military vicus was archaeologically attested. 105 There are another constructions north and north-west from the camp, which are assumed to belong to the same vicus. 106 The surveys revealed houses, small streets and other buildings along the via decumana of the vicus. 107 South to the camp, another vicus was identified. Other complexes outside the vicus can be interpreted as villae, judging from their size. 109 The salt resources were in connection with the more important salt exploitation at Salinae, but they existed also next to Războieni.110

What about the epigraphic file for Războieni? Except the brick- and tile stamps with the name of ala I Batavorum miliaria, 111 other brick stamps mention legio XIII Gemina. 112 It is possible that some detached units of the legion were accommodated here, in order to oversee not only the salt exploitation, but also the transportation of goods on the Mures River. On the other side, officers and soldiers of the ala are mentioned in Apulum. For example, C. Iulius Corinthianus, tribunus of this unit, died at Apulum around 200.113 Another soldier, horseman in the same ala, has an Illyrian origin (Dasas Scenobarbi). 114 Aelius Dubitatus was freed from the unit and died at the age of 30 in Apulum. 115

Identified with the ancient settlement Salinae, the archaeological excavations in the site of Ocna Mures have revealed the traces of a camp. V. Wollmann states that the remains of a Roman surface exploitation and of buildings used for this purpose between Ocna Mureș and Șpălnaca were still visible in the 19th century. 116 In any case, Ocna Mures is located at ca. 55 km to the north-west of Alba Iulia, the headquarters of the legio XIII Gemina.

Foremost represented by the stamped bricks of the aforementioned legion, the epigraphic assemblage from Ocna Mures also contains other interesting inscriptions, which we will discuss below. The bricks bearing the stamp of the legion are accompanied by anthroponyms of cives Romani,

<sup>87</sup> CIL III 1629, 17b; 8064-1k.

CIL III 1829, 17b.

<sup>89</sup> IDR III/6, 164a, 167

<sup>90</sup> IDR III/6, 165b, 165, 166; AE 1998, 1075d; IDR III/4, 47-5.

<sup>&</sup>lt;sup>91</sup> CIL III 1629-17a, 8065-20c-d.

<sup>92</sup> AE 1971, 375e.

<sup>&</sup>lt;sup>93</sup> AE 1975, 729j.

<sup>94</sup> For example, the bricks and the tiles with the name of this unit: IDR III/4,

<sup>95</sup> Se MISCHKA/RUBEL/VARGA 2018, 377, but also the other works on Războieni and Ocna Mureș.

<sup>96</sup> CRIŞAN 1965, 63-74.

<sup>97</sup> BOTA/RUSCU/RUSCU/CIONGRADI 2004, 291-300.

<sup>98</sup> OLTEAN 2007, 158-159. See also MARCU 2009, 153.

<sup>99</sup> RUSU-BOLINDEȚ/ONOFREI 2010, 401-447.

<sup>100</sup> POPOVICI/VARGA 2010; VARGA 2012, 806-820; BOUNEGRU/VARGA 2017, 47-51.

<sup>101</sup> MISCHKA/RUBEL/VARGA 2018, 382.

<sup>102</sup> MISCHKA/RUBEL/VARGA 2018, 382-385, Abb. 6-7.

<sup>103</sup> MISCHKA/RUBEL/VARGA 2018, 384.

MISCHKA/RUBEL/VARGA, 389-390. See other situations by HODGSON/BIDWELL 2004, 123-131; SCHOLZ 2009, 55.

<sup>105</sup> MISCHKA/RUBEL/VARGA 2018, 393.

<sup>106</sup> MISCHKA/RUBEL/VARGA 2018, 303.

<sup>107</sup> MISCHKA/RUBEL/VARGA 2018, 393.

<sup>108</sup> OLTEAN 2007, 158-159; MISCHKA/RUBEL/VARGA 2018, 396.

<sup>109</sup> MISCHKA/RUBEL/VARGA 2018, 396-397.

See also ARDEVAN/VARGA 2010, 183-199.

<sup>&</sup>lt;sup>111</sup> IDR III/4, 78-81; PISO/DEAC 2016, 12-1,2.

<sup>&</sup>lt;sup>112</sup> IDR III/4, 77A-B.

<sup>&</sup>lt;sup>113</sup> IDR III/5, 442.

<sup>114</sup> IDR III/5, 522.

<sup>&</sup>lt;sup>115</sup> IDR III/5, 475.

<sup>&</sup>lt;sup>116</sup> WOLLMANN 1996, 241. See also OLTEAN 2007, 182.

which are probably *magistri figlinae* (or *figlinarum*) — soldiers tasked with overseeing the manufacturing workshops. This is indicated by a stamp from Apulum in which the name of Aurelius Godes (also mentioned at Ocna Mureș) is accompanied by the group of letters 'M F' (interpreted by C. Băluță as manu facit, but actually designating responsibility - magister figlinae or figlinarum)<sup>117.</sup> B. Lörincz holds that these magistri figlinarum were regular soldiers, perhaps immunes118, a view also shared by Y. le Bohec. The few stone inscriptions with direct or indirect references—from Germania Inferior (Iulius Victor — magister figlinarum, 119 two immunes figlinarum<sup>120</sup>), Germania Superior (one custos castelli figlinarum)<sup>121</sup>, and Dacia (Drobeta — one in figlinis magister super milites LX)—confirm that these magistri were soldiers of the legion tasked with superintending the production of bricks on the property (properties) in which the legion's workshops were found.

Besides Aurelius Godes, to whom this responsibility can be assigned, the other individuals lack such functions assigned to their names, but it follows that they were likewise soldiers of the legion (being Roman citizens) with similar attributions.

It must be stated from the onset that the presence of these stamped bricks at Ocna Mures does not necessarily imply the presence of the legion in that place. But considering the number of such materials, the proximity to Apulum, and the economic and strategic importance of the exploitation from Salinae, the discussion is more complex and will be detailed after enumerating the more important epigraphic mentions from this settlement.

Thus, Ocna Mureș yielded two bricks of the legio XIII Gemina bearing the name of Lucretius Aquila<sup>122</sup>. Besides  $Apulum^{123}$ , tiles bearing the name of the same soldier are furthermore found at Germisara, 124 Micia, 125 Sebes, 126 Sighișoara, 127 Ulpia Traiana Sarmizegetusa 128, and Ampelum. 129 C. Băluță places these tegulae, on the basis of an archaeological context (presented superficially), not earlier than the rule of Marcus Aurelius  $^{130}$ , but it's not excluded that they date from much later, starting with Caracalla<sup>131</sup>.

Flavius Heliodorus is another name mentioned on the stamped tegulae from Ocna Mureș. 132 The same name is found on bricks of the legio XIII Gemina from Ulpia Traiana Sarmizegetusa, 133 Micia 134 and, surely, Apulum. 135 The archaeological contexts in which the stamps were found are

```
<sup>117</sup> IDR III/6, 163. BENEA 2005, 143-150; BENEA 2010, 207.
118 LÖRINCZ 191-197, 1991; LE BOHEC 07-01, 1997.
<sup>119</sup> CIL XIII 8739.
<sup>120</sup> AE 1930, 33.
<sup>121</sup> KURZMANN 2005, 412.
<sup>122</sup> IDR III/6, 225, 228.
<sup>123</sup> AE 1965, 39-14; 1995, 1293s; IDR III/6, 226-227, 229; OTA/LASCU 2011,
208-209
124 IDR III/3, 226-4B.
<sup>125</sup> IDR III/3, 195-18A-B.
<sup>126</sup> AE 1971, 375F.
<sup>127</sup> CIL III 8065-31I.
<sup>128</sup> IDR III/2, 541-7.
<sup>129</sup> AE 1911, 37.
^{130}\, IDR III/6, 226 sqq., sub numero.
<sup>131</sup> See OTA/LASCU 2011, 208-209.
<sup>132</sup> IDR III/6, 183.
<sup>133</sup> IDR III/2, 541-6.
134 CIL III 8065-25B.
<sup>135</sup> IDR III/6, 182-184; OTA/LASCU 2011, 208.
```

not relevant, so we can date these bricks to the last quarter of the 2<sup>nd</sup> century and the first half of the 3<sup>rd</sup> century.

