

**New York University**  
**Amheida / Trimithis 2015 season report**  
**Directed by Roger S. Bagnall**

Excavations at Amheida for 2015 began on January 18 and ended on February 14. The team consisted of Roger S. Bagnall (director, papyrologist); Paola Davoli (archaeological field director); Olaf Kaper (associate director for Egyptology); Roberta Casagrande-Kim and Dorota Dzierzbicka (senior archaeologists); Borna Scognamiglio, Brooke Norton, and Stefania Alfarano (archaeologists); Leonardo Davighi (topographer); Clementina Caputo and Irene Soto (ceramicists); Marina Nuovo and Jennifer Thum (registrars); Bruno Bazzani (database management and computer operations, photographer); Raffaella Cribiore and Mohamed Gaber el-Maghrabi (papyrologists); Rodney Ast (papyrologist and archaeologist); Thomas Faucher and Khaled Ismail (numismatists); Susanna McFadden (art historian); Valentina Caracuta (archaeobotanist); Salima Ikram and Megan Spitzer (faunal analysts); Maud Slingenberg (egyptologist); Christopher Kleihege (photographer); Dorothea Schulz (paintings conservator and artist); Emiliano Ricchi, Alberto Sucato, Mohamed Ahmed Sayed Mustafa and Mahmoud Samir Hussein, (conservators); Ashraf Barakat (assistant to the director); Gaber Murad (house manager). The MSA inspectors were Seham Senusi Mohamed, Warda Selim Mohamed and Azzaz Nasr Mohammed.

The main body of work took place in three areas, Area 4.1 (the Temple of Thoth), Area 8.1 (a large house), and Areas 2 and 8 (survey of rooms with painted plaster). Besides the excavation and survey, work continued on the arrangement of the decorated blocks from the temple in the magazine built for that purpose (see report on Egyptian epigraphy); on the decoration of the replica of the House of Serenos (Building 1) (see separate report below); and on the conservation and study of objects found in previous seasons, particularly the large hoard of tetradrachms excavated in 2012, of which conservation was completed. The unbaked clay coffins for sacred birds excavated in 2008 were conserved, and their contents (largely bones of birds) removed and studied. The archaeobotanist studied many samples of vegetable material collected in earlier seasons as well as the current one.

#### **Area 4.1: Temple area**

Paola Davoli, Borna Scognamiglio, Stefania Alfarano, Dorota Dzierzbicka

The 2015 excavations focused on square AS 48 (10 x 10 m), west of previously excavated squares in the area, and on 2.5 x 10 m in square AS 49. These squares were chosen in order to investigate the possible presence of a *contra-temple* on the back of the temple proper, of which the rear collapsed wall was found in 2014.

Below surface layer DSU 251, mainly consisting of windblown sand, there was a brown and dense layer (DSU 253, 4 to 55 cm thick) covering 18 pits dug in the past by *sebbakhin* in the anthropic layers of settlements of previous periods. The pottery found in the filling of the pits is dated to a span from the Old Kingdom until the 4<sup>th</sup> cent. AD (Fig. 2).

All pits are filled by layers of sand and complete or fragmentary temple blocks. The blocks are either concentrated toward the bottom of the pits (as in pit F166) (Fig. 3) or grouped in clusters sloping down from the top toward the bottom (as in pit F159).

To the southwest of the square, a huge pit (F159) has been found. Its excavation brought to light a cluster of collapsed light-gray sandstone blocks (DSU 255) — north-south oriented — mainly consisting of pseudo-cubic relatively well shaped blocks, quite regularly put one next to each other on two courses, though without any apparent architectural connection. Indeed, two circular stone bases for columns have been uncovered as well.

Toward the center of the square, excavations concentrated on an important cluster of blocks DSU 257. Among the blocks there are two big cavetto cornices from the top of the temple, part of a sandstone screen-wall with blocks still in connection and part of the column, blocks from doorways and its cavetto cornices as well as pieces of lotus capitals (Fig. 4).

To the northeast of the square, pit F164 has been excavated, delivering a considerable amount of blocks (DSU 260) as well. The sand layer right below the cluster (DSU 278) yielded many bread moulds and fragmentary grinding stones.

