

**ARCHAEOLOGICAL
FIELDWORK
IN ESTONIA**

2008

**ARHEOLOOGILISED
VÄLITÖÖD EESTIS**

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ARCHAEOLOGICAL TRIAL EXCAVATIONS ON RÕUGE HILL FORT, SOUTH-EAST ESTONIA

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In 2008, small-scale archaeological excavations took place on the Rõuge hill fort, south-eastern Estonia (Rõuge parish). The plateau of Rõuge hill fort has been thoroughly studied in 1951–1955. In the course of these excavations also a 4 m-wide trench was made in its eastern rampart (see Schmiedehelm 1959, 154–155, fig. 2). The main aim of the new investigations was to re-open the profile of the rampart and to collect charcoal from its several burnt layers, in order to date the burnings of the hill fort more precisely. The excavations were carried out by the University of Tartu.

In all, three trial pits were made – two on the eastern rampart (trial pits A and B) and one (trial pit C) in the moat separating the fort and the synchronous settlement site east of it (Fig. 1). The locations of the trial pits were linked to the excavation plot of the 1950s. The burnt layers found in the rampart were also numbered according to the system of the former excavations (I–VI from the bottom to the top; see Aun 1992, fig. 12).

TRIAL PIT A

In order to reveal the 3 m wide part of the southern profile of the 1950s rampart trench, mixed soil filling the old excavation plot was removed by a small backhoe in 2008. The unearthed profile incorporated, according to the numeration of the previous excavations, quadrates 9 and 10. Five layers of burnt timber and numerous charcoal particles could be observed in the profile. Trial pit A was measured continuously south of the trench of the 1950s; its length from east to west was 4 m, the width from north to south was 1.1 m. After removing the burnt layer IV, the measures of the excavation plot was reduced to 3 × 1.1 m (Fig. 2).

The upper part of the eastern rampart was partly disturbed (mostly 30–40 cm, in some places even 70–80 cm from the modern ground level) in the Soviet period. The rampart had been a popular place for the Midsummer fires (St. John's Day).

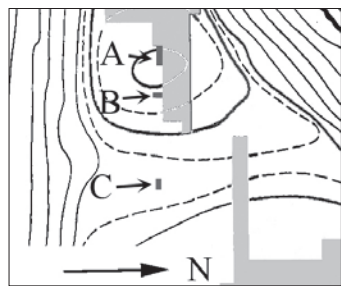


Fig. 1. The location of the trial pits A, B and C in Rõuge hill fort. The excavation plots of the 1950s are marked in grey.

Jn 1. Proovikaevandite A, B ja C asukoht Rõuge linnusel. 1950. aastate kaevandid on märgitud halliga.

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Fig. 2. The trial pit A after the excavations. View from the north.

Jn 2. Proovikaevand A pärast kaevamist. Vaade põhjast.

Photo / Foto: Anti Lillak



Fig. 3. Burnt layer IV. The charred logs A, B and C (from left to right) and a pit next to them. View from the south.

Jn 3. IV põlengukiht. Söestunud palgid A, B ja C (vasakult paremale) ning nende kõrval asuv sissekaeve. Vaade lõunast.

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Fig. 4. Birch bark covering the burnt layer III. View from the north-east.

Jn 4. III põlengukihti katter kasetoht. Vaade kirdest.

Photo / Foto: Anti Lillak

All of the burnt layers (I–V; burnt layer VI was missing from that part of the rampart) were separated from each other by yellow gravelly sand that formed the body of the rampart. In some places the yellow sand also bore traces of fire – it was orange or a little bit carnation in colour. It seemed that the burnt layers IV and V were a result of a single fire – the western end of layer V was smoothly next to the upper part of the burnt layer IV, so it was impossible to observe any sharp gap between them.

The burnt layer IV (similarly to layers V and VI) was situated more east than layers I–III. It was rather thick, reaching up to 50 cm in the easternmost part of the trial pit. It contained four charred logs (named A–D) next to each other in the NW–SE direction (Fig. 3). The diameter of the logs varied in a range of 10–20 cm, their length in the trial pit was about 120 cm, although the original length was definitely somewhat bigger. The logs were removed entirely (except the parts that reached out of the borders of the excavation area) for charcoal analysis. On one end of the log A a probable axe-made quoin, typical to horizontal log buildings, could be observed. Also a part of the fifth log was unearthed in the profile of the excavation pit (assumably in SWW–NEE direction). This log remained untouched.

