ULUSLARARASI ÇAĞLAR BOYUNCA HATAY VE ÇEVRESİ ARKEOLOJİSİ SEMPOZYUMU BİLDİRİLERİ

THE PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON THE ARCHEOLOGY OF HATAY AND ITS VICINITY THROUGH THE AGES



MUSTAFA KEMAL ÜNİVERSİTESİ
HATAY - 1992





Hatay'ın anavatanına katılışının 74. yılı ile Türkiye Cumhuriyetinin Kuruluşunun 90. yılı anısına...

ULUSLARARASI ÇAĞLAR BOYUNCA HATAY VE ÇEVRESİ ARKEOLOJİSİ SEMPOZYUMU BİLDİRİLERİ

21-24 MAYIS 2013 ANTAKYA

MUSTAFA KEMAL ÜNİVERSİTESİ, FEN-EDEBİYAT FAKÜLTESİ

ARKEOLOJİ BÖLÜMÜ

THE PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON THE ARCHEOLOGY OF HATAY AND ITS VICINITY THROUGH THE AGES

21-24 MAY 2013 ANTAKYA

MUSTAFA KEMAL UNIVERSITY FACULTY OF FACULTY OF SCIENCE AND LETTERS,

ARCHAEOLOGY DEPARTMENT

MUSTAFA KEMAL ÜNİVERSİTESİ YAYINLARI NO: 52

Uluslararası Çağlar Boyunca Hatay ve Çevresi Arkeolojisi Sempozyumu Bildirileri

21-24 Mayıs 2013 Antakya

The Proceedings of The International Symposium On The Archeology of Hatay and Its Vicinity Through The Ages

21-24 May 2013 Antakya

© Mustafa Kemal Üniversitesi Yayınları No: 52

ISBN: 978-975-7989-50-9

Bu kitapta yayınlanan bildirilerin yayım hakkı saklıdır. Yazarlarının yazılı izni olmaksızın çoğaltılamaz, basılamaz, yayınlanamaz. Bildiri metinleriyle ilgili her türlü sorumluluk yazarlarına aittir.

All rights reserved. No part of this book may be used or reproduced without written permission from the authors. All responsibility rising from the content of the papers published here rests upon their authors.

Baskı Öncesi Hazırlık - Prepared for print by

Mustafa Kemal Üniversitesi, Fen-Edebiyat Fakültesi, Arkeoloji Bölümü

Kapak Tasarımı - Cover design

Mustafa Kemal Üniversitesi, Fen-Edebiyat Fakültesi, Arkeoloji Bölümü

Çizim - Illustration

Barış Kocamaz

Baskı - Print

Life Medya

Kanatlı Mah. Atatürk Cad. Mecitoğlu Apt.

Kat:2 No:30 Antakya / HATAY

Tel: +90 326 216 71 81 - 88

Faks: +90 326 216 71 82

www.hataylife.com

Antakya - Türkiye

2014

Editörler - Edited By

Aynur Özfırat - Çilem Uygun

Bilim Kurulu - Academic Committee

Prof. Dr. Aynur Özfırat

Prof. Dr. K. Aslıhan Yener

Prof. Dr. Timothy Harrison

Doç. Dr. Hatice Pamir

Düzenleme Kurulu - Organization Committee

Prof. Dr. Aynur Özfırat

Doç. Dr. Hatice Pamir

Yrd. Doç. Dr. Çilem Uygun

Öğr. Gör. Ahmet Görmüş

Arş. Gör. Canan Karataş

Arş. Gör. Barış Kocamaz

İÇİNDEKİLER

ÖNSÖZ

Prof. Dr. Hüsnü Salih Güder, Mustafa Kemal Üniversitesi Rektörü

Prof Dr. Aynur Özfırat, Mustafa Kemal Üniversitesi Fen-Edebiyat Fakültesi Dekanı
Arkeoloji Bölüm Başkanı

BİLDİRİLER - PAPERS

Erksin GÜLEÇ, İsmail ÖZER, Mehmet SAĞIR, İsmail BAYKARA, Serkan ŞAHİN,
Ahmet Cem ERKMAN, Ayşen AÇIKKOL YILDIRIM
"İlk Modern İnsanlar Anadolu'da: Üçağızlı Mağarası" 17

Emre ÖZŞAHİN, Çağlar Kıvanç KAYMAZ
"Coğrafi Bir Değerlendirme: Amik Ovası (Hatay) Höyükleri" 29

Rana ÖZBAL
"Hatay'ın Neolitik ve Kalkolitik Dönemleri" 43

Aslıhan YENER, Murat AKAR
"Yeni Kazılar Işığında Aççana Höyük, Antik Alalah Kenti Orta – Geç Tunç ve Demir Çağı Tabakaları" 61

Charles GATES
"Kinet Höyüğün Akamenid Pers ve Helenistik Dönemleri: 1998-2012 Yılları Kazı Sonuçları" 85

Hatice PAMİR
"Antakya Kent İçi Kurtarma Kazıları" 101

Meryem ACARA ESER
"Antakya Kent İçi Kazısında Ele Geçen Metal Buluntularından Bir Grup: Aydınlatma Araçları" 115

Mustafa Hamdi SAYAR, Selin ÖNDER
"Ammianus Marcellinus ve Libanius'un Anlatımlarında M. S. 4. yy.'da Antiocheia Hakkında Bazı Notlar" 121

Hadrien BRU
"Essai De Sociologie Historique d'Antioche Sur l'Oronte Aux Époques Hellénistique Et Romaine: Anthroponymie, Cultures Et Peuplement" 127

Figen ÇEVİRİCİ COŞKUN
"2005 Yılı Haç Dağı Mevkii Yüzey Araştırmasında Ele Geçen Hellenistik ve Roma Dönemi Seramikleri" 145

Ergün LAFLI, Eva CHRISTOF
"New Hellenistic and Roman Grave Reliefs from Antioch" 161

Emel ERTEN
"Hatay'dan Bir Cam Buluntu: Esentepe Skyphosu" 183

Füsun TÜLEK
"Interaction of The Deli Halil Settlement with The Settlements in Issos Plain" 191

Angela M. BELL
"Tilmen Höyük'de Bahadır Alkım Kazıları Döneminde Ortaya Çıkartılan Anadolu'nun En Erken Yerli Çark Yapımı Mal Gruplarından Biri: Brittle Orange Ware" 211

Sabahattin EZER
"Gedikli Karahöyük and Tilmen Höyük Plain Simple Ware/Simple Ware Grupları ve İsimlendirilmesi Üzerine Düşünceler" 227

Cevdet Merih EREK
"Levant ve Anadolu Arasında Paleolitik ve Epi-Paleolitik Kültürel Yayılımı ve Direkli Mağarası" 239

A. Tuba ÖKSE, Ahmet GÖRMÜŞ
"Orta Fırat Havzası ve Çevresinde M.Ö. Üçüncü Binde Kullanılan Kırsal Dini Alanlar" 253

Mehmet ÖNAL
"Zeugma ve Doliche Mühür Baskılarında Tykhe Betimleri" 269

Gürhan BAHADIR
"The Socio-Political Structure of Antioch Between IV – VI. Centuries" 285

Ahmet GÜNDÜZ, Ahmet Caner ÇATAL
"Şark Ticaret Yıllıklarına Göre Antakya (1883-1912)" 291

Mine TEMİZ
"Osmanlı Döneminde Antakya'da Ticaret Alanlarının Biçimlenişi" 305

Sezer ARSLAN
"Antakya'da Osmanlı Dönemi 19. yy.'a Ait Bir Arap-Ortodoks Hıristiyan Katedrali: Aziz Pavlus ve Havari Petrus Katedrali" 323