Iulius Deiotarus<sup>136</sup> and Ulpius Fronto<sup>137</sup> are two names of magistri figlinarum attested at Ocna Mureș. Both names are recorded elsewhere in Dacia. Besides Apulum<sup>138</sup>, Iulius Deioteratus is also attested at Micia. 139 Ulpius Fronto is attested only at Apulum.140 Like in the previous cases, the tegulae date not earlier than the last quarter of the 2<sup>nd</sup>

Another soldier mentioned on the stamped bricks from Ocna Mureș is Aurelius Dionisius<sup>141</sup>, a name also found at Apulum. 142 An Aurelius Dionisius consecrates an altar at Micia to the genius Turmazgadas<sup>143</sup>, a Syrian god<sup>144</sup>. With the cohors II Flavia Commagenorum having stationed at Micia, we can presume that the Aurelius Dionisius from here was a curator in this military unit. This makes it hard to identify this curator cohortis with the soldier from the stamps of Apulum. In any case, the gentilicium Aurelius argues for a dating of these stamps starting with Caracalla.

Another name encountered on the bricks from Salinae is that of Aurelius Callistratus. 145 Besides Apulum, 146 tiles mentioning his name have also been found at Micia and its environs<sup>147</sup>. His onomastics point to a dating starting with the rule of Caracalla.

We also propose the same dating for the stamps bearing the name of soldier Aurelius Caius<sup>148</sup> attested, besides Apulum<sup>149</sup>, at Ulpia Traiana Sarmizegetusa<sup>150</sup> and also Sighișoara.151

A frequent name encountered on the tegulae is that of Aurelius Enthimus. At Ocna Mureș it is found once<sup>152</sup>. Besides Apulum and its environs<sup>153</sup>, his name is also attested on bricks at Şard,154 Sighişoara,155 Brucla,156 Cenad157, and Sânnicolau Mare. 158 Al. Flutur proposed in the case of the discoveries from Cenad and Sânnicolau Mare that the bricks were carried there sometimes in the Middle Ages. 159 This is possible, but a Roman military presence should not be excluded. That no Roman fortifications have been found does not necessarily prove that soldiers of the legio XIII Gemina were not stationed there. In this case too, a dating post-Caracalla is likely.

```
136 CIL III 8065-29a.
 137 CIL III 8065-34a.
 138 CIL III 8065-29c; AE 1995, 1293m; IDR III/6, 202-205.
    AE 1975, 729m, CIL III 8065-29b, IDR III/3, 195-15a.
 <sup>140</sup> AE 1995, 1293v, IDR III/6, 249, 251-253, 254b, 456.
 <sup>141</sup> IDR III/6, 150a.
 <sup>142</sup> IDR III/6, 150b.
 <sup>143</sup> IDR III/3, 149.
 <sup>144</sup> See SANIE 1981, 99-103; NEMETI 2005, 235-238; NEMETI 2013, 140.
 <sup>145</sup> CIL III 8065-13a.
 <sup>146</sup> IDR III/6, 143-147
 147 CIL III 1629-10a-c; 8065-13f.
 148 At Ocna Mureș: CIL III 8065-17b-c.
 <sup>149</sup> IDR III/6, 140a-d.
<sup>150</sup> IDR III/2, 235.
 <sup>151</sup> IDR III/4, 194.
152 CIL III 8065-18b; OTA/LASCU 2011, 208.
<sup>153</sup> IDR III/6, 151a-c; III/4, 47-2.
<sup>154</sup> IDR III/4, 51-2.
155 IDR III/4, 194-1.
156 CIL III 8065-18d.
<sup>157</sup> IDR III/1, 277g.
<sup>158</sup> IDR III/1, 275b.
159 FLUTUR 2010, 63-67.
```

Aurelius Menander is attested on the stamps of two bricks from Salinae<sup>160</sup>. Besides Apulum and its environs<sup>161</sup>, this name is attested at Ulpia Traiana Sarmizegetusa, 162 Sebeș,<sup>163</sup> Potaissa,<sup>164</sup> and Micia<sup>165</sup>. I'm inclined to assign these bricks likewise to the 3<sup>rd</sup> century, in any case after 212.

Also from the same period date the stamped bricks bearing the name of Aurelius Mommo, numbering two at Ocna Mureș<sup>166</sup>. The name of this magister figlinae is found, besides Apulum, 167 at Ulpia Traiana Sarmizegetusa 168 and Micia.169

Finally, Aurelius Godes, magister figlinae of legio XIII Gemina, is found in two instances at Salinae. 170 His name is obviously attested at Apulum and the surrounding area, 171 but also at Ulpia Traiana Sarmizegetusa, 172 Păuca, 173 Cenad<sup>174</sup>, and Sânnicolau Mare.<sup>175</sup> Like in the case of the other Aurelii magistri figlinarum, these bricks date from the period after 212.

The epigraphic assemblage from Ocna Mureș contains several other interesting texts. One is a votive inscription to Apollo by Atilius Celsianus, decurio. 176 The character is undoubtedly decurio in an auxiliary unit, very likely the ala I Batavorum, located nearby, at Războieni-Cetate (Ad Vatabos).

An extremely fragmentary funerary text mentions another decurio, most likely belonging to the same unit<sup>177</sup>: Aurelius C[api?]to, tesserarius in legio V Macedonica is commemorated by his wife Aelia Candida. On account of the name of the character and the date of the legion's presence in Dacia, the inscription can definitely be dated after Caracalla, but it also shows that the soldiers of this legion had brief missions at Salinae.

Finally, we can conclude the review of the most important inscriptions from this settlement without mentioning the altar dedicated to the goddesses Diana and Terra Mater by a character (or characters) whose name(s) has not been preserved. 178 Terra Mater is a divinity worshiped in the mining areas of the Balkan-Danubian provinces.<sup>179</sup> In Moesia Superior, in the Rudnik mining area, the temple of the goddess, ruined by old age, is rebuilt under the rule of Septimius Severus. 180 In Dalmatia, in the Ljubija mining district, Terra Mater is found on six dedications, on part of functionaries from the iron exploitation administration. 181

```
160 IDR III/6, 164a, 167.
```

In Dacia, three inscriptions come from the Alburnus Maior area, the main center of gold mining. They were produced by the workers of the gold mines. 182 Besides the inscription from Salinae, Terra Mater is also mentioned in two centers of salt exploitation, specifically at Potaissa (Roman citizens from the vicus through the intercession of magistri)183 and Domnești (by Atticus, actor of Publius Aelius Marius, conductor pascui et salinarum). 184 The text from Salinae, albeit fragmentary, is linked to the exploitation of salt in this place.

The epigraphic dossier from Ocna Mureș, even if it has not been presented exhaustively, is particularly relevant for underlying the importance of salt exploitation in the area. The ancient name of the settlement, corroborated by the altar dedicated to the goddess Terra Mater, discussed above, confirm the exploitation of this resource in the present-day Ocna Mures. The stamped bricks likewise have special significance. It could be argued that their presence does not necessarily imply the presence of legionnaires. But we notice that at Salinae the most frequent mentions are of magistri figlinarum of legio XIII Gemina, whose activity span most probably from the end of the 2<sup>nd</sup> century to the middle of the 3<sup>rd</sup> century. The stamped bricks bear the name of no less than eleven magistri figlinarum: Lucretius Aquila, Flavius Heliodorus, Iulius Deiotarus, Ulpius Fronto, Aurelius Dionisius, Aurelius Callistratus, Aurelius Caius, Aurelius Enthimus, Aurelius Menander, Aurelius Mommo, Aurelius Godes. Many of these (foremost the Aurelii) bear Greek (Heliodorus, Dionisius, Callistratus, Enthimus, Menander) or Eastern (Godes) cognomina. The proximity to Apulum and the importance of the resource for the army, as well as for the civilian populace, explains the large number of individuals mentioned on the stamped bricks. Even if a castra of a military unit has not been discovered, the presence of soldiers in mission cannot be denied. In point of fact, the inscription Atilius Celsianus or the epitaph of Aurelius C[api?]to clearly shows that the soldiers of the alae I Batavorum and of the legio XIII Gemina were present at Salinae. Even though the castra from Războieni-Cetate was closer to Salinae than Apulum, the number of soldiers from the legion and the power of the legion account for the control of this territory by the legio XIII Gemina. In point of fact, a stamped brick with the name of the legion was even found in the castra from Războieni-Cetate<sup>185</sup>.