Indeed, from the stratigraphy visible on the pits' interfaces, it can be ascertained that a majority of the area of the square was somehow related to bread baking. The most evident element supporting this hypothesis is the thick dark-gray ash layer (DSU 282) visible in five pits (F160, F165, F166, F169, F174, F165), which, in several parts, is associated with slightly baked reddish clay lying upon or below it. It might suggest the presence of ovens spread all over the area.

The total number of blocks from the temple or contra-temple removed this year is about 400, of which 12 are decorated, with 3 bases of columns and parts of lotus capitals with a diameter of 2 m (Fig. 4).

The remains of a composite oven (1.20 m height, 3.20 m diameter), probably for baking bread, have been excavated in square AR49 (Fig. 5). It is badly damaged by the cutting of the pits from the *sebbakhin*, but nevertheless it was possible to recover interesting data about its structure. A wall surrounds a circular area in which several baking chambers were set, some of them one on top of the others after they were taken out of use. Its date can be preliminarily assigned to the Second Intermediate Period or New Kingdom.

## **Area 8.1: Fourth-century house**

Roberta Casagrande-Kim, Rodney Ast

During the 2015 season, excavations commenced in area 8.1, a densely settled quarter at the northern limits of the city, with the investigation of a domestic complex, which was assigned number B10 (Fig. 6).

The building, roughly 30 meters North-South and 26 meters East-West, comprised five rooms in its northern half (rooms 2, 3, 4, 5, and 6) and at least 7 rooms in its southern half, of which only three (rooms 1, 7, and 8) were partially excavated during the 2015 season.

In the northern half of the house, room 3 (6 x 4.60 meters) functioned as the main entrance from a northern alley. The room was not fully investigated, as only the surface layer of sand and pottery sherds (DSU 1 and DSU 3) were removed. Room 3 gave access to room 2 (8.10 x 6.40 meters), a rather grand entrance hall. The walls to its north, east, and west sides were covered in lime plaster: the walls' lower elevations were decorated in black and white panels above which ran a narrow geometric band of yellow, blue, red, and green interlocking squares. Nothing survives of the plaster in the upper portion of the walls, but judging from fragments found scattered in the sand, we believe that the plaster was most probably white and without any figurative motifs. Several modeled decorations in gypsum, mostly palmettes and volutes, were found during excavation: they were probably part of a modeled stucco cornice placed higher on the walls right below the room's flat ceiling. Room 2 opened to all other rooms in this section of the house (doors into rooms 4, 5, and 6 were recognized but not excavated) as well as to the southern half of the complex via two monumental pilasters. Each pilaster, covered in black plaster like the rest of room 2, had a niche at its northern side with an image painted below it (a man holding grain ears on the western pilaster). Due to the fragility of the remaining plaster, preliminary consolidation was carried out on all preserved portions, excavation was interrupted, and retaining mudbrick walls were built along this room's walls and features to allow partial backfilling.

Room 4 (4.90 x 8.70 meters) was not excavated, while of rooms 5 and 6 (respectively: 4.15 x 6.80 meters, and 3.40 x 6.80 meters) only a small portion of wall collapse along their western perimeter walls was removed. Four Greek ostraka were found among the mudbricks. Evidence of painted plaster (mainly white and black in color) was observed on the walls of both rooms. Consequently, excavation of these rooms was postponed for future seasons to allow proper in situ conservation.

In the southern half of building B10, room 7 constituted the monumental fulcrum of the house (north-south: 9 meters; east-west: 7.70 meters). At the center are four columns (diameter: 60 cm) supporting a flat roof constructed of wooden beams and jareed and covered in white plaster. Four doors, two at the southwestern corner and the other two at the southeastern corner, opened into

the remaining rooms of the complex. Due to the room's large size, excavations were limited to the removal of a very large collapse of mudbricks and column shafts (DSU 8) concentrated in the western half. Once cleared of the debris, the western perimeter wall appeared to be articulated by 5 deep, tall niches covered in white lime plaster. On this plaster were drawn figural and Greek textual graffiti, most notably the image of a "navis rostrata" (a Roman military ship) and a trident-wielding man (Fig. 8). Two Greek ostraka, one complete pottery bowl, and one large stone mortar were found in this room.