Next to the westernmost log (A) an oval pit was revealed (Fig. 3). Its measures were 65 cm from north to south and 35 cm from east to west. The pit was presumably about 54 cm deep (its bottom reached about 110 cm from the modern ground level). The origin and function of the pit remain unclear – it may have been made already in the prehistoric times after the formation of the burnt layer IV (charcoal layer was missing on the pit), but its 20th century origin also cannot be excluded. The pit did not contain any modern times' finds, but in the brown fill soil a fragment of a glazed pottery was found in its vicinity.

Compared to the layer IV, layers I–III were relatively thin, only 25–30 cm in maximum. They also contained a lot of charcoal and some bigger fragments of logs, but as the slopes of the original rampart stages fell to the east, the burnt layers diminished gradually, having less than 1 cm in thickness. The upper part of the burnt layer III was only 20 cm deep from the modern ground level. Burnt layer II included a fragment of a quite large charred log, with a diameter up to 40–45 cm. Most of the timber had been removed from the rampart during the excavations in the 1950s and only about a 10–12 cm long end of it had remained. The fragment of the log was taken up for radiocarbon analysis.

A common feature for burnt layers I–III was that they all were covered by a single or double layer of unburnt birch bark (Fig. 4). The bark must have been placed only after the cooling of the burnt charcoal, otherwise it would have easily set on fire. The bark layer covered only the more intensive and thicker part of the burnt layers; at places, where the burnt layers diminished very thin, it was absent. The purpose of covering layers I–III with the birch bark is unclear. The bark covers were absent on the burnt layers IV–VI.

No. / Nr	Location / Asukoht	Layer / Kiht	Age / Vanus	Calibrated result (95.4%), Kalibreeritud tulemus	No. of the sample / Proovi nr
1.	Trial pit A	Grey sandy humus layer under the rampart	1758 ± 48	135–390 AD	Tln-3138
2.	Trial pit A	Burnt layer I	1281 ± 55	655–874 AD	Tln-3139
3.	Trial pit A	Burnt layer I, birch bark	1301 ± 55	645–870 AD	Tln-3140
4.	Trial pit A	Burnt layer II	1223 ± 55	668–945 AD	Tln-3141
5.	Trial pit A	Burnt layer II, birch bark	1299 ± 55	646–870 AD	Tln-3142
6.	Trial pit A	Burnt layer III	1298 ± 55	646–870 AD	Tln-3143
7.	Trial pit A	Burnt layer III, birch bark	1349 ± 55	581–798 AD	Tln-3144
8.	Trial pit A	Burnt layer IV, log A	1215 ± 55	673–952 AD	Tln-3145
9.	Trial pit A	Burnt layer V	1235 ± 60	661–945 AD	Tln-3146
10.	Trial pit B	Burnt layer V	1242 ± 60	660–937 AD	Tln-3147
11.	Trial pit B	Burnt layer VI	1352 ± 60	567–807 AD	Tln-3148

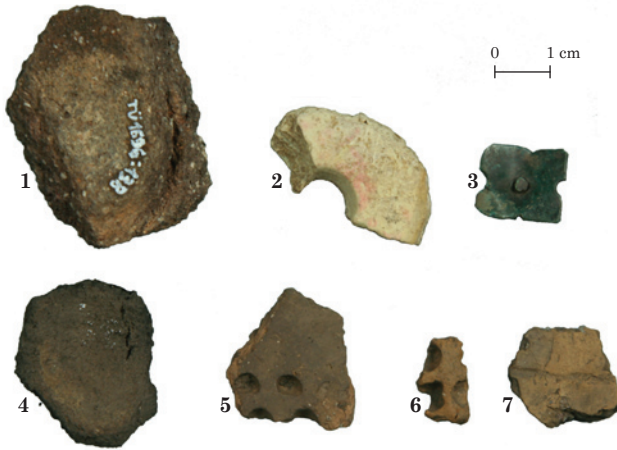


Table 1. Radiocarbon dates from the eastern rampart of the hill fort Rõuge.

Tabel 1. Radiosüsiniku analüüsid Rõuge linnuse idavallist.

Fig. 5. Finds from Rõuge hill fort and from the moat.