To conclude, several soldiers were present at Salinae, most from legio XIII Gemina, tasked with ensuring the protection of the salt exploitation in the region. Very probably, their number varied throughout time and according to the efficiency of exploitation, though a higher concentration of troops occurred at the end of the 2<sup>nd</sup> century and probably under the Severans. At Războieni, the task of the ala I Batavorum miliaria was not only to defend the salt exploitation, but also to survey the circulation of goods on the Mures River. Furthermore, the supplying with salt was important in itself for the auxiliary unit accommodated at Războieni.

IDR III/6, 165b, 165, 166; AE 1998, 1075d; IDR III/4, 47-5.

<sup>162</sup> CIL III 1629-17a, 8065-20c-d.

<sup>&</sup>lt;sup>163</sup> AE 1971, 375e.

<sup>&</sup>lt;sup>164</sup> CIL III 1629-17b, 8065-22e.

<sup>165</sup> AE 1975, 729j.

 $<sup>^{166}\,</sup>$  CIL III 8065-14 (most likely Mommo); IDR III/6, 170.

<sup>&</sup>lt;sup>167</sup> IDR III/6, 168-169.

CIL III 1629-11e, 8065-23e.

<sup>&</sup>lt;sup>169</sup> IDR III/3, 195-11.

<sup>&</sup>lt;sup>170</sup> CIL III 8065-20a; IDR III/6, 155.

<sup>&</sup>lt;sup>171</sup> IDR III/6, 156-163; IDR III/4, 42, 47-4, 51-3.

<sup>&</sup>lt;sup>172</sup> IDR III/2, 541-2.

<sup>&</sup>lt;sup>173</sup> IDR III/4, 45.

<sup>174</sup> CIL III 8065-20e.

<sup>&</sup>lt;sup>175</sup> IDR III/1, 275e.

<sup>&</sup>lt;sup>176</sup> IDR III/4, 72.

<sup>&</sup>lt;sup>177</sup> IDR III/4, 68.

<sup>&</sup>lt;sup>178</sup> IDR III/4, 67.

<sup>179</sup> See also DUŠANIĆ 1999, 129; NEMETI/NEMETI 2010, 119-120.

<sup>&</sup>lt;sup>180</sup> ILJug 71. See also HORSTER 2001, 411.

<sup>&</sup>lt;sup>181</sup> IlJug 158-159, 161, 778-781. See also MIHAILESCU-BÎRLIBA 2006, 153-

<sup>154, 162-163.</sup> 

<sup>182</sup> ILD 378, 397, 409.

<sup>184</sup> ILD 804. I have adopted the lecture of DANA/ZĂGREANU 2013, 31, more plausible than that of BENEA 2007, 43 (see also MIHAILESCU-BÎRLIBA 2016, 54, 57).

<sup>&</sup>lt;sup>185</sup> IDR III/4, 77.

# 2.8. Ocna Sibiului

Ocna Sibiului is a rich saliferous area, which was certainly exploited in the Roman period (Fig. 8). However, the area is poor in epigraphic monuments. On the Topârca road, a military camp has been identified. 186 The camp has a rectangular form with four round-shaped towers at the corners. It was a marching camp and very likely more detachments of several units were stationed there. B. Moinier showed that rock salt was used for the treatment of the leather for the soldiers' tents.  $^{187}$  It is clear that Moinier's hypothesis cannot be overall applied, but the rock salt resources in Ocna Sibiului make this theory possible in this case.

At Sibiu (thus practically next to Ocna Sibiului) there were discovered many tile- and brick-stamps bearing the name of military units, like legio XIII Gemina<sup>188</sup> and cohors I Alpinorum. 189 One brick-stamp contains the name of the magister figlinae of the legion: Flavius Martinus. 190 This magister is mentioned on twelve other brick-stamps, ten found at Apulum, 191 one at Cenad 192, and one at Sebes. 193 In the case of Cenad, we have already mentioned the opinion of Al. Flutur according to which in the case of the discoveries from Cenad the bricks were carried there sometimes in the Middle Ages. 194 However, a military presence cannot be excluded. Like other cases of magistri figlinae in Apulum, an exact dating cannot be made, but we can presume that Flavius Martinus could be related to another magisteri, Flavius Heliodorus, so a dating from the end of the  $2^{nd}$  c. to the first half of the  $3^{rd}$  c. is possible.

At Gușterița (a neighborhood of Sibiu), a brickstamp mention the cohors N(umidarum). 195 The cohort is attested in Dacia inferior<sup>196</sup> and it is not surprising that this stamp appears in the area of Sibiu, on the other side of the Carpathians. Taking into account that other bricks or tiles with the stamp of the same unit bore the epithet Antoniniana, 197 we can date this brick before Caracalla.

In conclusion, at Ocna Sibiului there were small troops defending the saltworks. Detachments from legio XIII Gemina cohors I Alpinorum and cohors Numidarum were certainly there, but it is not excluded that other units were also present. The camp from Ocna Sibiului could only accommodate small units on the move, but it was sufficient for the defense of the salt exploitation.

# 2.9. Ocnele Mari-Buridava

Ocnele Mari is another area where halite deposits have been identified. Even though no archaeological interventions have been carried out, the likelihood of Roman

- 186 LUCA/PINTER/GEORGESCU 2003, 158. See also http://ran.cimec.ro/ sel.asp?descript=ocna-sibiului-oras-ocna-sibiului-sibiu-castrul-roman-dela-ocna-sibiului-drumul-toparcii-cod-sit-ran-143860.05.
- <sup>187</sup> MOINIER 2013, 367-388.
- <sup>188</sup> CIL III 1629-11; 8065-26c.
- 189 CIL III 1633-23.
- <sup>190</sup> CIL III 8065-c.
- 191 CIL III 12612g; AE 1995, 1293k; 1997, 1291; IDR III/6, 185, 185a, 186, 187, 187a, 188-189.
- 192 IDR III/1, 227i.
- 193 AE 1971, 375d.
- 194 FLUTUR 2010, 63-67.
- <sup>195</sup> IDR III/4, 174.
- <sup>196</sup> See ŢENTEA/MATEI-POPESCU 2004, 290, with bibliography.
- <sup>197</sup> IDR III/4, 177.

exploitation are rather high. Not far from here, the Romans built the camp of Buridava (Fig. 9). The camp was primarily founded for strategic reasons during Trajan's Dacian wars. Tile- and brick-stamps with the names of the three legions that took part in the Dacian conflict (together or separately) were found here. 198 The strategic role of the camp is beyond any doubt, with the units stationed here controlling the gorge of the river Olt.

Besides the stamps containing the names of the aforementioned legions, there are three more auxiliary units attested on the same type of sources. One of them is cohors I Augusta Nervia Pacensis miliaria Brittonum. 199 The cohort received battle honors and the reward of Roman citizenship at Darnithithi during Trajan's second Dacian war, as evidenced by a special diploma of 110.200 The cohort is also recorded in military diplomas from Dacia of 109 and 110 as cohors I Brittonum milliaria Ulpia torquata c. R.<sup>201</sup> Another unit is cohors II Flavia Bessorum. 202 Both units belong to the army of Moesia Inferior, and their presence at Buridava is connected with the information from the so-called Hunt papyrus, attesting to the presence of military units from Lower Moesia at Buridava.<sup>203</sup>

The aforementioned units are definitely related to the second Dacian war, in which the Roman troops prepared the entrance in the Olt gorge. Not far from Buridava, at Bârsești, another Roman fort was built and the cohors II Flavia Bessorum<sup>204</sup> was attested. D. Tudor read the name of cohors IX Batavorum on a brick-stamp, 205 but a new lecture proposed by F. Matei-Popescu, doubled with historical and epigraphic arguments, convincingly shows that this cohort never was dislocated to Moesia Inferior or to Dacia Inferior.<sup>206</sup>

It seems that all the units mentioned at Buridava and Bârsești are connected with the second Dacian war, and that they did not stay in the region after the war concluded. The fort was nevertheless occupied until the Roman army left the province<sup>207</sup>, and it is certain that some of its units controlled not only the Olt gorge, but also the salt deposits from Ocnele Mari.