The last two weeks of excavations focused on room 1, the easternmost room of the house (4.90 x 3.80 meters). Several layers of walls and vault collapses were removed. In order from top to bottom: DSU 10, the collapse of the second floor's western wall, and DSU 13, the collapse of the second floor's pavement. On the pavement (Fig. 7) rested numerous fragmentary jars and several complete ones still sealed by mud stoppers with embedded Greek ostraka. Below this layer was DSU 17, the collapse of the first floor's barrel vault, and DSU 22, the collapse of the first floor's western perimeter wall. Below these thick layers of rubble, circa 1.90 meters from the top of the preserved height of the perimeter walls, was found a layer of broken ceramic vessels (smashed by the impact of the collapsed wall) and complete pots, DSU 23. Notable was the presence of a wooden post in the room's southwestern corner and remains of what appears to have been a wooden box. All complete vessels were removed before partially refilling the room. A total of 81 Greek ostraka (all well tags) (Fig. 9), one bronze ring, 19 intact ceramic vessels, and 19 fragmentary but reconstructable ceramic vessels were found in this room, which can therefore be interpreted as the house's pantry.

### **Survey of Painted Plaster**

Susanna McFadden, Dorota Dzierzbicka, Brooke Norton, Emiliano Ricchi, Alberto Sucato

With the aid of a grant from the Antiquities Endowment Fund of the American Research Center in Egypt, a short survey of the decorated plaster on walls of several buildings visible from the surface of the site was undertaken in order to formulate parameters for future conservation and excavation.

The methodology employed for this survey was to dig multiple small test trenches along the walls of rooms that were identified by the topographers in previous seasons as containing decorated plaster. In order to maintain the integrity of the rooms' archaeological contexts, no more than 1 meter of windblown sand was removed from each trench. Any plaster revealed was cleaned and consolidated by the conservators in situ and all related features (walls, plaster and DSU's) were properly documented according to Amheida excavation protocols, in the space of a single day

before backfilling. In each case, the removal of just this small amount of sand was more than enough to assess the condition of the plaster and reveal its decorative motif.

Between January 22<sup>nd</sup> and February 5<sup>th</sup>, the painting survey project investigated 5 buildings, 19 rooms and dug a total of 33 trenches (Fig. 1). Seven trenches were opened in three rooms of B13 (Area 8.2), two trenches in R1 of B12 (Area 2.5), twelve trenches in seven rooms of B16 (Area 2.4), six trenches in five rooms of B20 (Area 2.6), and six trenches in three rooms of B21 (Area 2.7).

Of these 33 trenches, only 5 revealed undecorated white plaster. The rest of the trenches yielded a rich corpus of decorated plaster containing a colorful variety of decorative motifs, including molded stucco (Fig. 10). With one exception, only non-figural motifs were identified, some of which are quite similar to those already known from the House of Serenos (B1). Other designs bear a striking resemblance to mural remains from nearby Kellis. Still others are, as yet, unique to the site of Amheida (Fig. 11).

The analysis of the data gathered from this cursory survey therefore will allow for a better understanding of the state of plaster preservation at the site as well as the art historical significance of the paintings present in Amheida. It will also enable us to develop a detailed, overall plan for the conservation and study of the painted houses in future seasons.

## **Egyptian epigraphy and temple decoration**

Olaf E. Kaper

Among the some 400 blocks excavated, only a total of 12 blocks showed relief as part of the ancient temple decoration. All of these were Late Period in date, and mostly from the time of Darius I. One fragment of the Roman period temple was found on the surface of an adjacent square. The largest single group of blocks was found reused in the masonry of a collapsed wall that probably dates to the Roman period.

In addition, part of a stela was found that can be dated to the Third Intermediate Period. It depicts the gods Seth and Nephthys, and it must be identified as a votive stela to these gods that was deposited in the temple of Thoth.

The newly found blocks mainly stem from the temple erected under Darius I. Several blocks were found with inscriptions that can be related to the doorways of the temple. Similar inscriptions, although not identical, are known from the doorways in the temple of Hibis in Kharga.

Apart from studying and recording the new blocks, the season was spent on preparing the future display of the blocks, and the presentation of the history of the temple. Diagrams were prepared of each wall that is to be reconstructed inside the existing building at Amheida, and a detailed plan was drawn up for the coming two years of work.

## **Ostraka**

Rodney Ast, Roger S. Bagnall

The 2015 season produced a total of 87 Greek and 6 Hieratic and Demotic ostraka. 81 of the Greek were found in Building 10, Room 1. 2 came from the columned hall (Room 7), and 4 were found within the mudbrick collapse in Rooms 5 and 6. All of the Greek ostraka are well tags with the clear exception of inv. 16705 (inv. 16753 might also not be a tag). While those from Rooms 5 and 6 appear to have been chinking sherds, most ostraka found in Room 1 are from an occupational context, some still preserved in the jar stoppers in which they were originally placed.