- 1, 2 – fragments of crucibles
3 – a fragment of a spindle whorl
4 – bronze plaque
5, 6 – fragments of hand-made ceramics with dipped ornament
7 – a fragment of hand-made ceramics with line ornament.

Jn 5. Leiud Rõuge linnamäelt ja vallikraavist.

- 1, 2 – tüglikatked
3 – värtnakedra katke
4 – pronksneet
5, 6 – lohkornamendiga käsikeraamika killud
7 – joonornamendiga käsikeraamika kild.

(TÜ 1696: 138, 393, 155, 605, 142, 268, 390.)

Photo / Foto: Anti Lillak

Under the burnt layer I, the first phase of the eastern rampart of the Rõuge hill fort was unearthed. It was only about 50 cm high and covered a light grey sandy humus layer, 10–15 cm thick. The latter contained small pieces of charcoal, that were collected for radiocarbon analysis. Under the grey natural sand, light yellow natural soil with no traces of disturbance was revealed. Nowadays the height of the rampart is about 1.7–1.9 m from the original ground level, although in the prehistoric times, when the hill fort was still in active use, the rampart was probably somewhat higher.

The finds were not numerous. The bulk of items (mostly fragments of hand-made pottery; Fig. 6: 4, 6, 7, 9) was found from the upper layers of the rampart. Under the burnt layer IV there were only single sherds of ceramics – they were almost absent in

Fig. 6. Finds from Rõuge hill fort and from the moat.

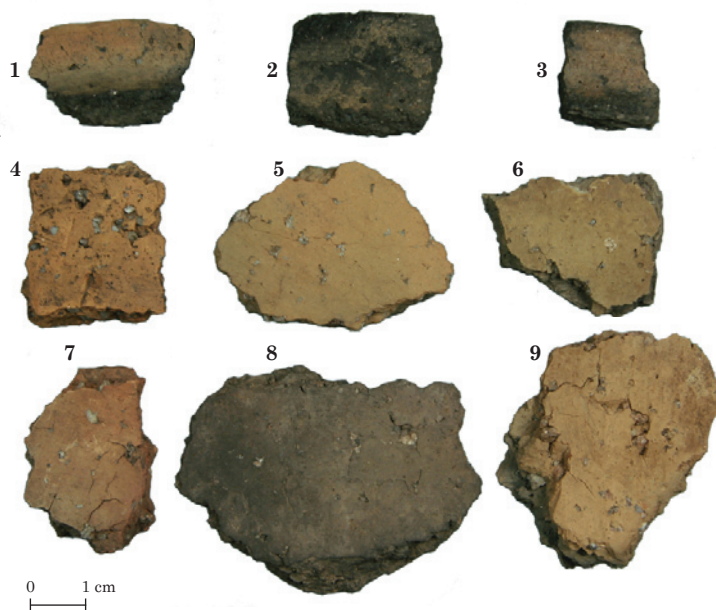
1–3 – fragments of wheel-thrown pottery
4–9 – fragments of a hand-made ceramics.

Jn 6. Leiud Rõuge linnamäelt ja vallikraavist.

1–3 – kedrakeramika katkend
4–9 – käsitsikeraamika katkend.

(TÜ 1696: 588, 665, 548, 1, 770, 39, 33, 157, 102.)

Photo / Foto: Anti Lillak



horizons I–III. Some fragments of clay vessels in the burnt layer III originate from the soil that was mixed, probably in the Soviet times. On the burnt layer II a fragment of a whetstone was found. The mixed soil, excavated in the 1950s and selectively sealed this time, also contained quite a large amount of ceramics (Fig. 5: 5) and even a fragment of a crucible (Fig. 5: 1).

A ^{14}C -analysis, taken from the grey sandy humus layer under the first phase of the rampart, gave the result 1758 ± 48 BP (cal. 95.4% 135–390 AD; see Table 1: 1). The radiocarbon dates from the burnt layers in the rampart give quite equable results, ranging between the end of the 6th century to the middle of the 10th century (see Table 1: 2–11). In general, it seems that the burnt layers I–III formed during a period from the middle of the 7th century to the third quarter of the 9th century (a couple of dates diverge from this generalization). It is noteworthy, that the burnt layers IV and V have very close dates from the third quarter of the 7th century to the middle of the 10th century. This also enables us to suggest that the layers IV and V may have been formed at the same time.