# 3. CONCLUSIONS

The salt exploitations were, as we have already seen, defended by the Roman army (see Fig. 10). First of all, we should not exaggerate the army's mission. The camps were situated in a prioritary strategic position, in order to defend important objectives of the province (river gorges, mountain's passes, the frontier with Barbaricum). However, our opinion is that the Roman administration sought to place these castra in such a way that the army could control and defend the strategic points and the salt exploitations at the same time. The salt resources were supply sources for the

- <sup>198</sup> IDR II, 556-558, ILD 151b.
- 199 AE 1967, 420; IDR II, 560
- <sup>200</sup> CIL XVI 160.
- <sup>201</sup> CIL XVI 163; RMD III 148. See also ROXAN 1999, 252-253.
- <sup>202</sup> IDR II, 561-562.
- <sup>203</sup> See FINK 1971, 217-227. Moreover, see PETOLESCU/POPESCU 2008, 358-359.
- <sup>204</sup> IDR II, 571.
- <sup>205</sup> TUDOR 1965, 184. See also BIANCARDI 2002, 245-251.
- <sup>206</sup> MATEI-POPESCU 2004-2005, 55-60.
- <sup>207</sup> PURECE 2012, 91.

There were two main types of salt resources: the salt springs and the rock salt deposits. In both cases, the distance between the salt resources and the military camps does not exceed 20 km. Some important salt exploitations were controlled not only by the auxiliary units, by also by sub-units of the main legions (legio XIII Gemina and legio V Macedonica). At Salinae the most frequent mentions are of magistri figlinarum of legio XIII Gemina. Even if a castra of a military unit has not been discovered on the ground, the presence of soldiers in mission is beyond any doubt. The castra from Războieni-Cetate was closer to Salinae than Apulum; however, the number of soldiers from the legion and the power of the legion proved that this territory was control conjointly by the legio XIII Gemina and by the ala I *Batavorum*. The salt exploitations from Turda were the most important in Dacia; before the coming of the 5<sup>th</sup> Macedonica legion, exploitation already took place. Surely, a military presence is not well attested epigraphically, but the brick stamps of the 13th Gemina legion show that this legion controlled all the important mines until 170. After that, the presence of the legio V Macedonica not only assured the frontier's control, but also the mines' defense.

Other mines were also defended by auxiliary units (like Ocna Dejului, Ocna Sibiului and Ocnele Mari). Gherla was home to the ala II Pannoniorum: the unit assured the control of the Ocna Dejului mines, but also of the salt surface resources from Sic and Cojocna. At Ocna Sibiului, tile- and brick-stamps mention the legio XIII Gemina, cohors I Alpinorum, and cohors Numidarum. Their presence is confirmed by the existence of a small camp. At Buridava, except for the units stationed during the second Dacian war, no other is attested in this location, but the camp proves that there was a rather strong military presence in the area. Other salt mines were in Sovata and Praid. Not far from Sovata was the camp of cohors I Alpinorum at Sărățeni, while the units accommodated at Inlăceni (cohors VIII Raetorum c. R. eq. torq.,208 cohors III Hispanorum and likely cohors I Alpinorum and cohors II Gallorum) defended the mines from Praid.

Besides the salt mines, the salt springs also came to the attention of the army, very likely the most important ones. Domnești was not only such a place, but also an administration center. The inscriptions attested both clerks and soldiers. The centurio regionarius mentioned at Domnești had police duties with respect to both the pastures and the saltworks. Two camps are attested not far from Domnesti. Ilişua was for a long time the castra for ala I Tungrorum Frontoniana, while Orheiul Bistriței accommodated the cohors I Hispanorum milliaria equitata. Another important area with salt spring was that of Sânpaul-Mărtiniș-Ocland. At Sânpaul, like at Domnești, an administrative clerk is mentioned, but there are also bricks bearing the name n(umerus) M(aurorum) S(---). At Ocland, the archaeological excavation revealed a fortlet; an inscription of a beneficiarius consularis found at Crăciunel (village part of Ocland) revealed a statio of beneficiarii controlling the road along the saliferous area (Ocland-Mărtiniș). Olteni was the camp of a probable *c*(*ohors*) *IIII Bel*(*garum*): the area is quite rich in salt springs.

As we can notice, even though the strategic role of the units took precedence, the defense of the salt exploitations

was not at all neglected. The supplying with salt of the units was another important military objective. Thus, in this regard, the presence of the army next to salt resources is perfectly explainable through the importance of this resource not only for the province, but for the exercitus itself.

There is another last aspect less clear for the province of Dacia. B. Moinier stated that rock salt was extremely useful for the treatment of the tents' leather, which was practiced by auxiliary units in march.<sup>209</sup> Considering the dimensions of the camps, only at Ocland and Sibiu we can speak about castra for troops on the move. Rock salt deposits were found only at Ocna Sibiului, while at Ocland there were salt springs. I am not questioning Moinier's analysis for other regions of the Empire, but this association is hard to prove for Roman Dacia, even if it cannot be excluded.

# ACKNOWLEDGEMENT.

This work was supported by a grant of Ministry of Research and Innovation, CNCS – UEFISCDI, project number 151/2017, PN-III-P4-ID-PCE-2016-0759, within PNCDI III.

# REFERENCES

AE.

L'Année Épigraphique. Paris. ARDELEANU/ZĂGREANU 2010

Ardeleanu, S./Zăgreanu, R., Tigle și cărămizi ștampilate inedite descoperite la Gherla. In: Pop, H./Bejinariu, I./ Băcueț-Crișan, S./Băcueț-Crișan, D. (eds.), Identități culturale locale și regionale în context european. Studii de arheologie și antropologie istorică. În memoriam Alexandri V. Matei (Cluj-Napoca: Mega), 489-500.

ARDEVAN/VARGA 2010

Ardevan, R./Varga, R., Descoperiri monetare antice la Războieni (jud. Alba), Bibliotheca Historica et Archaeologica Universitatis Timisiensis 12, 183-199.

ARDEVAN/ZĂGREANU 2005

Ardevan, R./Zăgreanu, R., Eine römische Inschrift im Museum der Stadt Gherla, Eos. Commentarii Societatis Philologae Polonorum XCII, 2, 2005, 257-264.

**BĂRBULESCU 1987** 

Bărbulescu, M., Din istoria militară a Daciei Romane. Legiunea V Macedonica și castrul de la Potaissa (Cluj-Napoca: Dacia).

**BĂRBULESCU 1994** 

Bărbulescu, M., Potaissa. Studiu monografic (Turda: Muzeul de Istorie Turda).

BĂRBULESCU 1997

Bărbulescu, M., Das Legionslager von Potaissa (Turda)/ Castrul legionar de la Potaissa (Turda) (Zalău).

**BARBULESCU 2012** 

Bărbulescu, M., Inscripțiile din castrul legionar de la Potaissa/ The Inscriptions of the Legionary Fortress at Potaissa (București: Editura Academiei Române).

**BENEA 2005** 

Benea, D., Aurelius Godes magister figlinarum legionis XIII Geminae, Banatica 17, 143-149.

**BENEA 2007** 

Benea, D., Cu privire la administrarea salinelor din Dacia romană, Analele Banatului 15, 41-46.

**BENEA 2010** 

Benea, D., Despre organizarea pășunilor în Dacia romană și importanța lor în economia provinciei, Bibliotheca Historica et Archaeologica Universitatis Timisiensis 12, 45-74.

**BIANCARDI 2002** 

<sup>&</sup>lt;sup>208</sup> IDR III/4, 263. See also PETOLESCu 2002, 119-120, no 54.

<sup>&</sup>lt;sup>209</sup> MOINIER 2013, 367-388.

Biancardi, M., Per una possibile correzione a CIL III 11918, Zeitschrift für Papyrologie und Epigraphik 140, 245-251.

# BISHOP/COULSTON 2006

Bishop, M. C./Coulston, J. C. N., Roman Military Equipment from the Punic Wars to the Fall of the Rome (Oxford: Oxbow Books).

# BORDI/ZĂGREANU 2010

Bordi, Z. L./Zăgreanu, R. I., Auxilia de la Olteni. Controverse și interpretări, Acta Siculica (sine numero). 195-218.

# BORDI/ZĂGREANU 2011

Bordi, Z. L./Zăgreanu, R. I. 2010, Auxilia from Olteni. Controversy and Interpretations, Ephemeris Napocensis 21, 131-144.

# BOTA et alii 2004

Bota, E./Ruscu, L./Ruscu, D./Ciongradi, C., Cercetări arheologice în castrul alei I Batavorum milliaria de la Războieni-Cetate (jud. Alba), Apulum 41, 291-300.