Süleyman HATİPOĞLU
"Atatürk'ün Hatay'ı Misak-I Milli'ye Dâhil Etme Çabaları" 345

Olcay ÖZKAYA DUMAN, Volkan PAYASLI
"Sancak'tan Vilayet'e Bağımsızlık Mücadelesinin Bir Kültür Evi Hatay Halkevleri (1937-1939)" 353

İsa KALAYCI
"Fransız İdaresi Döneminde Suriye'den Hatay'a Yapılan Göçler (1919-1946)" 363

Servet ÇAYAN
"Geleneksel Antep Evlerinde Duvar ve Tavan Resimleri" 377

ÖNSÖZ

Farklı din ve kültürleri bünyesinde barındıran Hatay ili antik dönemde coğrafi konumunun sağladığı avantajla doğu ile batı arasındaki sosyal ve kültürel etkileşimin en canlı yaşandığı bölge olarak birçok kültür ve uygarlığa ev sahipliği yapmıştır. Hatay coğrafyasının özgünlüğü, jeomorfolojik yapısı Doğu Akdenizi çevreleyen birçok uygarlık merkezi ile yakın iletişim ve etkileşim olanağı sunması; ekonomik kaynaklarını oluşturan tarım, orman ürünleri, su ve maden kaynakları bakımından zenginliği ve ikliminin elverişliliği bölgeyi Paleolitik Çağ'dan bu yana insan topluluklarınca yerleşim alanı olarak cazip kılmıştır.

Bölgedeki bu kültürel birikim 1900'lü yıllarda gerçekleştirilen araştırmalarla arkeoloji literatüründe tanınmaya başlamış ve günümüzde yürütülen çalışmalarla da Yakın Doğu ve Doğu Akdeniz yerleşimlerine ilişkin daha geniş düzeyde arkeolojik ve tarihsel verilere ulaşılmıştır. Toprak altındaki kültürel değerleri ortaya çıkararak, insanlık tarihi açısından yorumlamaya çalışan bilim isanları tarafından gerçekleştirilen söz konusu araştırma projelerine ait sonuçlar 2013 yılı içerisinde üniversitemiz tarafından düzenlenen bir sempozyumla ortak bir platformda paylaşılmıştır. Yurtiçi ve yurt dışından araştırmacıların katılımıyla gerçekleştirilen bu bilimsel etkinlikte sunulan ve insanlık tarihinin en erken sürecinden başlayarak Hatay'ın anavatana katılımına kadar uzanan kronoloji dilimini kapsayan bildiriler, kitaplaştırılarak üniversitemiz yayın serisi içerisinde basılmıştır

Bölgede yürütülen araştırma projelerini tek bir kaynakta toplayan bu yayının oluşumunda makaleleri ile katkıda bulunan bilim insanlarına, sempozyum ve yayın sürecinde emek veren Arkeoloji Bölümü öğretim üyelerine teşekkür ederim. Her geçen gün gelişmekte olan kentimizin tarihi ve kültürel değerlerine yönelik özverili çalışmaların neticelerini içeren bu yayının ilgili tüm araştırmacılara başvuru kaynağı olması dileğiyle...

Prof. Dr. Hüsnü Salih GÜDER
Mustafa Kemal Üniversitesi Rektörü

SUNUŞ

Hatay ve yakın çevresindeki arkeolojik değerlere ilişkin çalışmaları ve bilim insanlarını bir araya getirerek bilgi paylaşımını sağlayabilmek amacıyla Mustafa Kemal Üniversitesi Rektörlüğü'nün desteği ile Arkeoloji Bölümü tarafından Mustafa Kemal Üniversitesi salonlarında "Çağlar Boyunca Hatay ve Çevresi Arkeolojisi (21-24 Mayıs 2013)" başlıklı uluslararası bir sempozyum düzenlenmiştir. Organizasyonda Palaeolitik Dönem'den Cumhuriyet Dönemi'ne kadar bölgede yürütülen araştırmalara ait sonuçlar ilgililerle paylaşılmıştır

Söz konusu bilimsel toplantının kalıcılığını sağlamak adına yine Rektörlüğümüzün desteği ile bildiri kitabı hazırlanarak Mustafa Kemal Üniversitesi yayın serisi içerisinde basılmasına karar verilmiştir. Böylece arkeolojik değerleriyle son derece zengin olan Hatay ve yakın çevresinde yürütülen araştırmalara ilişkin bilgilerin çok daha geniş kitlelere ulaşması amaçlanmıştır. Bölgemizde gerçekleştirilen ve her biri tek başına oldukça önemli bulgular içeren arkeolojik alanlara ilişkin güncel bilgileri kapsayan bu yayının, akademisyenler, öğrenciler ve arkeolojiye ilgi duyanlar için yararlı olacağını umuyoruz.

Sempozyumun gerçekleşmesinde desteklerini bizden esirgemeyen başta Sayın Rektörümüz Prof Dr. Hüsnü Salih Güder olmak üzere, Mustafa Kemal Üniversitesi Rektörlüğü personeli ile Sağlık, Kültür ve Spor Daire Başkanlığı'na teşekkürler

Sempozyum Bilim Kurulu, Düzenleme Kurulu, Arkeoloji Bölümü öğrencileri, öğretim üyeleri ve elemanları ile katılımcılara emekleri için çok teşekkürler

Prof. Dr. Aynur Özfırat
Fen-Edebiyat Fakültesi Dekanı
Arkeoloji Bölüm Başkanı

BİLDİRİLER

PAPERS

INTERACTION OF THE DELI HALIL SETTLEMENT WITH THE SETTLEMENTS IN ISSOS PLAIN

Füsun Tülek *

Abstract

The ancient settlement of Deli Halil is situated on the south slope of a volcano in Toprakkale town, Osmaniye Province, and overlooks the entire Issos Plain and the Issikos Gulf. The Issos Plain is merely a narrow coastal plain and is secured by its geographic setting and thus was home to numerous ancient settlements. The Deli Halil settlement is in a strategic location, being situated at the highest point and able to observe the ancient harbor of Burnaz and the city of Epiphaneia, which is the major ancient city of the plain.

Ruins of the Deli Halil settlement are recorded in three clusters on the south face of the volcano, and have been named the East, North, and West sections. In total, an area of ±26 hectares has been recorded and drawn, comprising one third of the entire settlement. The structures recorded at the ancient settlement are mainly of two types: rectangular and round in shape. Round structures are circular in plan with corbelled walls which rise up slightly tapering; the tops are conical in shape, or covered by a flat vault or a saddle-like vault. Almost all of the round structures are built into the ground, while some round structures are built above-ground, or rising above the ground, and are fewer in number. Residential structures are rectangular in shape and mostly have two units, preceded by a courtyard in which there is at least one round structure built in ground. In the West section of the ancient settlement, there are 96 rectangular structures and 115 round structures on ±13 ha of recorded area.

A plethora of potsherds found on basalt masonry debris belong to various types of vessels are dated at the earliest to the beginning of the fifth century, and at the latest to the end of the sixth century CE. Numerous weight and press stones from olive presses have been recorded at three sections of the settlement. Inhabitants of the Deli Halil settlement were not only producing olive oil to consume but for to trade, and they were not only facilitating round structures as storage cellars for their own production but, probably, also letting products of other settlements stored for to trade in maritime commerce at the Mediterranean Sea.

The ancient settlement of Deli Halil is situated on the south slope of a volcano, between 354 and 229 meters in altitude, in Toprakkale town, Osmaniye Province (Fig. 1). The ancient settlement overlooks the entire Issos Plain and the Issikos Gulf. Volcanic land covered with lava eruptions, the Deli Halil Basalts, stretches from the north-eastern tip of the Mediterranean Sea eastwards to the Amanus mountain range, separating the south-eastern part of Plain Cilicia from the Issos Plain and blocking its access to the Mediterranean Sea. A narrow pass, the Kısık Pass, runs between the volcanic land and the foothills of the Amanus range in a south - north direction, making it possible for the East Plain Cilician people to travel to the Mediterranean coast.