Room 1 provided a wealth of pottery vessels, from large storage jars to small pots and bowls. For us, the most exciting discovery was perhaps the two tags embedded in mud stoppers that were still affixed to their jars, both from year 28 (Fig. 12). Other ostraka were also found still embedded in their stoppers; they date mainly to year 28, with one from 26 and an well-worn outlier from year 17. The complete vessels containing tags have allowed us to identify at least some types of jars that these tags belonged in. While more than one kind of stopper was uncovered in the room, it appears that only the type used with the larger jars carried the ostraka. The other stoppers, most of which are of a more refined clay with fewer inclusions, show no signs of having borne tags.

This season's ostraka have complicated our understanding of the chronology of the tags. There is a striking bimodal distribution: many tags from years 10-14, then very few from 15-25, then many from 26-30. Coherence within the heavy years is shown by some major figures who appear several times. The chronological problem lies in the fact if the dates given in the tags are regnal years, they cannot represent a continuous sequence, despite the seeming appearance of continuous spread. Years 10-16 could not be later than 315/6 to 321/2; years 26-30 as a continuum are likely to be 349/350-353/4, although it is not certain that 331/2-335/6 are excluded. The tags need further consideration before we can be sure of their implications for our understanding of dated material throughout the site.

## **Archaeobotany**

Valentina Caracuta

The present report includes the results of the writer's first archaeobotanical investigation carried out during the 2015 field season in the site of Amehida. The study aimed at analyzing plant material collected in Areas 2.1, 2.2, 4.1, and 8.1 during the 2006, 2007, 2010 and 2015 seasons. In total, ninety-seven bags were checked for archaeobotanical analysis. Five bags contained 10 liters of sediment each, while ninety-two included handpicked plant material. The handpicked material was sorted using the binocular microscope, while the sediment was first dry-sieved using sieves of

0.3 and 0.5 mm mesh, and only then sorted. The perfect state of preservation of the remains, whether charred or desiccated, allowed an accurate study of morphological traits. As a result, 95% of the 1700 remains was identified.

The bulk of the material consists of seeds and fruits found in the garbage deposit that filled the foundation of Serenos's house (Area 2.1, rooms 9, 10,14,15) and the garbage found below the streets (S2 and S3) that ran beside the house. The rest of the plant material comes from the Temple area (Area 4.1), from a votive deposit that included offering of animals and plant matter inside clay coffins and from a bread mold found in the oven F144. A few samples come from the secondary deposit that filled the abandoned thermal complex (Area 2.2 B6/R26; B6/R24). A single sample of sediment was collected from inside a jar found in a storage room in Area 8.1 (B10/R1).

The study of the morphological features of the seeds and fruits led to the identification of fourteen species: five annual-herbaceous and nine perennial-arboreal plants. Date palm (*Phoenix dactylifera*), olive (*Olea europaea*) and grape (*Vitis vinifera*) dominated the archaeobotanical assemblage, followed by peach (*Prunus persica*), carob (*Ceratonia siliqua*), cherry (*Prunus avium*) Christ's thorn or jujube (*Ziziphus spina-christi*). Barley (*Hordeum* ssp.) is the most attested annual species, followed by hulled wheat (*Triticum monococcum/ dicoccum*). Very few specimens of naked wheat (*Triticum aestivum/compactum*) were also found.

Arboreal and non-arboreal species were not equally attested in all the contexts. The garbage deposit found below Serenos's house was mainly composed by remains of edible plants such as dates, pits and fruits, that represent the 74% of the entire archaeobotanical assemblage, and olive pits (25%). The discovery of one seed and one pod of acacia nilotica in the deposit might suggest that fodder was also dumped. Residues of dates dominated the deposit below streets 2 and 3 (64% of the whole archaeobotanical assemblage). The rest of the deposit was made up of olive pits (14%), carob seeds (3%) and desiccated peach fruit and peach stones (19%). Date and olive pits were also found in the dump that was formed after abandonment of the complex (Area 2.2). The plant material recovered in the temple area (Area 4.1) differs from that collected in the dumps of Areas 2.1 and 2.2 in the abundance of grape (pip and fruits) and in the presence of cereal grains. More than three hundred grapes were recovered from inside the coffins, and outside them, in a layer that included burnt organic material (Stratigraphic Unit 120). Chaff remains of hulled wheat were also found in the coffins, but no grains of this kind have been discovered so far. The only grains recovered are caryopses of barley found in coffin F81. Residues of barley were collected also in the bread mold found in oven F144. Here barley spikelet and grains (40%) were mixed together with hulled wheat spikelet (9%) and naked wheat grains (8%). Less than 15% of the plant remains were papyrus-like seeds. The last context analyzed, a jar discovered in a storage room of Area 8.1 (B10/R1), was filled with sediment that included two tiny grape pips.