# BUZEA(CHIRICESCU)/DEÁK 2008

Buzea, D., (Chiricescu)/Deák, A., Cercetările etnoarheologice de la Olteni (jud. Covasna). In: Monah, D./ Dumitroaia, Gh./ Garvăn, D. (eds.), Sarea, de la prezent la trecut (Piatra Neamț: Editura Constantin Matasă), 41-79.

CIL

Corpus Inscriptionum Latinarum (Berlin).

#### CRIŞAN 1965

Crișan, I. H., Săpături și sondaje în valea mijlocie a Mureșului (Lechința, Cristești, Războieni-Cetate), Acta Musei Napocensis 2, 63-74.

# DANA/GAIU 2016

Dana, D./Gaiu, C., Quatre diplômes militaires du milieu du IIe siècle pour l'exercitus Daciae Porolissensis trouvés à Arcobara/Ilișua, Zeitschrift für Papyrologie und Epigraphik 197, 257-267.

# DANA/ZĂGREANU 2013

Dana, D./Zăgreanu, R., Deux dédicaces latines inédites de Porolissum, Tyche. Beiträge zur Alten Geschichte, Papyrologie und Epigraphik 28, 27-35.

# **DUDĂU 2006**

Dudău, O., Circulația monetară în castrele de trupe auxiliare din provincia Dacia (Timișoara: Graphite).

# DUŠANIĆ 1999

Dušanić, S., The Miners' Cults in Illyricum, Pallas 50, 129-139.

# FINK 1971

Fink, R. O., Roman Military Record on Papyrus (Princeton: Princeton Univerity Press).

# FLUTUR 2010

Flutur, Al., Cărămizile ștampilate ale legiunii a XIII-a Gemina de la Cenad și Sânnicolau Mare, Analele Banatului 1, 63-67.

# FUHRMANN 2012

Fuhrmann, Chr. J., Policing the Roman Empire: Soldiers, Administration, and Public Order. (Oxford: Oxford University Press).

# GAIU/ZĂGREANU 2011

Gaiu, C./Zăgreanu, R., Inscripții și piese scuplturale din castrul roman de la Ilișua (Cluj-Napoca: Accent).

# GOSTAR 1966

Gostar, N., Studii epigrafice II, Arheologia Moldovei 4, 175-188.

# **GUDEA 1997**

Gudea, N., Der dakische Limes. Materialien zu seiner Geschichte. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 44/2, 1-114.

# **GUDEA 2001**

Gudea, N., Restituiri arheologice. III. Cohors IIII Betasio-

rum, Ephemeris Napocensis 11. 55-60.

# HARDING 2015

Harding, A., Salt exploitation in the later prehistory of the Carpathian Basin, Documenta Praehistorica 42. 211-217.

# HARDING 2016

Harding, A., Balkan salt in Antiquity. In: Bacvarov, K., Gleser, R. (eds.), Southeast Europe and Anatolia in prehistory. Essays in honor of Vassil Nikolov on his 65th anniversary (Bonn: Habelt), 375-378.

# HARDING/KAVRUK 2013

Harding, A./Kavruk, V., Transylvania. In: Harding, A., Kavruk, V. (eds.), Exploration in Salt Archaeology in the Carpathian Zone (Budapest: Archaeolingua), 41-153.

# HERZ 2011

Herz, P., Finances and Costs in the Roman Army. In: Erdkamp, P. (ed.), A companion to the Roman Army (London: Blackwell). 306-322.

# HODGSON/BIDWELL 2004

Hodgson, N./Bidwell, P. T., Auxiliary Barracks in a New Light: Recent Discoveries on Hadrian's Wall, Britannia 35, 121-157.

#### HORSTER 2001

Horster, M., Bauinschriften römischer Kaiser. Untersuchungen zur Inschriftenpraxis und Bautätigkeit in den Städten des westlichen Imperium Romanum (Stuttgart: Franz Steiner).

IDR

Inscripțiile din Dacia romană (București-Paris: Editura Academiei Republicii Socialiste România-De Boccard).

ILD

Petolescu, C. C. (ed.), Inscripții latine din Dacia I-II. (București: Editura Academiei Române).

# ILJug

Inscriptiones Latinae quae in Iugoslavia inter annos MCMXL et MCMLX repertae et editae sunt (Ljubljana: Narodni Muzej).

# ISAC 2006-2007

Isac, D., Reparații și construcții în castrele Daciei romane în a doua jumătate a secolului III p. Cr. (O nouă analiză a fenomenului), Ephemeris Napocensis 16-17, 131-163.

# IVANOV/LUKA 2015

Ivanov, R./Luka, K., Montana - Praesidium, Regio, Municipium. In Ivanov, R. (ed.), Roman Cities in Bulgaria II: Thracian, Greek, Roman and Medieval Cities, Residences and Fortresses in Bulgaria (Sofia: Ratiaria Semper Floreat). 197-278.

# KURZMANN 2005

Kurzmann, R., Soldier, Civilian and Military Brick Production, Oxford Journal of Archaelogy 24, 4, 405-414.

# LE BOHEC 1992

Le Bohec, Y., Les estampilles de l'armée romaine sur briques et sur tuiles, Epigraphica 54. 43-62.

# LÖRINCZ 1991

Lörincz, B., Pannonische Ziegelstempel und die militärisd chen Territorien. In: Maxfield, V. A., Dobson, B. J. (eds.), Roman Frontier Studies 1989. Proceedings of the XVth International Congress of Roman Frontier Studies (Exeter: University of Exeter Press), 244-254.

# LUCA/PINTER/GEORGESCU 2003

Luca, S./Pinter, Z./Georgescu, A., Repertoriul arheologic al județului Sibiu (Situri, monumente arheologice și istorice) (Sibiu: Editura Economică).

# MANNING 2014

Manning, W. H., The Roman army and the Roman smith: Some evidence from Britain. In: Collins, R. McIntosh, F. (eds.), Life in the Limes. Studies of the people and objects of the Roman frontiers presented to Lindsay Allason-Jones of the occasion of her birthday and retirement (Oxford:

Oxbow Books), 11-17.

# MARCU 2009, 86-87.

Marcu, F., Organizarea internă a castrelor din Dacia (Cluj-Napoca: Mega).

# MATEI-POPESCU 2004-2005

Matei-Popescu, F., On the presence of the cohort IX Batavorum milliaria equitata in Moesia Inferior, Acta Musei Napocensis 41-42. 55-60.

# MATEI-POPESCU/ŢENTEA 2016

Matei-Popescu, F./Tentea, O., The Eastern Frontier of Dacia. A Gazetteer of the Forts and Units. In: Bârcă, V. (ed.), Orbis Romanus and barbaricum. The barbarians around the Province of Dacia and Their Relations with the Roman Empire (Cluj-Napoca: Mega Publishing House), 7-24.

# MIHAILESCU-BÎRLIBA 2006

Mihailescu-Bîrliba, L., Les affranchis dans les provinces romaines de l'Illyricum (Wiesbaden: Harrassowitz Verlag).

# MIHAILESCU-BÎRLIBA 2011

Mihailescu-Bîrliba, L., La cité romaine du Haut-Empire d'Ibida (Mésie Inférieure). Considérations historiques selon le dossier épigraphique, Studia Antiqua et Archaeologica 17. 83-143.

# MIHAILESCU-BÎRLIBA 2014

Mihailescu-Bîrliba, L., Une nouvelle inscription de Topolog (Mésie Inférieure). Dacia N. S. 58. 303-307.

# MIHAILESCU-BÎRLIBA 2015

Mihailescu-Bîrliba, L., Le culte de Jupiter et de Junon en Mésie Inférieure : le témoignage d'une nouvelle inscription. In: Zerbini, L. (ed.), Culti e religiosità nelle province danubiane. Atti del II Convegno Internazionale Ferrara 20-22 Novembre 2013 (Bologna: I libri di Emil), 439-445.

# MIHAILESCU-BÎRLIBA 2016

Mihailescu-Bîrliba, L., Les salines en Dacie romaine: remarques sur le personnel administratif, Studia Antiqua et Archaeologica 22/1, 51-58.

# MISCHKA/RUBEL/VARGA 2018

Mischka, C./Rubel, A./Varga, R., Das lager der ala I Batavorum miliaria und sein vicus in Războieni-Cetate Alba/RO). Geophysikalische Untersuchungen und historische Einordnungen, Archäologisches Korrespondenzblatt 48, 377-405.

# MOINIER 2013

Moinier, B., Légions et auxiliaires en marche - du sel et de la castramétation, Istros 19, 367-388.