* **Assoc. Prof. Dr. Füsun Tülek,** Kocaeli University, Fen-Edebiyat Fakültesi, Archaeology Department, Kocaeli. *fusuntulek@kocaeli.edu.tr*

The ancient settlement of Deli Halil is situated on the south slope of a volcano, between 354 and 229 meters in altitude, in Toprakkale town, Osmaniye Province (Fig. 1). The ancient settlement overlooks the entire Issos Plain and the Issikos Gulf. Volcanic land covered with lava eruptions, the Deli Halil Basalts, stretches from the north-eastern tip of the Mediterranean Sea eastwards to the Amanus mountain range, separating the south-eastern part of Plain Cilicia from the Issos Plain and blocking its access to the Mediterranean Sea. A narrow pass, the Kısık Pass, runs between the volcanic land and the foothills of the Amanus range in a south - north direction, making it possible for the East Plain Cilician people to travel to the Mediterranean coast.

The Issos Plain today consists of the Erzin and İskenderun plains, and is merely a narrow coastal plain irrigated by numerous streams issuing both from the Amanus ridge and from the outskirts of the Deli Halil Basalts. The alluvial deposits of the Plain are fertile, supporting abundant orchards, and in the past, olive groves (Karahanoğlu, Doyuran ve Suvagondha 1986, 58). The Issos Plain is connected in the north to East Plain Cilicia via the Kısık Pass, and in the south to the Amuq Plain, Antioch and north Syria via the Belen Pass. The Amanus Mountain range, rising high with massive, green, cedar forests, block communication between the Issos Plain and settlements in the east, in the Amuq Plain. To the west of the Issos Plain is the north-south coastline, stretching in a bow-like shape along the Issikos Gulf, starting from the Deli Halil Basalts and terminating at the southern outskirts of the Amanus Mountain range where, in the past, harbors and mooring places provided a connection to other coastal regions.

The Issos Plain, although a small and narrow coastal plain, is secured by its geographic setting and thus was home to numerous ancient settlements of different sizes, dating from prehistoric times to the Middle Ages: prehistoric mounds, Classical, Roman and Late Antique settlements and villages, as well as ancient harbors. Muttalip Mound lies at the tip of the Issikos Gulf on the shore, Karahöyük Mound is situated 3 km south of Muttalip Mound and 2 km from the shore, and Kinet Mound is on seashore, 15 km south of Muttalip Mound. Recent archaeological surveys conducted in Issos Plain found more than twenty minor settlements between the Muttalip and Kinet mounds in the Erzin Plain, most of them dating to the Roman Imperial and the Late Antique periods (Özgen and Gates 1993; Tobin 2004; Lehmann et al. 2006). The major ancient city of the plain is Epiphaneia (Oinoanda/ Issos), which is situated at the southern entrance to the Kısık pass, on its west bank.

At the turn of the twentieth century, a colonnaded street with marble and basalt capitals was recorded to have remained, stretching from the ruins of the city of Epiphaneia to the seashore, possibly leading to its harbor, Burnaz (Bell 1906, 3, 4). The history of the foundation of the city is as yet unclear; studies assert that initially the city was called Winuwanda, a Hittite settlement in origin (Trémouille 2001, 64), and it was later called Oinoanda in the Iron Ages (Pliny V, 93). The name Issos, presumably given during pre-Hellenistic times, is controversial, since the Kinet Mound is also claimed as the Classical city of Issos (Gates 1993, 194). In the late Hellenistic period the city is known to have been renamed Epiphaneia by Antiochus IV Epiphaneus. The metropolis of Epiphaneia is known to have struck coins during the Hellenistic and Roman Imperial periods, 113- 4 CE, commemorating its honorification by Emperor Trajan (Sayar 2004, 53), and it is known to have been populated with Cilician pirates by the victorious General Pompeius (Pauly - Wissova VII, 191). The harbor of Epiphaneia must have been renovated during the Early Roman Imperial period, when the cursus publicus leading to Antioch was established. During the Late Roman period Epiphaneia, together with the cities of the Orient, was granted a tax remission by Emperor Theodosius II, granted to the Eastern Provinces of the empire until 407 CE due to a disaster that had taken place, enabling the city to recover and reorganize (Corbier 1991, 233 cite Codex Theodosius 11.28.10).

The settlement landscape of the Issos Plain was enriched by the ex novo foundation of a settlement on the basalt bedrock of the Deli Halil volcano (Fig. 2). The Deli Halil settlement, studied by the Osmaniye Archaeological Survey team, extended over an area of ±90 hectares, 2 km from the metropolis of Epiphaneia, on the south-eastern outskirts of the volcano (Tülek 2011a) (Fig. 3). The basalt bedrock of the volcano is covered with pyroclastic heaps of lava eruptions that are hard to walk on. There is no source of water on the volcano, nor is there arable land for growing grain. It is possible that when Epiphaneia was granted reorganization as a city during the time of Emperor Theodosius II, provisions like that of lex Hadriana may have been given to peasants to settle on uncultivated land,

as observed in the Lime Massif of Syria (Tate 1997, 60). The foundation of the Deli Halil settlement may have been a result of the phenomenon of inter-regional migration noted by Trombley during the Late Antique Period, as is the case with Korykos, a coastal settlement in Rough Cilicia (Trombley 2001, 229). However, it is uncertain whether the Deli Halil inhabitants were paroikoi settled on a land they rented (Liebeschutz 2003, 293).

The Deli Halil settlement is in a strategic location, being situated at the highest point and able to observe the ancient harbor of Burnaz and the city of Epiphaneia which is located on the west bank of the Kısık Pass, thus controlling the land trade leading to the north, as well has having a broad view of other settlements on the Issos Plain. The Archaeological Survey did not detect any city walls, indicating that it was an unfortified settlement. Apparently, fortification was not necessary to protect inhabitants of the Deli Halil from their neighbors. Settlements on the Issos Plain may not have been anxious about their security, since the high-rising range of the Amanus Mountains protect the Plain to the east and south. To the north is the volcanic land on which the Deli Halil settlement was built. To the west, the coast of the Plain must have seen busy seafaring activity, while to the north-east, the land route via the Kısık Pass was under the control of both the city of Epiphaneia and the Deli Halil settlement. The northern entrance of the Kısık Pass was also controlled by the Toprakkale Mound[1]. Although the Deli Halil settlement was unfortified, it must certainly have been a single administrative entity and its borders must have been clearly defined. The fiscal and municipal administration in the city of Epiphaneia must have implemented cadasters, since the residents received a well-planned settlement in its territory. Regardless of its size and significance, the residents would have wanted to mark the boundaries of the settlement, and placed border stones - ὅροϛ, as was the tradition.

The ancient settlement was first identified by the Osmaniye Archaeological Survey team, and was named after the volcano (Tülek 2010c, 374)[2]. The volcano, at an altitude of 450 meters, is estimated to have erupted three times, for the first time in the Upper Pleistocene period, between 2.5 M and 250.000 years ago (Yılmaz 2011, 119), and has three craters at its top. The volcanic land has a circumference of 37 square kilometers, and the lava is spread over 73 square kilometers, creating a basalt bedrock and pyroclastic heaps that are almost impossible to walk and live on (Yılmaz 2011, 120). The ancient settlement encroached on the south side of the volcano at an altitude of 354 meters, widely extending from east to west at 229 meters altitude at the lowest point. The thickness of the basalt bedrock of the volcano at the peak is estimated to be 200 meters, decreasing towards the outskirts to 25 meters in thickness. The volcanic land is not arable. Small olive groves are observed on the level outskirts of the volcano. Husbandry is possible, but only herds of goat and sheep are kept, in small flocks. It is not possible to grow enough grain and corn to supply food for subsistence. No streams run over the basalt bedrock, and at such a height, where the basalt bedrock is thick, drilling water from a well is impossible. Archaeological examinations have not detected any sort of well, but some of the structures built into the ground are surmised to be cisterns for water.