TRIAL PIT B

Trial pit B was made 5 m east of trial pit A (Fig. 7). Its main purpose was to reach the burnt layers V and VI, the latter being absent in trial pit A. As was the case in the pit A, mixed soil of the 1950s trench was removed in an area of 1×1 m, to unearth the southern profile. However it seemed that the profile of the trench had collapsed to some extent, because



Fig. 7. Trial pit B. Burnt layers VI in the middle of the profile and V in the bottom. View from the west.

Jn 7. Proovikaevand B. VI põlengukiht profiili keskel, V põlengukiht allääres. Vaade läänest.

Photo / Foto: Anti Lillak



Fig. 8. Trial pit C in the moat. View from the west.

Jn 8. Proovikaevand C vallikraavis. Vaade läänest.

Photo / Foto: Anti Lillak

the prehistoric layers were revealed only 20–80 cm south from their supposed location. Therefore the measures of the pit grew 1.8 m from north to south, but from east to west, it remained 1 m wide. Trial pit B was about 1 m deep, because in that depth the burnt layer V was found. It consisted a lot of charcoal, a ¹⁴C-analysis of which gave calibrated result 660–937 AD (see Table 1: 10). The result matches well with the result of the burnt layer V from the trial pit A, indicating that the layer was formed between the third quarter of the 7th century and the middle of the 10th century.

The burnt layer VI was separated from the layer V by two or three yellow or orange-yellow sand layers (thickness in total about 25 cm). Layer VI was rather thin (up to 10 cm) and it contained a small amount of charcoal particles. The ¹⁴C-date of the layer is somewhat surprising, giving the result from the third quarter of the 6th century to the beginning of the 9th century (Table 1: 11), i.e. an earlier date than for layer V.

The few finds from pit B mainly consisted of hand-made pottery (Fig. 6: 8), but also a fragment of a spindle whorl made of white limestone (Fig. 5: 3) should be mentioned. In total, 28 stone spindle whorls have been found in the hill fort of Rõuge in the 1950s (Vedru 1999, 97); their blanks show that the whorls were made at the site (see Schmiedehelm 1959, table VI: 8, 10, 11). It is possible, that this spindle whorl was also unfinished, as indicated by the partly hubbly surface.

TRIAL PIT C

In addition to collecting the charcoal samples from the rampart of the hill fort, a 2 × 1 m trial pit was made in the bottom of the moat. The east–west directional pit was situated 21 m east of pit A and 15 m of pit B, in the deepest place of the moat. The main aim was to find out, how deep the original moat had been.

An approximately 1.4 m thick cultural layer covered the original bottom of the moat (Fig. 8). The homogeneous, evidently eroded soil was very dark, almost blackish grey in colour. The lowest 20 cm of the dark cultural layer was mixed with dark yellow moraine gravel. The original moat bottom was about 4.8 m below from the top of the rampart. The cultural layer contained numerous fragments of pottery (about 600 finds) among which hand-made ware was prevailing (Figs. 5: 6, 7, 6: 5), although there was also a considerable number of fragments of wheel-thrown vessels sherds (Fig. 6: 1–3), even in the depth of 90–100 cm. The pottery fragments were mostly quite small and did not have any ornamentation. In addition, a simple square bronze plaque (Fig. 5: 4), probably from a belt, and two assumed crucible fragments (Fig. 5: 2) were found.

CONCLUSIONS

The archaeological research carried out on Rõuge hill fort affirmed the general data about the fortifications gained in the excavations of the 1950s (Schmiedehelm 1959, 155–157). According to the fresh results

of radiocarbon analysis, it seems that the plateau of the hill fort was taken into use already in the Roman Iron Age, as indicated by the pieces of charcoal under the first rampart. The few fragments of textile-impressed and striated ceramics, found in the hill fort in the 1950s (see for example Aun 1976, table 1: 5) also confirm the early date of the hill fort. The plateau of the fort was probably not yet separated from the territory of the settlement site by the rampart then, but the precise character of the hill fort's fortifications at that time is unknown (except for its steep northern and southern slopes).