# NEMETI 2005

Nemeti, S., Sincretismul religios în Dacia romană (Cluj-Napoca: Presa Universitară Clujeană).

# NEMETI 2013

Nemeti, S., La religione dei Daci in età romana. In: Tauffer, M. (ed.), Sguardi interdisciplinari sulla religiosità dei Geto-Daci [= Rombach Wissenschaften. Reihe Paradeigmata 23] (Freiburg im Breisgau/Berlin/Wien: Rombach Verlag KG), 137-155.

# NEMETI 2014

Nemeti, S., Finding Arcobadara. Essay on Geography and Administration of Roman Dacia, (Cluj-Napoca: Mega Publishing House).

# NEMETI/BĂRBULESCU 2006-2007

Nemeti, S./Bărbulescu, M., Territorium Arcobadarense, Ephemeris Napocensis 16-17, 107-118.

# NEMETI/BĂRBULESCU 2010

Nemeti, S./Bărbulescu, M., Arcobadara, Latomus 69. 446-455.

# NEMETI/NEMETI 2010

Nemeti, I./Nemeti, S., The barbarians within. Illyrian colonists in Roman Dacia, Studia Historica. Historia Antigua 28, 109-133.

# OLTEAN 2007

Oltean, I. A., Roman Dacia. Landscape, Colonisation, Romanisation (London: Routledge).

# OTA/LASCU 2011

Ota, R./Lascu, I., Cercetări arheologice în canabae legionis XIII Geminae / Municipium Septimium Apulense - sectorul estic, Acta Musei Porolissensis 33, 201-220.

# PETOLESCU 2002

Petolescu, C. C., Auxiliae Daciae. Contribuții la istoria militară a Daciei romane (București: Ars Docendi).

# PETOLESCU/MATEI-POPESCU 2008

Petolescu, C. C./Matei-Popescu, F., The presence of the Roman Army of Moesia Inferior at the North of the Danube and the Making of the Dacia Inferior Province. In: Piso, I. (ed.), Die römischen provinzen. Begriff und Gründung (Colloquium Cluj-Napoca 28. September-1. Oktober 2006 (Cluj-Napoca: Mega Verlag), 357-367.

# PISO 2006-2007

Piso, I., Note sur le territorium Arcobadarense, Acta Musei Napocensis 43-44, 163-167.

#### PISO 2013a

Piso, I., Studia Porolissensia IV, Revista Bistriței 27, 39-51.

#### PISO 2013b

Piso, I., Studia Porolissensia III, Acta Musei Porolissensis 35, 159-176.

#### PISO/CUPCEA 2014

Piso, I./Cupcea, G., Ein centurio regionarius der legio X Fretensis in Dakien, Tyche. Beiträge zur Alten Geschichte, Papyrologie und Epigraphik 29. 115-123.

# PISO/DEAC 2016

Piso, I./Deac, D., Inscriptiones Daciae Romanae. Appendix I. Inscriptiones laterum Musei Zilahensis (Cluj-Napoca: Mega).

# PÎSLARU 2009

Pîslaru, M., The Roman coins from Potaissa. Legionary Fortress and Ancient Town (Cluj-Napoca: Mega Pubishing House).

# POPA et alii. 2010

Popa, Al./Cocis S./Klein, C./Gaiu, C./Man, Geophysikalische Prospektionen in Ostsiebenbürgen. Ein deutsch-rumänisch-moldauisches Forschungsprojekt an der Ostgrenze der römischen Provinz Dacia, Ephemeris Napocensis 20, 101-128.

# POPOVICI/VARGA 2010

Popovici, P./Varga, R. Ad Vatabos. Monografie arheologică a localității Războieni-Cetate (Cluj-Napoca: Editura Mega).

Protase, D. Elemente trace și illire în Ala II Pannoniorum din Dacia, Studii și cercetări de istorie veche și arheologie 19/2, 339-344.

# PROTASE 1985

Protase, D. Date noi despre ala I Tungrorum Frontoniana în Dacia, Studii și cercetări de istorie veche și arheologie 36/3, 249-253.

# PROTASE 2010

Protase, D. Două fragmente din diplome militare descoperite în Dacia Porolissensis, Revista Bistriței 24, 163-170.

# PROTASE/GAIU/MARINESCU 1997

Protase, D./Gaiu, C./Marinescu, G., Castrul civil și așezarea romană de la Ilișua. (Bistrița: Muzeul Județean Bistrița-Năsăud).

# PROTASE/GUDEA/ARDEVAN 2008

Protase, D./Gudea, N./Ardevan, R., Din istoria militară a Daciei romane. Castrul roman de interior de la Gherla / Aus der Militärgeschichte des römischen Dakien. Das römische Binnenkastell von Gherla (Timișoara: Mirton).

# PURECE 2012

Purece, S. The End of the Roman Habitation at Buridava

(Stolniceni, Vâlcea County), Analele Banatului 20, 91-95.

#### **RAJH 2000**

Repertoriul arheologic al județului Harghita (Sf. Gheorghe: Editura Carpaților Răsăriteni).

# RANKOV 1983

Rankov, N. B., A Contribution to the Military and Administrative History of Montana. In: Poulter, A. G. (ed.), Ancient Bulgaria. Papers Presented to the International Symposium on the Ancient History and Archaeology of Bulgaria, University of Nottingham 1981 (Nottingham: University of Nottingham Press), 40-73.

# **ROYMANS 2009**

Roymans, N., Hercules and the construction of a Batavian identity in the context of the Roman empire. In: Derks, T./ Roymans, N. (eds.), Ethnic Constructs in Antiquity. The Role of Power and Tradition (Amsterdam: Amsterdam University Press), 219-238.

# **ROYMANS 2010**

Roymans, N., The Batavians in the Early Roman Empire. Ethnic Identity and Imperial Power (Amsterdam: Amsterdam University Press).

#### **RUBEL 2008**

Rubel, A., Eine Besitzermarke aus Moesia Inferior und die römische Militärpräsenz in Ibida, Archäologischer Anzeiger 44, 2, Halbband 1-8.

# RUSU-BOLINDEŢ/ONOFREI 2010

Rusu-Bolindeț, V./Onofrei, C., Date noi privind activitatea militară și cultura materială a alei I Batavorum de la Războieni-Cetate. In: Rusu-Bolindeț, V., Sălăgean, T., Varga, R. (eds.), Studia Archaeologica et Historica in honorem magistri Dorin Alicu (Cluj-Napoca: Mega), 401-447.

#### **SANIE 1981**

Sanie, S., Cultele orientale în Dacia romană. I. Cultele siriene și palmiriene (București: Editura Științifică și Enciclopedică).

# SCHÄFER 2001

Schäfer, A., Götter aus dem Rheingebiet in Dakien und Pannonien. In: Spickermann, W. (ed.), Religion in den germanischen Provinzen Roms (Tübingen: Mohr-Siebeck), 259-284.

# SCHOLZ 2009

Scholz, M., Das Reiterkastell Aquileia/Heidenheim. Die Ergenisse der Ausgrabungen 2000-2004 (Stuttgart: Theiss).

# SPAUL 2000

Spaul, J., Cohors<sup>2</sup> (Oxford: Archaeopress).

# SPEIDEL 1984

Speidel, M. P., Regionarii in Lower Mosia, Zeitschrift für Papyrologie und Epigraphik 57, 185-188.

# SZÉKELY 1978-1979

Székely, Z., Castrul roman de la Olteni, Aluta 10-11, 55-75. SZÉKELY 1993

> Székely, Z., Castrul roman de la Olteni. Noi rezultate ale cercetărilor din 1987-1988, Arheologia Moldovei 16, 279-282. SZÉKELY 2012

> Székely, Z., Lucrări alese (Sfântu Gheorghe: Muzeul Național Secuiesc).

# **TUDOR 1965**

Tudor, D., Comunicări epigrafice II, Studii și cercetări de istorie veche 16, 177-188.

# ŢENTEA/MATEI-POPESCU 2004

Țentea, O./Matei-Popescu, F., Alae et Cohortes Daciae et Moesiae. A review and update of J. Spaul's ala and cohors, Acta Musei Napocensis 39-40, 259-296.

# VARGA 2012

Varga, R., Pre-excavation research at the site of Ala I Batavorum (Dacia). In: Börner, W., Uhlritz, S., Dollhofer, L. (eds.), International Conference on Cultural Heritage and New Technologies, November 14-16, 2011. Proceedings (Wien: Museen der Stadt Wien – Stadtarchäologie), 806-820.