Ruins of the settlement are recorded in three clusters on the south face of the volcano, and have been named the East, North, and West sections (Figs. 4- 6). The ancient settlement has been widely destroyed by quarries that have hollowed out huge gorges, particularly in the East and North sections. Several dirt roads for heavy trucks have also been opened up in the course of time, and looters have not only plundered the material culture, but have also taken down the walls of the ancient structures to use as ready building material for present-day housing. The three recorded sections of the settlement are the parts where the archaeological context is preserved and remains are identifiable, yielding information about the plan of the structures and the layout of the settlement.

---

[1] The Osmaniye Archaeological Survey team examined the Kısık Pass and the Toprakkale mound for two years, and the present author is conducting an archaeo-geological project granted by the Kocaeli University, Project 2012-73.

[2] The Osmaniye Archaeological Survey is an on going project since 2005, conducted by the present author with permission and grants from the Turkish Minister of Tourism and Culture, Kocaeli University. The project was initiated and is supported by the Governor of Osmaniye Province, and by grant BAP 2008-18 from Kocaeli University. An archaeo-geological examination of the Deli Halil settlement and the volcano was conducted with a grant from TUBİTAK- SOBAG Project no. 109K025.

In total, an area of ±26 hectares has been recorded and drawn, comprising one third of the entire settlement; the recorded parts of the West section measure ca ±13 hectares, the North measures ca ±2.5 hectares, and the East measures ca ±10.5 hectares. An extensive archaeological survey and aerial photography of the entire volcano show that mining activities disconnected the parts of the settlement, and that originally the three sections were part of one entity, the ancient settlement of Deli Halil. The masonry, plan types, and types of structures built in the three sections share the same characteristics of a single culture.

The settlement is laid out to conform to the topography, with structures placed on terraces in places where the incline is steep, as well as on insulae formed by intersecting streets where the land extends smoothly. The layout of the settlement presents densely placed structures with enclosed forecourts that are relatively smaller in size on terraces, and rectangular structures getting larger in size in the level parts of the settlement. The layout of the settlement, particularly in the West section, is in the shape of a fan, narrow and squeezed at the top and getting wider and more extensive below at the outskirts.

The layout of the West section includes the remains of a temple, prominently placed at the western-most tip of the highest terrace, where the land protrudes like the prow of a ship (Tülek 2010a, 49) (Fig. 7). It is visible from all parts of the settlement, and can be seen from the ancient harbor of Burnaz, as well as from the temple site in the metropolis of Epiphaneia. The temple is enclosed by a wall, and scattered around its temenos are broken pieces of entablature and a round column shaft of white limestone, whereas the masonry of the entire structures in the settlement is of black-brown basalt stone, amorphous in shape. No other identifiable public building has been recorded, such as a sumptuous town hall. However, a group of rectangular units aligned around a very large courtyard is surmised to be the market place of the West section, no.67 in the plan. A two-story structure in the East section, structure no.5, which has the largest courtyard, enclosed with high walls built of heavy column-type basalt rock, is estimated to be an inn, a place for visitors to stay, a *pandocheion* (Tülek 2012b, 244) (Fig. 6).

The structures recorded at the Deli Halil ancient settlement are mainly of two types: rectangular and round in shape. Almost all of the round structures have a circular ground plan with corbelled walls, rising up and slightly tapering, and conical-shaped tops, while some are covered by a flat vault or a saddle-like vault. Most of the round structures are built into the ground, with conical tops rising above the ground (Figs. 9- 11). Round structures built above-ground, or mostly rising above the ground, are fewer in number and constitute just ten percent of the round structures. These round structures in or above the ground with conical tops are picturesque, and adorn the silhouette of the settlement. All of these round structures are built of basalt rubble masonry with mortar. Some have vaults reinforced with flat terracotta tiles in rubble masonry. The interiors of all the round structures are thickly plastered, 0.25mm, in pink lime. The round structures are plain circular or elliptic in shape and mostly conical in form, but some are cylindrical; they measure ±2.5 to ±3.5 meters in diameter and ca±5 meters in height (Tülek 2010a, 48-49). They have a capacity of 19 m^3. Whether built into the ground or above ground, the round structures of the Deli Halil settlement are considered to have functioned as storage, to store water, grain and olive oil. In the three sections of the ancient settlement, the round structures built above the ground are recorded in lesser number than the underground structures. They are placed mostly at the intersections of the streets, plaza-like areas, and in one place at the junction of two terraces of the settlement, as if these above-ground structures, rising like short towers, are for communal use. It is noteworthy that the number of round structure exceeds the number of rectangular residential structures in the settlement.

In the West section of the ancient settlement, there are 96 rectangular structures and 115 round structures on ±13 ha of recorded area. The excessive number of round structures points to another function other than water storage. Studies in Mediterranean archaeology show that in a Mediterranean climate, a person consumes 9 liters of water a day (Zorn 1994, 42). Rain falls during six months of the year in this climate, thus it is necessary to store water to consume for the rest of the year, 183 days, meaning that 1,647 liters of water must be stored per person. The water capacity of the round structures is roughly 19 tons, and so one round structure has the capacity to store water to supply 11 people. Demographic estimation for the West section of the Deli Halil ancient settlement,

assuming 5.5 as the constant per household and that 96 of the rectangular structures are residential, shows that 528 people lived in the recorded part of the settlement, using 45 of the round structures as cisterns (Tülek 2014b). The remaining 64 round structures out of the total of 109 must have been used to store the main produce of the Deli Halil inhabitants.

Residential structures are rectangular in shape and mostly have two units, preceded by a courtyard in which there is at least one underground round structure. The surviving walls of some of the buildings rise to a height of 1.5 m, enclosing the perfectly laid out rectangular structures of houses. Holes for log beams remain in the walls, indicating that most of the houses on inclined land were built on two floors. Local basalt is the construction material used for building both enclosure walls and structures, while timber is used in the division of the floors. Doors and roofing thrusts were possibly of timber, and access to the upper floor must have been provided by a wooden ladder. Roofs must have been covered with terracotta tiles, since broken or intact roof tiles are found all over the ruins. The absence of mortar in all these walls is noteworthy. All of the masonry at the ancient settlement appears to use a dry-wall technique inherited from the pre-classical architecture of Anatolia; the amorphous and very light basalt stone from the burned-out lava is easily put together and compacted firmly. Column-type basalt stone, which is also easy to produce at a local quarry, is utilized in the exceptionally large structure of the East section, structure no.5 (Tülek 2012, 244, Figs. 1a and b). White limestone is found only in the construction of the temple in the West section. On the floors of the three residential structures, traces of mortar used for embedding mosaic and the remains of a couple of small tesserae indicate that some well-to-do families decorated their floors with polychrome mosaics. Almost nothing among the finds of material culture bears any significant features revealing information about the culture of the Deli Halil people, other than an arch stone with a carved high relief of a dolphin tail. The basalt arch stone with the dolphin tail relief was found at the temple temenos, and may have been part of an arch at the entrance, while the relief might represent the insignia of the Deli Halil settlement (Tülek 2010, 377). A couple of architectural terracotta pieces found at a site with few ornaments indicate a lively culture placing emphasis on decorating the exteriors of structures as well (Tülek 2014b).

