

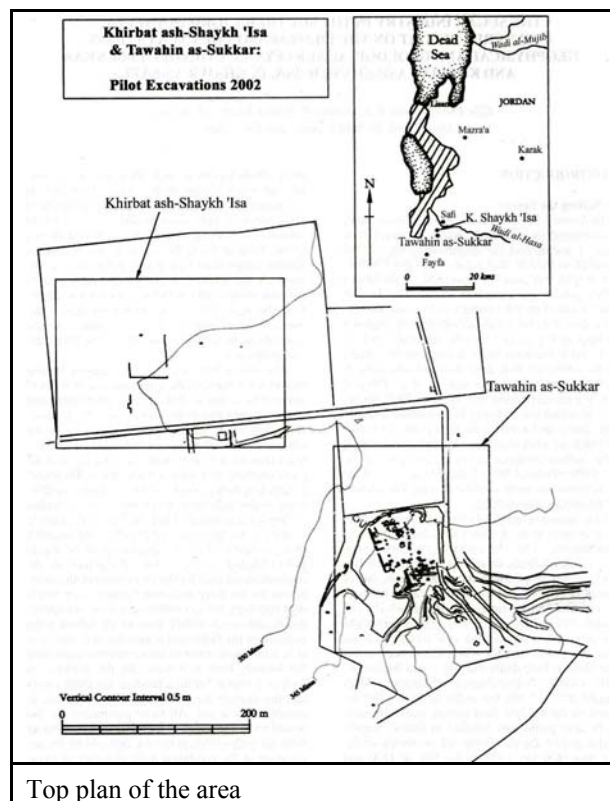
## Excavations at Ghor es-Safi 2002

### Tawahin es-Sukkar and Khirbet Sheik 'Isa in the Ghor es-Safi (ancient Zoara)

by Konstantinos Politis

Excavations were conducted in January 2002 at Tawahin es-Sukkar and Khirbet Sheik 'Isa in the Ghor es-Safi (ancient Zoara). They were sponsored by the Hellenic Society for Near Eastern Studies and Glasgow University in collaboration with the Department of Antiquities of Jordan. The project was directed by Drs Effie Photos-Jones and Konstantinos Politis, both founding members of the HSNES.

Following the successful topographic and geophysical surveys conducted in 1999 and 2000 (Jones et al AD AJ 2000:523-534), trial trenches were made in both Tawahin es-Sukkar and Khirbet Sheik 'Isa in 2002. The main objective of these was to test the results of the non-intrusive surveys which indicated interesting anomalies below the surface. Since resources for this were limited, only seven small trenches could be opened.



Two trenches were made at Tawahin es-Sukkar. The first trench followed the northerly flowing chute of the eastern water channel revealing that it continued

below the floor of a room with a large in situ mill stone. Two other smaller circular stones were also found in the area. One apparently stood upright inside the larger one and was used for crushing, and a second possibly acted as a counter-balance. Underneath the large mill stone, the top of a silted-up vaulted chamber was discovered which was connected to the northerly-flowing water channel. This was mirrored immediately to the west by a similar water channel and most probably by a second mill. In addition, there is a third steeper vertical chute to the south. These three constitute one of the largest known early milling complexes. On the basis of pottery and other finds, these can be dated from the Abbasid (8th-10th centuries) to the Ayyubid-Mamluk (12th-15th centuries) periods.

A second trench was opened to the north of the mills where huge heaps of industrial waste was visible from the surface. This area was rich in carbonised material and sugar pot fragments both apparently related to a boiling and refining process (a large copper cauldron used for boiling sugar cane which was found at the site is now in the Kerak Museum). This evidence along with the mills indicates that the site was indeed a major sugar factory complex as its Arabic name suggests.

At Khirbet Sheik 'Isa five trenches were made focusing on geophysical anomalies. One trench on the western section of the fine ashlar-built perimeter wall, revealed a bastion, perhaps part of a gateway (another bastion had been exposed during bull-dozing in 1995). The other four trenches were opened within the perimeter wall, exposing two main phases of occupation. The late Ottoman (18th-19th centuries) was characterised by roughly-built stone architecture which may have been visible in the 1970s when the modern village still occupied the site. The earlier Ayyubid-Mamluk (12th-15th centuries) phase was strikingly different, with ashlar masonry (one wall was 1.5 m wide and preserved over 3 m high), evidence for very active pottery kilns and imported pottery from Syria and Egypt. This reflected the bustling commercial centre of Zughar described by medieval Arab historians. Furthermore, residual Nabataean, Roman and Byzantine finds corroborate the site as the city of Zoara depicted on the Madaba mosaic floor map.



The Tawahin es-Sukkar from the North West (photo by K.D. Politis)

### **Bibliography**

Jones et al, Annual of the Department of Antiquities of Jordan 44 (2000): 523-534  
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