# VARGA/SĂSĂRMAN 2012

Varga, R./Săsărman, M., Nomina Germanorum ex provincia Dacia, Studii și cercetări de istorie veche și arheologie 63, 1-2, 83-97.

# VLÅDESCU 1983, 118

Vlădescu, C. M., Armata romană în Dacia Inferior (Bucharest: Editura Militară).

#### **WOLLMANN 1996**

Wollmann, V., Mineritul metalifer, extragerea sării și carierele de piatră in Dacia romană (Cluj-Napoca: Muzeul Național de Istorie a Transilvaniei).

# ZĂGREANU 2007

Zăgreanu, R. 2007., Tipuri de monumente sculpturale necunoscute de la Gherla, Revista Bistriței 21, 255-268.

# SOURCE OF DEM

Shuttle Radar Topographic Mission.

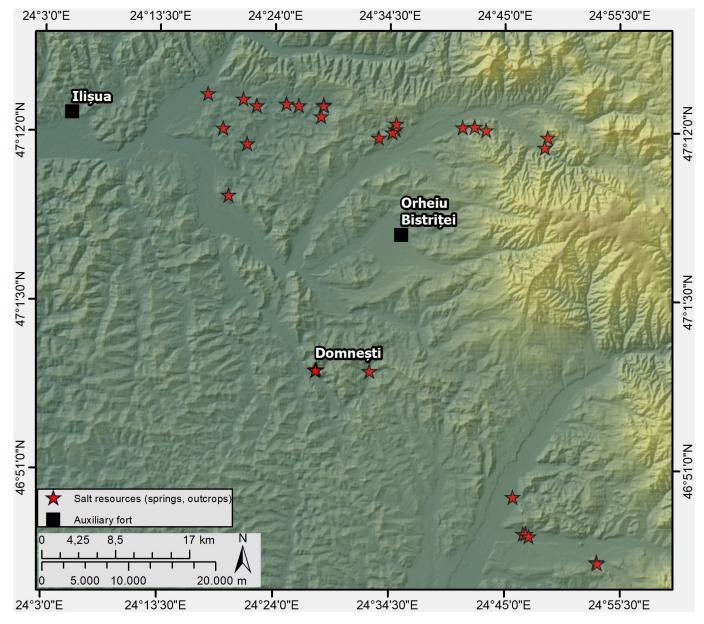


Fig. 1. Domnești-Ilișua-Orheiul Bistriței

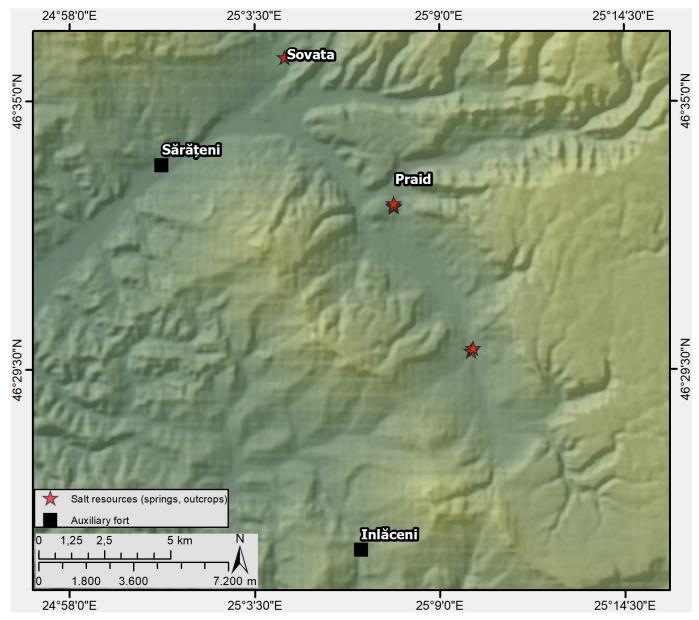


Fig. 2. Sovata-Praid-Sărățeni-Inlăceni

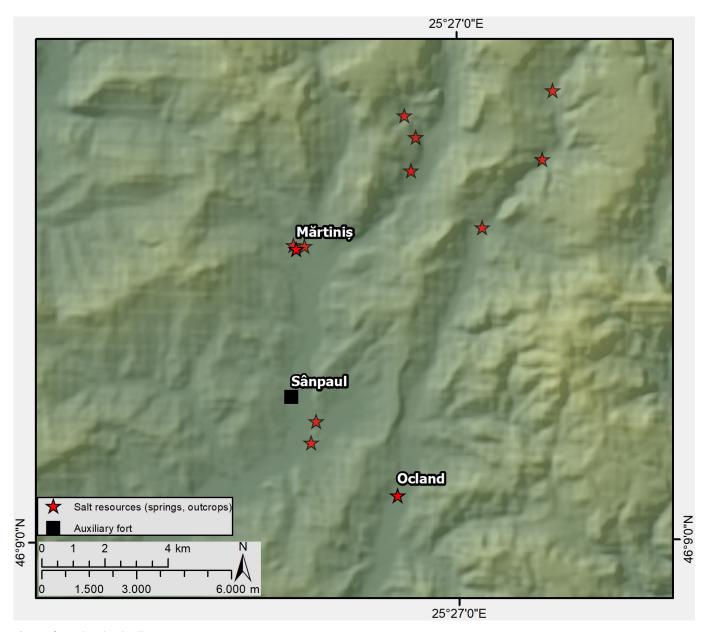


Fig. 3. Sânpaul-Ocland-Mărtiniş

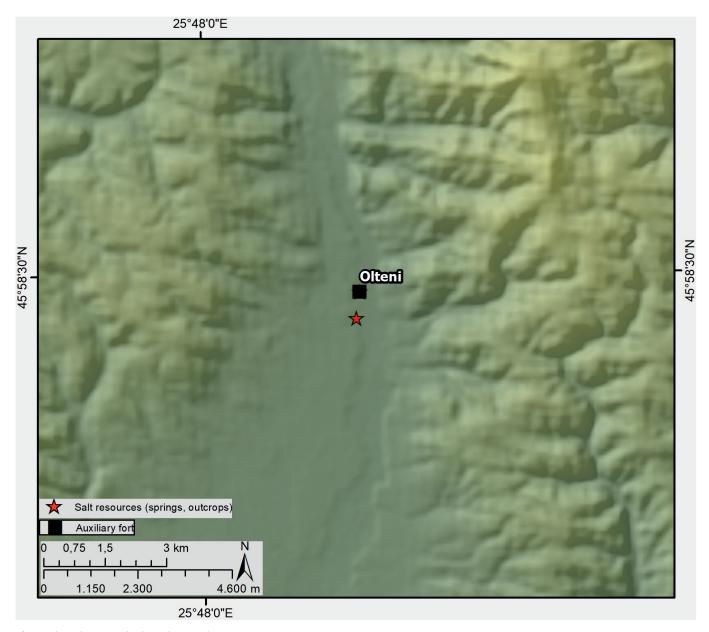


Fig. 4. Olteni (camp and salt exploitation)