A plethora of potsherds found on fallen basalt masonry stand out in lively terracotta color on black-brown colored stones (Fig. 12). The terracotta fragments belong to various types of vessels, containers such as amphorae, dolia, jugs and juglets, roof tiles and decorative architectural terracotta, oil lamps, bread stamps, and two idols, as well as common ware and tableware for culinary purposes (Tülek 2010b, 160, Fig.2; Tülek 2013, 262, Figs. 1- 5; Tülek 2014a). Among the potsherds, almost of the tableware is fine ware of Late Roman C type, the Red Slip plates of Phocae production (Tülek 2011b, 494). The Phocaea Red Slip ware of the Deli Halil settlement is uniform in form, divided into only two major forms: Form 3 and Form 10; they are dated at the earliest to the beginning of the fifth century, and at the latest to the end of the sixth century CE (Hayes 1972, 337-338, and 346). Cooking pots are similar to those of the Tarsus excavation finds, dated to the Late Antique Period (Toskay- Evrin 2005, 688). Amphorae fragments are few compared to the number of fine ware fragments; however, all the pieces collected belong to African amphorae and spatheia of the Late Antique Period, Keay 34, 35, 62) and A-D and E types are common (Bonifay 2004, 125, 133, 137, 138 and 143). Fragments of dolium belonging to the same type are abundant, with a whole mouth, and squat in height with a large belly. This is a local type of dolium observed all over East Plain Cilicia; intact ones are on display in the Adana Archaeology Museum.

Numerous weight and press stones from olive presses have been recorded at three sections of the settlement (Tülek 2010, 374) (Figs. 13- 14). Five olive oil presses have been documented in the archaeological survey of the West section alone, in an area of ±13 ha (Fig. 15). The olive oil presses are placed in spacious flat areas of the settlement, with clusters of round structures built into the ground. In ancient olive oil production, oil draining from the presses was collected in containers, with water to help it to flow. As a second step of the process, the olive oil was stored in containers to separate from the water (Callot 1984, 20). Containers near olive oil presses examined in North Syria are mostly built in the ground, and are round in shape (Callot 1984, 79). Five olive oil presses served by ±90 houses in the recorded part of the West section must have produced more olive oil than was required for annual domestic use. It has been estimated that the average annual rate of production of olive oil per press is ca.

±2,000- 5,000 liters (Giorgi 2010, 104). Thus the five olive presses existing in only one third of the west section must have produced 10,000 to 25,000 liters of olive oil. Although the annual consumption rate is uncertain, surplus olive oil must have been exported via maritime trade.

Evidently the people of the Deli Halil settlement must have been busily occupied in growing olives and producing olive oil. They might also have received olives to process from other settlements. Olive groves at the outskirts of the Deli Halil settlement are small in size, and insufficient to produce a quantity of olives to be processed annually in so many oil presses. Obviously, the people of Deli Halil were providing oil production services to neighboring settlements.

In connection with olive oil production at the Deli Halil settlement, the round structures built in the ground may have been used not only as containers but also as storage for the annual surplus of olive oil. It would have been reasonable to use the extra ±64 round structures as storage for the surplus olive oil, since they are thickly plastered with fine lime mortar that would also keep in liquids other than water. The basalt masonry is able to maintain a steady temperature of ±14°C year round, thus the structures provide perfect storage. The round structures of the Deli Halil settlement are calculated as having a capacity of 19 tons, so the ±64 of them can store a total of 1,216 tons of olive oil. A total capacity of 1,216 tons is a huge surplus for a population of 528 people with small olive groves, and is impossible to consume in one year.

The excessive number of round structures could have been used for both short-term and long-term storage. Being cool inside, at a steady temperature, they might have been favored for storing surplus olive oil by the neighboring settlements as well, and the Deli Halil people might have stored their neighbors' produce not only for year-round consumption, but also for trade – both regional and inter-regional. Thus, the Deli Halil settlement might have been an intermediary for the transshipment of goods stored in the round structures. Interactions between the Deli Halil settlement and neighboring settlements can be deduced by the evidence of the same type of potsherd finds in archaeological surveys (Tobin 2004, 65, Fig.83). A small fragment of African Red Slip ware bearing the stamped wind wheel motif found at the Deli Halil settlement is identical to the shard found in the archaeological survey of Burnaz harbor (Hayes 1972, 115, Figs.19.4 , 40). It is also the earliest shard ever found at the Deli Halil settlement, dated to the first quarter of the 5th century CE.

Olive oil was vital for ancient people in the Mediterranean basin, and is known since the Bronze Age in Hittite texts, used not only for culinary purposes but also for illumination, as a medicine, and for cosmetics (Güterbock 1968, 66-67). There was a big demand for olive oil in the Mediterranean basin, from the Classical Ages through the Late Antique periods. Particularly in Late Antiquity, in the 5th and 6th centuries, an increase in olive oil production was observed in Cilicia, Antiochene and North Syria (Giorgi 2010, 105). The abundance of olive oil press stones and presses attests to the active production of olive oil even in small villages (Pamir 2010, 89). Some Late Roman settlements in geographic proximity to the Deli Halil settlement were also known to have initiated olive oil production, even under the organization of the temples (Trombley 2004, 60- 61). In the Kafr Nabo settlement in North Syria, the olive presses belonged to the temple and the land was owned by the temple (Tate 1997, 67). In Baetocaece in North Syria, temples owned not only the land and the olive presses, but also the land of the small villages (Tate 1997, 69).

Therefore, olive oil was one of the major products traded throughout the Mediterranean basin during the Roman Imperial and Late Antique Periods. The settlements of the Issos Plain, as well as the Roman and Late Antique settlements of East Plain Cilicia, namely the settlements in the northeast of the Plain, may have taken their place in

this trade via the harbors of the Issikos Gulf, and the harbor of Burnaz. The Deli Halil ancient settlement is closely related to the city of Epiphaneia, just 2 km distant to the east, while Burnaz harbor is only a little more distant to its west (Tülek 2012a, 183)). It is noteworthy that the West section extends in the direction of Burnaz harbor. It is no coincidence that a 3 km paved road from the seashore, slightly to the north of Burnaz harbor and east of Muttalip Mound, has been recorded as leading in the direction of the Deli Halil volcano, dating to the Roman period (Özgen and Gates 1993, 390) (Fig. 16). The Deli Halil people could have taken this paved road as a short-cut leading directly to the harbor to take advantage of the opportunities of seafaring and maritime trade. Potsherds finds of Phocaea Red Slip fine ware brought from the west coast of Asia Minor, as well as African Amphorae fragments, constitute good evidence of the inter-regional maritime trade of the Deli Halil settlement.

Acknowledgements

Architects C. Sudaş and Asst. Prof. Dr. G. Gülmez supervised drawings of the structures and settlement plan, while cartography engineers H. Akan and Assoc. Prof. Dr. Ü. Gümüşay and accomplished mapping of the volcano and the ancient settlement.

Bibliography

Bell 1906
Bell, G. L., *"Notes on a Journey Through Cilicia and Lycanoia",* Revue Archéologique Seri 4. Cilt 7: 1-29.

Bonifay 2004
Bonifay, M., *Etudes sur la Céramique Romaine Tardive D'Afrique*. Oxford: British Archeological Reports International Series 1301.

Callot 1984
Callot, O., *Huileries Antiques de Syrie du Nord,* Paris.

Corbier 1991
Corbier, M., "*City, Territory and Taxation", in: City and Continuity in the Ancient World.* J. Rich ve A. Wallace-Hadrill (eds.), 211- 241, London.

Gates 1993
Gates, M. H., "1992 Excavations At Kinet Höyük (Dörtyol/Hatay)", *Kazı Sonuçları Toplantısı* 15/1 (Ankara, 24-28 Mayıs 1993) 193- 200, Ankara: T.C. Kültür Bakanlığı.