The three first phases of the eastern rampart were relatively small in size. Although the dates of the burnt layers I–III theoretically allow them to be interpreted as parts of a single fire, it is more likely, that three separate burnings have taken place, because after the formation of each layer it was covered by birch bark. These fires have likely taken place in a period from the 7th to 9th century. After that, large-scale fortification work took place in the hill fort and the rampart was widened remarkably. The burnt layers IV and possibly V are the remains of this fortification stage. Probably at that time the moat between the hill fort and the open settlement got its present visible shape and size (though filled with eroded cultural layer). The destruction of these defensive structures took place in a period from the 7th century to the 10th century.

Earlier excavations show that the hill fort was in use until the 11th century, as indicated by a small amount of wheel-thrown pottery, three silver coins of West-European origin (Leimus & Kiudsoo 2004, 32) and a bracelet, all found on the plateau of the hill fort in the 1950s (Schmiedehelm 1959, 162, 171, 172). Such a date is confirmed also by pollen analysis from Rõuge Tõugjärvi which referred to the decrease of human impact upon nature since the beginning of the 11th century (Poska *et al.* 2008, fig. 3). The date of the uppermost burnt layer VI (7th – beginning of the 9th century) did not match with the rest of the dates and is therefore quite unlikely. The ¹⁴C-dates gave no information about the latest, 11th century use of the fort. The remains of the latest timber fortifications of the hill fort have been evidently destroyed by erosion.

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ARHEOLOOGILISED PROOVIKAEVAMISED RÕUGE LINNUSEL KAGU-EESTIS

Tartu Ülikool korraldas 2008. aasta suvel väikese-mahulisi arheoloogilisi kaevamisi Rõuge linnamäel. Tööde peamine eesmärk oli koguda dateeringuteks söeproue linnuse idavalli põlengukihtidest. Selleks rajati vallile kaks proovikaevandit (A ja B). Lisaks tehti proovikaevand (C) linnuse ja selle kõrval oleva asulakoha vahele vallikraavi põhja, et saada teada selle esialgne sügavus (jn 1).

Proovikaevand A (4 × 1,1 m) rajati 1950. aastate vallitranshee kõrvale (jn 2). Esmalt eemaldati väikese ekskavaatoriga segatud pinnas vana vallitranshee kohalt ning puhastati välja 1950. aastate kaevamistel üles joonistatud lõunaprofiil (tollase numeratsiooni kohaselt ruudud 9 ja 10). Seejärel mõõdeti sisse kaevand profiili kõrvale. Põlengukihid nimetati 1950. aastate süsteemi järgi alt üles lugedes I–VI.

Rõuge linnuse idavalli ülemised kihid olid segatud 30–40 cm, kohati 70–80 cm ulatuses ilmselt millalgi Nõukogude ajal, mil vallil tavatseti teha jaanituld. Rohkelt tukke ja väiksemaid söetükke sisaldavad põlengukihid olid üksteisest eraldatud helekollaste kruusa-liiva kihtidega, mis paiguti olid muutunud kuumusest oranžikaks või roosakaks. IV ja V põlengukiht võisid olla tekkinud ühes ja samas tulekahjus, kuna V põlengukihi ots puutus vahetult kokku IV põlengukihiga. IV põlengukiht sisaldas nelja söestunud palki (jn 3), mis paiknesid kirde-kagu-suunaliselt üksteise kõrval reas; neist läänepoolseima otsal võis näha koerakaelanurga laadset süvendit. Kaevandis paljastus osaliselt veel viies, lääneedela- idakagu-suunaline palk. Palkidest vahetult läänes avastati sissekaeve, mille täpsem rajamisaeg ja otstarve jäid selgusetuks. Ilmselt oli tee tehtud millalgi pärast IV põlengukihi moodustumist, sest sissekaeve kohal puudus sõelade.

Põlengukihid I–III paiknesid IV põlengukihist mõnevõrra lääne pool ning olid õhemad. II põlengukihis asus suure, 40–45 cm läbimõõduga söestunud palgi ots. Tukke esines peamiselt omaaegse valli harjal; välisnõlval muutusid põlengukihid väga õhukeseks (alla 1 cm). I–III põlengukihi tukid olid kõik kaetud ühe- või kahekordse kasetohukihiga, mis pidi olema asetatud kohale alles pärast põlenud tukkide jahtumist (jn 4). Kasetohukatte otstarve on teadmata.

I põlengukihi all oli linnusevalli esimene, u 50 cm kõrgune järk, mis kattis 10–15 cm paksust halli liivakihti. Viimase puhul oli tegemist algse loodusliku huumusekihiga, mis sisaldas väikesi söetükke.