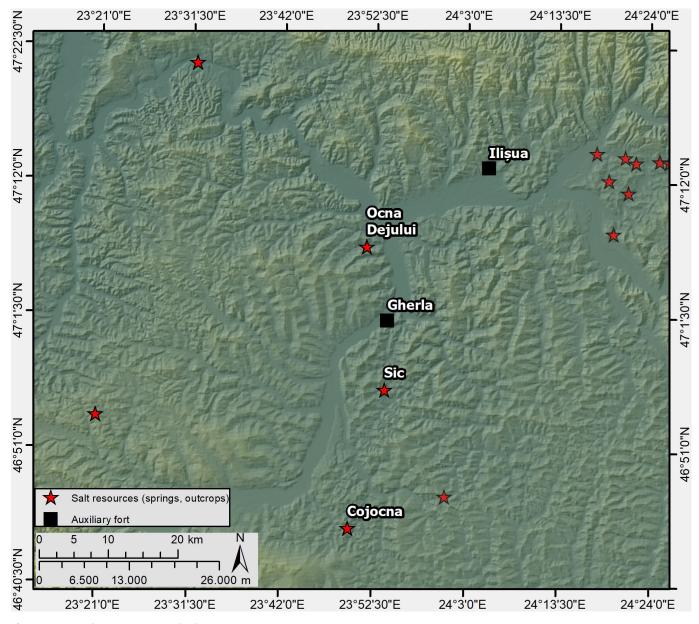


Fig. 5. Ocna Dejului–Sic–Cojocna–Gherla

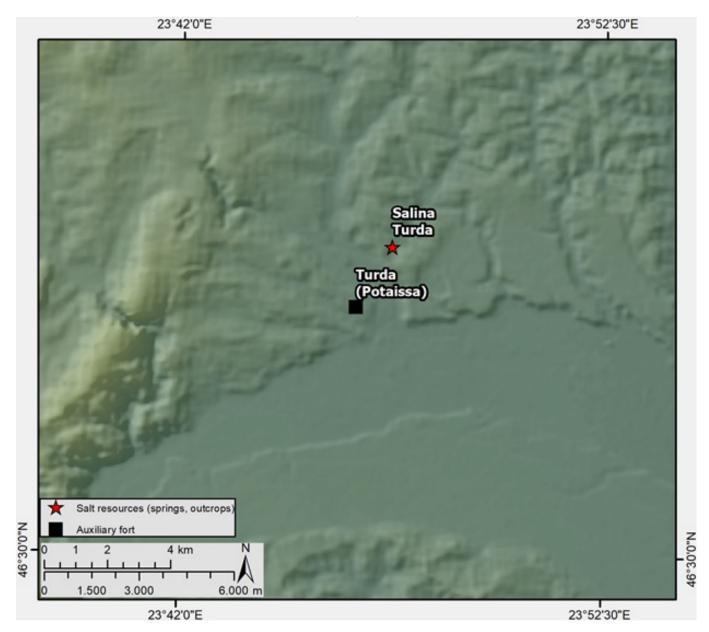


Fig. 6. Potaissa (Turda) – Turda salt mine (Salina Turda)

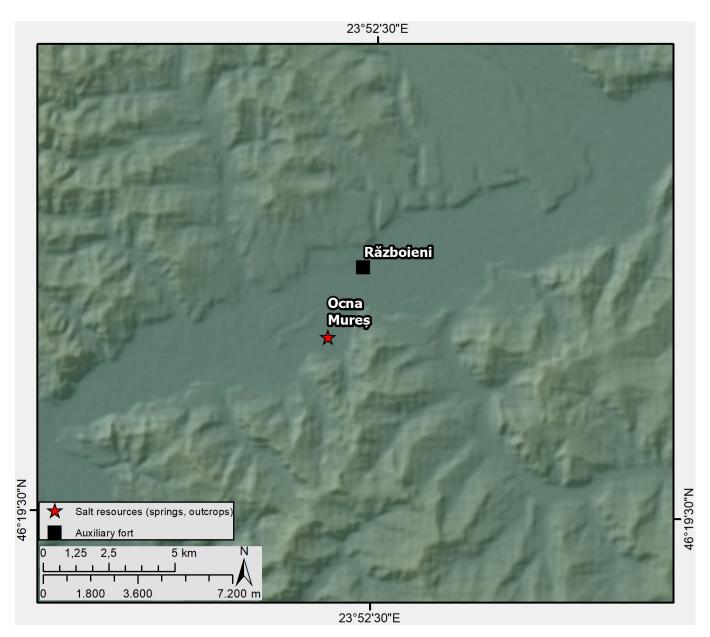


Fig. 7. Războieni-Ocna Mureș (Salinae)

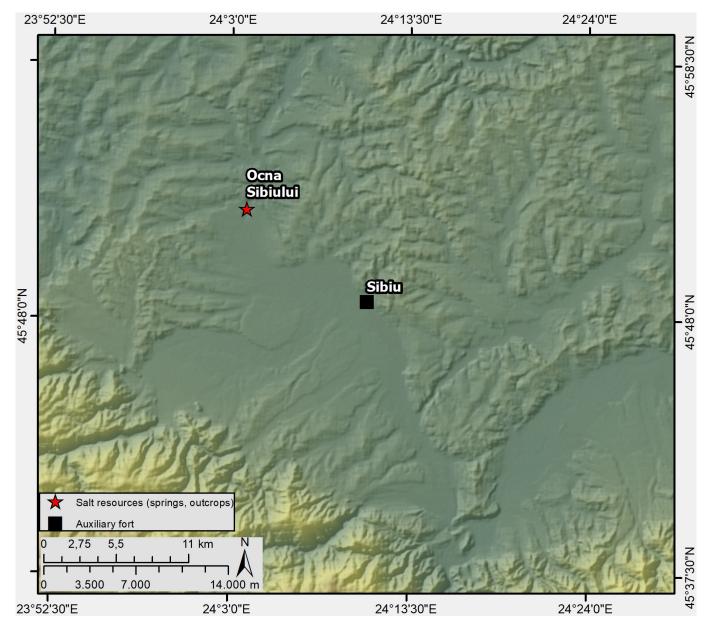


Fig. 8. Ocna Sibiului–Sibiu

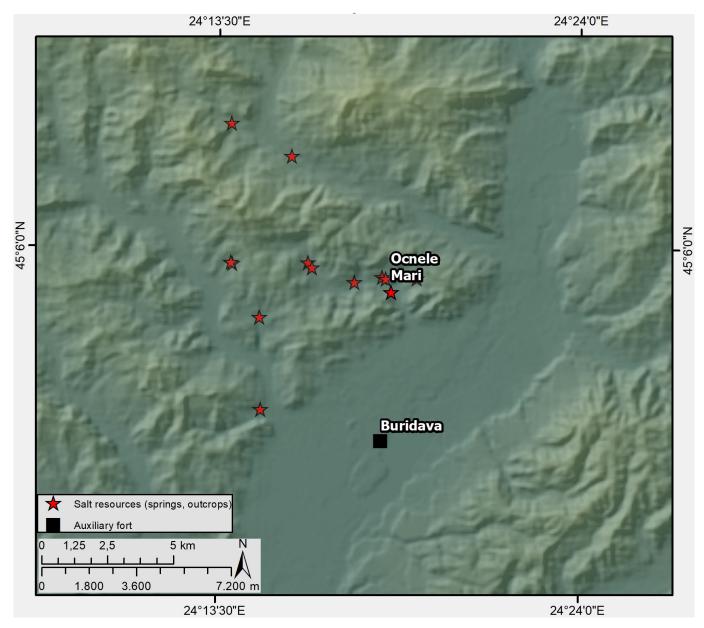


Fig. 9. Ocnele Mari-Buridava

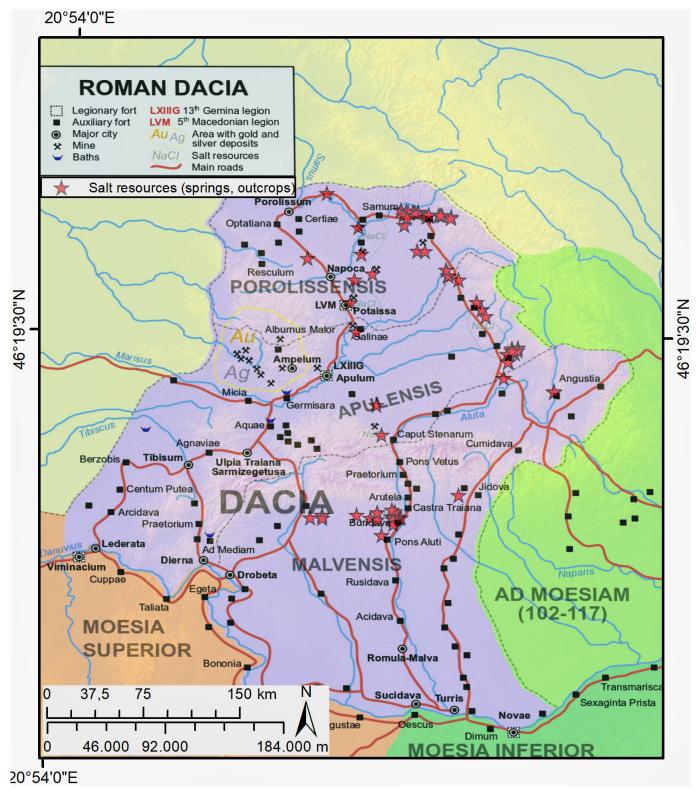


Fig. 10. General map of Dacia with military camps and salt exploitations