Giorgi 2010
Giorgi, A. U. D., "Olive Oil Production in the Antiochene From the Early Empire into Late Antiquity", *Olive Oil and Wine Production in Anatolia in Antiquity (06-08 Kasım 2008 Mersin)*, Ü. Aydınoğlu ve A. K. Şenol (eds.), 97- 108, İstanbul.

Güterbock 1968
Güterbock, H. G., "Oil Plants in Hittite Anatolia" , *Journal of the American Oriental Society,* Vol. 88, No. 1 (Jan. - Mar.), 66-71.

Hayes 1972
Hayes, J. W., *Late Roman Potter*, London.

Karahanoğlu ve diğ 1986
Karahanoğlu, N., V. Doyuran, F. A. Suvagondha, "Finite Element Model for the Erzin Plain (Hatay) Groundwater Basin", *Bulletin of the Geological Society of Turkey,* V. 29: 53 – 60.

Kolb 2003
Kolb, A., "Cursus Publicus" *Encyclopaedia of the Ancient World,* H. Cancik ve H. Schneider (eds.) Cilt 3.: 1022-1023.

Lehmann ve *diğ.* 2006
Lehmann, G., A. E. Killebrew, M. H. Gates, B. Halptern, "The Mopsos Project: The 2004 Season of Archaeological Survey in the Bay of İskenderun, Eastern Cilicia", *Araştırma Sonuçları Toplantısı* 23/2 (Antalya, 30 Mayıs – 3 Haziran 2005), 79- 88 Ankara: T.C. Kültür Bakanlığı.

Liebeschutz 2003
Liebeschutz, J. H. W. G., *The Decline and Fall of the Roman City,* Oxford.

Özgen ve Gates 1993
Özgen, İ., M. H. Gates, "Report on the Bilkent University Archaeological Survey in Cilicia and the Northem Hatay: August 1991" *Araştırma Sonuçları Toplantısı* 10 (Ankara, 25- 29 Mayıs 1992), 387- 393, Ankara: T.C. Kültür Bakanlığı.

Pamir 2010
Pamir, H., "Antiokheia ve Yakın Çevresinde Zeytinyağı Üretimi ve Zeytinyağı İşlikleri", *Olive Oil and Wine Production in Anatolia in Antiquity (06-08 Kasım 2008 Mersin),* Ü. Aydınoğlu ve A. K. Şenol (eds.), 75- 96, İstanbul.

Pauly ve Wissowa 1972
Pauly, A. F., G. Wissowa, *Paulys Real-Encyclopädie der Classischen Altertumswissenschaft*. Volume 1. Stuttgart.

Pliny
Pliny, *Natural Historia*. Loeb Classical Library. (Çev.) R. Rackham, Massachusets, 1942.

Sayar 2004
Sayar, M. H., "Epiphaneia" in: *Kulturbegegnung in einem Brückenland : Gottheiten und Kulte als Indikatoren von Akkulturationsprozessen im Ebenen Kilikien,* Marion Meyer und Ruprecht Ziegler (ed.), Asia Minor Studien; Bd. 53: 53.

Tate 1997
Tate, G., "The Syrian Countryside during the Roman Era", in: *The Early Roman Empire in the East.* Susan E. Alcock (ed.) Oxbow Monograph 95, Oxford: 55-71.

Tobin 2004
Tobin, J., *Black Cilicia: A Study of the Plain of Issus during the Roman and Late Roman Periods.* Oxford: British Archeological Reports International Series: 1275.

Toskay Evrin 2005
Toskay Evrin, Ç., "The Cooking Wares of the Romans Discovered during the Excavations at the Republic Square in Tarsus, Cilicia", in: J.M. Gurt i Esparraguera, J. Buxeda, I. Garrigos ve M.A. Cau Ontiveros (eds.). *LRCW1: Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry.* Oxford: British Archeological Reports International Series. 1340: 681-689.

Trémouille 2001
Trémouille, M. C., "Kizzuwatna, Terre de Frontiére", É. Jean, A. M. Dinçol ve S. Durugönül (ed.), *Kilikia: Mekanlar ve Yerel Güçler (M.Ö 2. Binyıl – M.S 4. yüzyıl) Uluslararası Yuvarlak Masa Toplantısı Bildirileri İstanbul, 2- 5 Kasım 1999,* Varia Anatolica XIII.: 57-78.

Trombley 2001
Trombley, F. R., "Town and Territorium in Late Roman Anatolia", in: Recent Research in Late- Antique Urbanism, Luke Lavan (ed.), *Journal of Roman Archeology,* Supplementary Series 42. Portsmouth, RI.: 217-232.

Trombley 2004
Frank R. Trombley, "Christian Demography in the Territorium of Antioch (4th-5th c): Observations on the Epigraphy", *Culture and Society in Later Roman Antioch,* Isabell Sandwell ve Janet Huskinson (eds.), Oxford: 59-85.

Tülek 2010a
Tülek, F., "Osmaniye Arkeolojik Varlıkları Envanter Çalışması 2009", *Türkiye Bilimler Akademisi- Kültür Envanteri Dergisi*, 8: 43-64.

Tülek 2010b
Tülek, F., "Archaeological Surveys in Osmaniye in 2009", *Anadolu Akdenizi Arkeoloji Haberleri,* 8: 159-164.

Tülek 2010c
Tülek, F., "Osmaniye Arkeolojik Yüzey Araştırması 2009 Yılı Çalışması", *Araştırma Sonuçları Toplantısı* 28/ 1 (İstanbul, 24-28 Mayıs 2010), 373-388 Ankara: T.C. Kültür Bakanlığı.

Tülek 2011a
Tülek, F., *Deli Halil Antik Yerleşimi ve Kurulumu Üzerinde Doğa Olaylarının Etkisi.* TÜBİTAK- SOBAG Rapport Project no.109K025, Ankara.

Tülek 2011b
Tülek, F., "2010 Yılı Osmaniye Arkeolojik Araştırmaları", *Araştırma Sonuçları Toplantısı,* 29/1 (Malatya, 23-28 Mayıs 2011), 491-504 Ankara: T.C. Kültür Bakanlığı.

Tülek 2012a
Tülek, F., "Burnaz, Doğu Akdeniz'de Kayıp Bir Antik Liman", *Arkeoloji ve Sanat*. 140: 175- 192.

Tülek 2012b
Tülek, F., "2011 Yılı Osmaniye Arkeolojisi Çalışma Raporu", *Araştırma Sonuçları Toplantısı* 30/ 2 (Çorum, 28 Mayıs – 1 Haziran 2012), 243- 254 Ankara: T.C. Kültür Bakanlığı.

Tülek 2013
Tülek, F., "Terracotta Finds of the Deli Halil Ancient Settlement: Architectural Tiles and Anthropomorphic Pieces ", *Identity and Connectivity* Proceedings of the 16th Symposium on *Mediterranean Archaeology (Florence, Italy, 1–3 March 2012),* 1.: 261- 268.

Tülek 2014a
Tülek, F., "Late Roman Ceramics of the Deli Halil Settlement in East Plain Cilicia" *KERAMOS*, İzmir (forthcoming).

Tülek 2014b
Tülek, F., "*Size Matters! Scale and Demography of the Deli Halil Settlement*" Gratulatoria for Marie Henriette Gates (forthcoming).

Yılmaz 2011
Yılmaz, İ., "Deli Halil Volkanı ve Çevresi Jeolojik Analizi" *Füsun Tülek (der.), Deli Halil Antik Yerleşimi ve Kurulumu Üzerinde Doğa Olaylarının Etkisi.* TÜBİTAK- SOBAG Rapport Project no.109K025: 83- 151.

Zorn 1994
Zorn, J. R., "Estimating the Population Size of Ancient Settlements: Methods, Problems, Solutions and a Case Study", *Bulletin of the American Schools of Oriental Research* 295: 31- 48.