## **The replica of Serenos' house**

Dorothea Schulz

This season started with repairing the damage caused by the construction on the new niche on the south wall in the domed room. Then the niche was decorated based on the original fragments (the 'apron') (Fig. 13). In the meantime, Tamer Ramadan decorated the purple room.

Since we know from only three of the panels what they looked like, the rest of them were decorated with animals from the Classical World (Figs. 14-15). The reason for this is that the panels are on child height and I hope that especially the children will enjoy the beasts.

In the domed room more figures could be added on the east wall. With a couple of big blocks and lots of small fragments, two major scenes could be reconstructed on the east wall: Orpheus playing the lyre for the animals and the large scene with chariots and horses. The plan for next season is to design and decorate the 'Educational Room', make a replica of the graffito in the 'Schoolroom' and reconstruct some more fragments.

## **Coins**

Thomas Faucher and Khaled Ismail

The stay in Dakhla from the 4<sup>th</sup> to the 13<sup>th</sup> of February aimed at a first study of the Roman coin hoard found in 2012. I had the assistance of Khaled Ismail, curator of The Egyptian Museum in Cairo.

The conservation of the hoard was completed by Mahmoud Samir and Hanna Shawki Sedin, and registered with the help of Marina Nuovo. Although the study of the hoard still needs to be completed, all the coins were registered and photographed this year. In total, the two hoards make a total of 856 coins (854 billon and 2 bronze).

The Emperors are represented as follow (for the legible coins):

Claudius	5
Nero	240
Galba	14
Vespasian	18
Domitian	1
Nerva	2
Trajan	26
Hadrian	112
Faustina	1
Antoninus	154
Marcus Aurelius	3

This year were registered 3 coins of Marcus Aurelius that were not identified before. These coins dated from the regnal year of Antoninus Pius. The latest dated coins is not changed, it is still 158/159. We have now 6 of those coins of three different types.

Failure to recover this large hoard would have represented a substantial loss for its owner, and it is hard at the moment to figure out what could have been the events leading to such an event. This amount of money could be related to a treasury of an administration collecting tax (or of the temple) or more likely related to the pay of soldiers.