Kõige all paljandus kollane looduslik aluspind. Praegune idavall on sellest aluspinnast mõõdetult u 1,7–1,9 m kõrge.

Leide oli kaevandis A võrdlemisi vähe, peamiselt leitud käsitsi tehtud savinõude kilde. Rohkem esines neid ülemistes kihtides; IV põlengukihist alt-poolt saadi vaid üksikuid leide. Peale savinõukildude leiti veel luisukivi katke. Prooviks sõeluti pisut 1950. aastatel läbikaevatud pinnast, kust saadi samuti veidi keraamikat ja sulatustiigli katke (jn 5: 1).

Vallialusest hallist kihist saadud söetükkide ¹⁴C-analüüs viitas perioodile 135–390 pKr s.o rooma rauaajale. Võib oletada, et sel ajal võeti linnuse-ala kasutusele, ehkki esialgsetest kaitseehitistest pole midagi teada (kui välja arvata järsud orunõlvad linnuse põhja- ja lõunaküljel). Ka üksikud 1950. aastatel leitud riibitud ja tekstiilijälgedega keraamikakillud viitavad linnuse varasele kasutusajale. Söetükkidest ja kasetohust võetud ¹⁴C-proovid näitavad, et põlengukihid I–III olid kõik tekkinud vahemikus 7. sajandi keskpaik – 9. saj kolmas veerand (paar dateeringut kalduvad üldisest tulemusest liivavõrra kõrvale). Kasetoht iga mainitud põlengukihi peal viitab asjaolule, et tegemist on kolme erineva tulekahjuga. IV ja V põlengukiht on kujunenud vahemikus 7. sajandi kolmas veerand – 10. sajandi keskpaik.

Teine proovikaevand (B) rajati linnuse idavallile, A kaevandist 5 m ida poole (jn 7). Sarnaselt eelmisele kaevandile püüti siin esmalt eemaldada 1950. a tranšee tätekiht, et avada osa VI ja V põlengukihist. Algselt vana tranšee alale mõõdetud 1 × 1 m kaevand venis põhja-lõuna suunas 1,8 m pikkuseks, kuna tõenäoliselt oli 1950. aastate kaevamistel osa profiilist maha varisenud ja profiilisein paljandus seetõttu eeldatavast asukohast kuni 0,8 m võrra lõuna pool. VI ja V põlengukiht, millest võeti söeprouvid, tulid nähtavale 1 m sügavusel; edasi kaevandis B ei kaevatud. V põlengukihi tekkimisaeg sobib hästi kokku kaevandist A saadud dateeringutega (7. sajandi kolmas veerand – 10. sajandi keskpaik). VI põlengukihi raamdateering – 567–807 pKr – osutus V kihist varasemaks.

Mõned 1950. aastate arheoloogiliste kaevamiste leiud (kedrakeramika katked, kolm Lääne-Euroopa hõbemünti, pronkskäävõru), samuti palünoologia andmed viitavad linnuse kasutusele veel 11. sajandil, kuid selleaegsetest kaitseehitistest pärit sõejäänuseid dateerida ei õnnestunud – ilmselt on nad

erosiooni toimetel hävinud. Leidudest saadi proovikaevandist B peale vähese koguse käsikeraamika veel kivist värtnakedra (arvatavasti tooriku) katke (jn 5: 3).

Kolmas proovikaevand C (mõõtmed 2 × 1 m) paiknes linnust asulakohast eraldavas vallikraavis. Tumehall (peaaegu mustjas) ühtlane erodeerunud kultuurkiht kattis looduslikku moreenjat aluspinda umbes 1,4 m paksuse kihina (jn 8). Linnuse idavalli

hari on oma praegusel kujul vallikraavi esialgsest põhjast u 4,8 m kõrgemal (algselt oli vall kindlasti mõnevõrra kõrgem). Arvukas leiumaterjalis domineerisid suhteliselt väikesed käsikeraamika katke, kuid leidis ka kedranõude kilde (jn 6: 1–3), sealjuures ka 90–100 cm sügavusel. Leidudest väärivad mainimist veel lihtne ruudukujuline pronksist vöönaast (jn 5: 4) ning kaks oletatavat savist sulatustiigli katket (jn 5: 2).