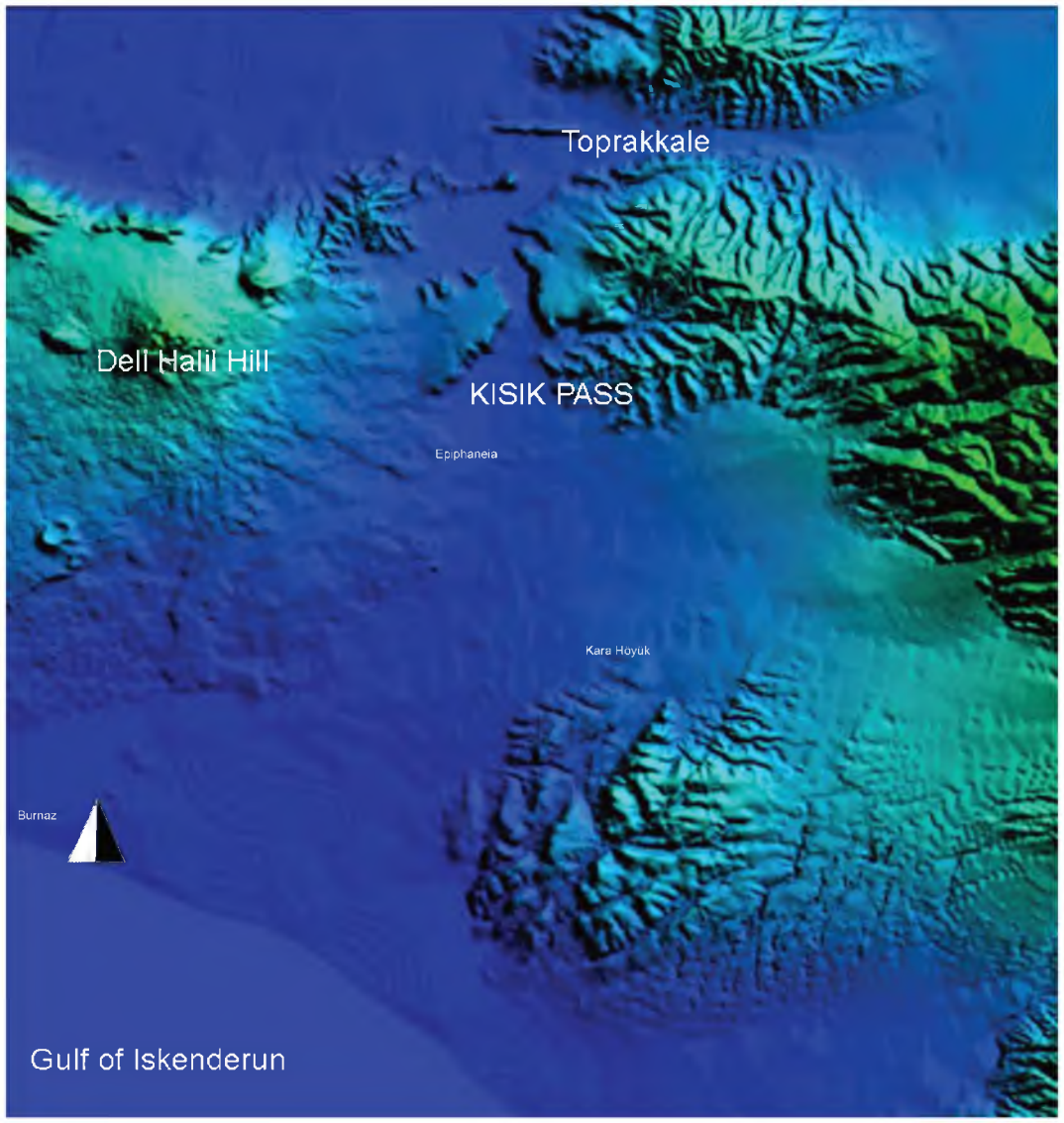


Fig. 1. Deli Halil Settlement Geographical Position

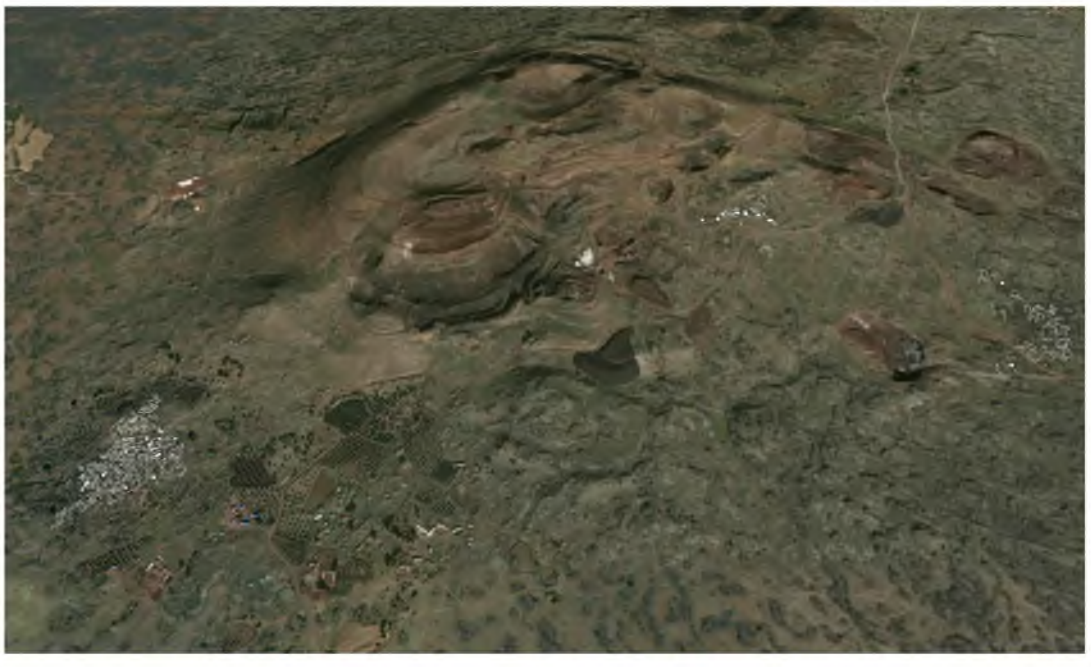


Fig. 2. Deli Halil Settlement Situated on South Slope of the Deli Halil Volcano



Fig. 3. Deli Halil Settlement Geographically Poistioned on Map N36-D4

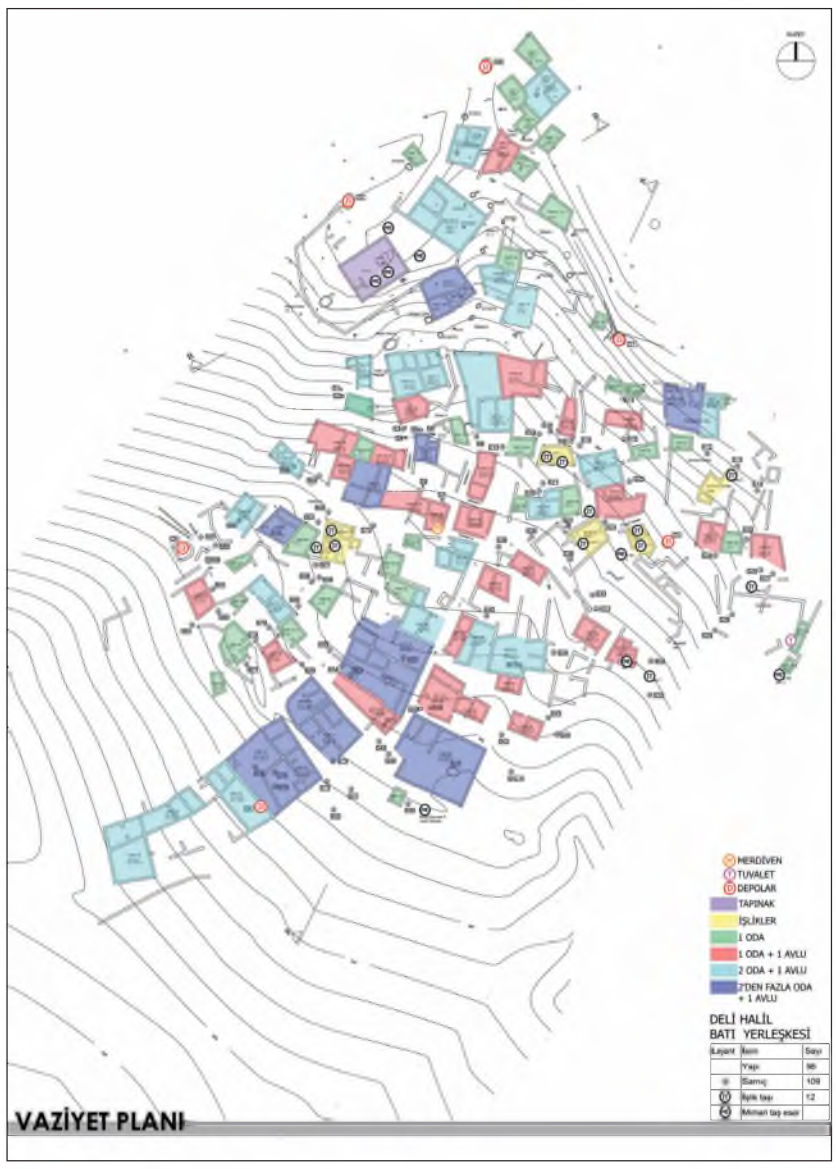