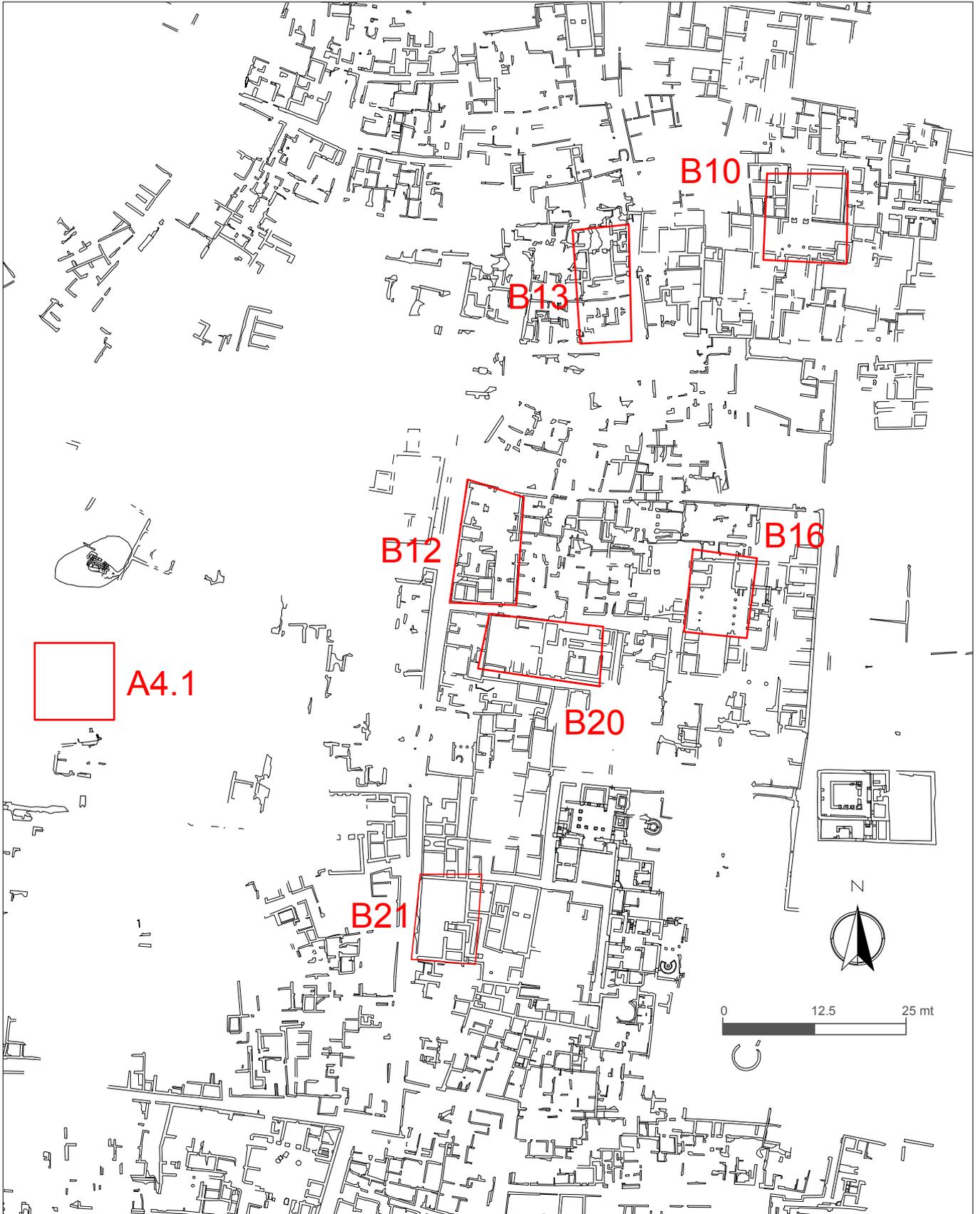


Fig. 1 General plan of Amheida with the 2015 excavated areas



Fig. 2: Plan of squares AS-AR 48-49 in area 4.1.



Fig. 3: Area 4.1. View of square AS48 after excavations. *Sebbakhin* pits and blocks in one pit.



Fig. 4: Area 4.1. Lotus capital block.



Fig. 5: Area 4.1. Bread oven F125.



Fig. 6. Area 8.1. Plan of house B10.



Fig. 7: Area 8.1 Building 10. View of the vessels crashed on the floor in Room 1.



Fig. 8. Area 8.1 Building 10. Graffito in one of the niches in room 7.

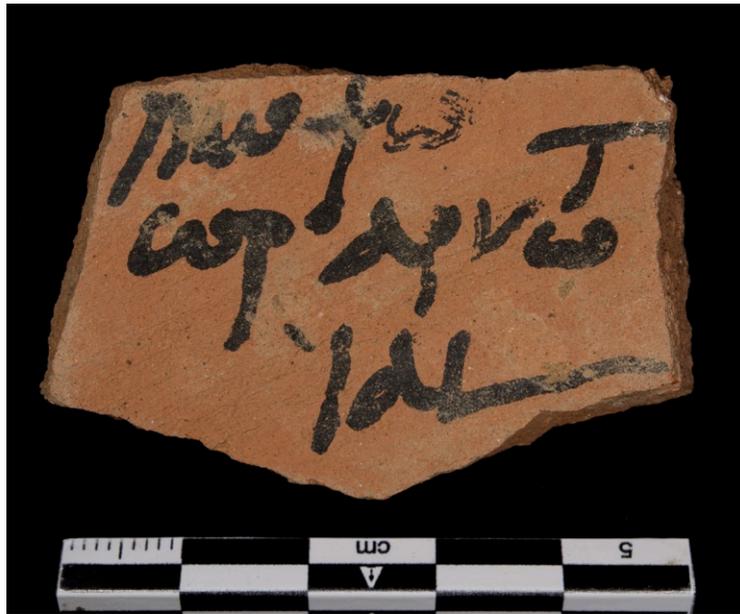


Fig. 9: Area 8.1 Building 10. Greek ostrakon from room 1.



