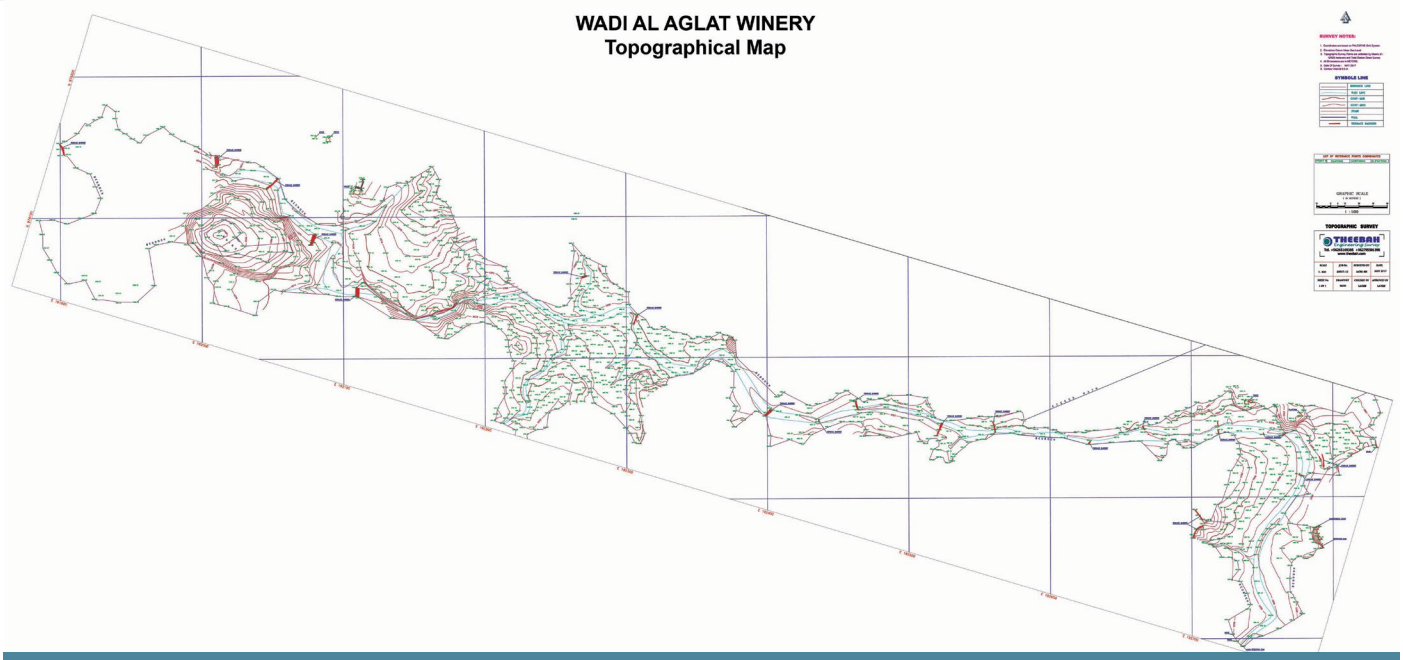

Fig. 70. Topographical map of Wadi Aglat, original scale 1:500 showing the location of all archaeological remains recorded (Drawing by Abdel Atheef Dhibeh). For a high-resolution version of this image, click here.

PETRA: WADI AGLAT

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A detailed archaeological survey in Wadi Aglat, located nearby and to the West of Baydha, was implemented from April to June 2017. The entire area of Wadi Aglat was mapped (Fig. 70) and all visible archaeological remains recorded. The survey revealed the existence of an extensive winery over the full extension of the Wadi Aglat from the western inlet to the eastern outlet and from the northern to the southern cliffs. Before the winery could be set up, the outlet of Wadi Aglat into Wadi Baydha was completely barred by a dam of solid masonry with a height of 4.9 m. The construction of the dam led to the natural deposit of the soil sediments required for the plantation of the vines; hence, Wadi Aglat in its topography became a largely artificial, man-made landscape. Upon the complete accumulation of the sediments, the entire area was terraced for the planting of vines and a sequence of 21 terrace barriers in total was erected to dam up the runoff water to the level of the plantations. The terrace barriers in the upper western part of Wadi Aglat had an original height of around 6 m and led to the accumulation of huge sediments creating an extensive, even area for cultivation (Fig. 71).

On top of a hill overlooking the wide and even upper part of Wadi Aglat, the ruins of a large farmstead could be identified, and this most probably served as the administrative and logistic center of the winery. Two huge wine presses, one each located in the eastern and the western parts of the wadi, allowed for efficient processing of the grape harvest. The eastern press was first mentioned by Zeyad Al-Salameen (2004, 176). Hydraulic installations such as retention dams, water channels, and cisterns in close proximity to the wine presses assured a sufficient supply of runoff water for the needs of wine production.

In conclusion, the newly discovered winery in Wadi Aglat is one of the most elaborate models of agriculture by terracing in the Petra area, and furthermore it bears witness to long-term planning and investment in the field of agricultural production. Estimations have shown that the accumulation of the sediments upstream of the main dam and the construction of the terrace barriers would have taken around 30 years. The entire surface for the cultivation of vines, created through terracing of the wadi bed, finally covered an area of 5 hectares, which would produce an annual yield of around 30,000 liters of wine.

As the winery in Wadi Aglat is exclusively accessible from Baydha by a monumental, rock-cut stair-case, it is obvious that the winery and the rock-cut tri- and biclinia in Baydha have to be seen as connected. The co-operation of the Wadi Aglat Winery Project with the Ba'aja Survey Project of Miami University, directed by David Graf, has shed new light on wine production by the Nabataeans and its socio-economic aspects. As the wine production is concentrated in the Baydha-Ba'aja area, and considering the long-term planning and investment inherent to an undertaking such as the establishment of the Wadi Aglat winery, the wine production was most probably a royal monopoly with a governmental director as superintendent, equivalent to the Praepositus Vinorum of the Roman Emperors. His offices and his residence could well have been in the luxurious mansion excavated by Patricia Bikai on the elongated rock outcrop just to the east of Siq al Barid (Bikai et al., 2008).

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Fig. 71. Panoramic view of the upper, western part of Wadi Aglat from North. At the bottom in the center one of the major terrace barriers with an original height of 6 m may be seen. To the right of the terrace barrier the enormous accumulation of sediments is still visible, despite the erosion having taken place after the earthquake of A.D. 749 (Photo by U. Bellwald).