Fig. 10: Painting survey. Molded stucco in Building 21.



Fig. 11: Painting survey. Painted decoration in Building 20.



Fig. 12: Jars stopper with the ostrakon/tag imbedded, from B10 room 1.



Fig. 13: Serenos' house replica. Niche in the South wall of the domed room.



Fig. 14: Serenos' house replica. Orpheus playing the lyre.

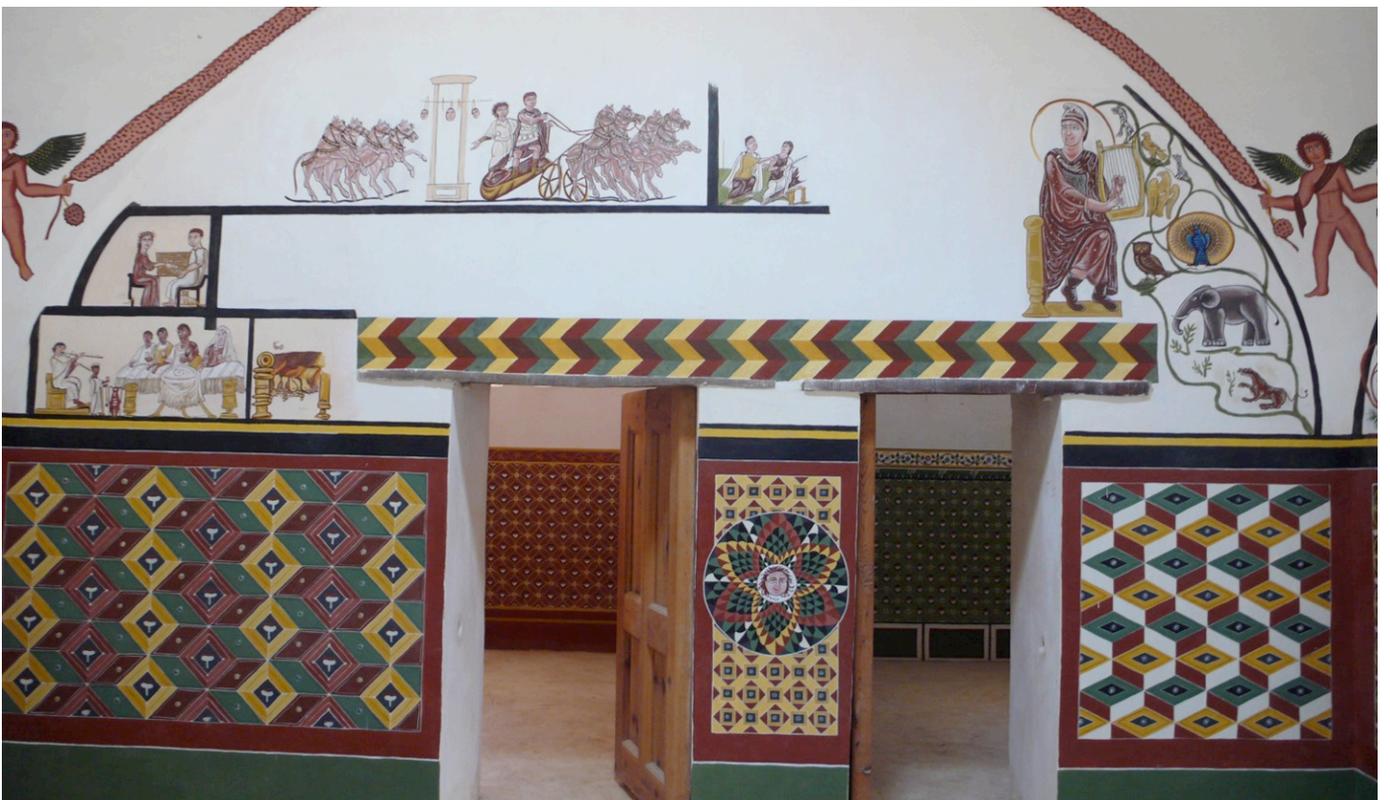


Fig. 15. Serenos' house replica. The West wall of the domed room.