Fig. 4. Deli Halil Settlement, The Layout of the West Section

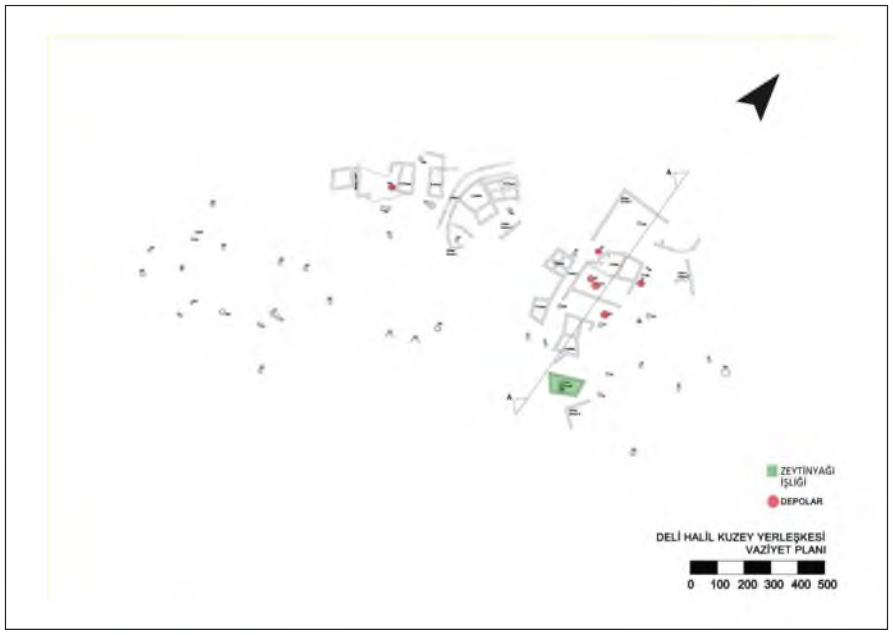


Fig. 5. Deli Halil Settlement, The Layout of the North Section



Fig. 6. Deli Halil Settlement, The Layout of the East Section

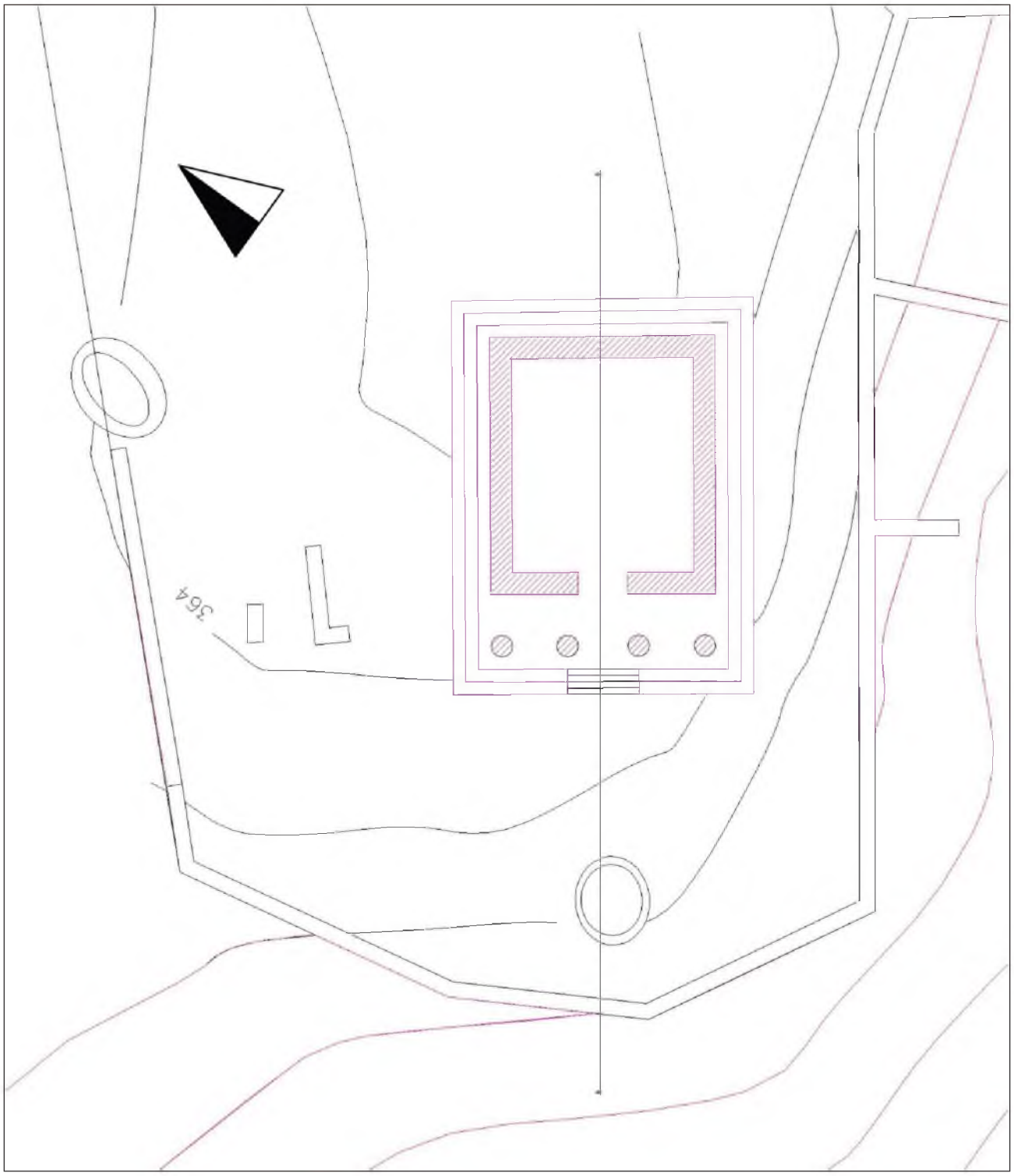


Fig. 7. Deli Halil Settlement, The West Section Temple

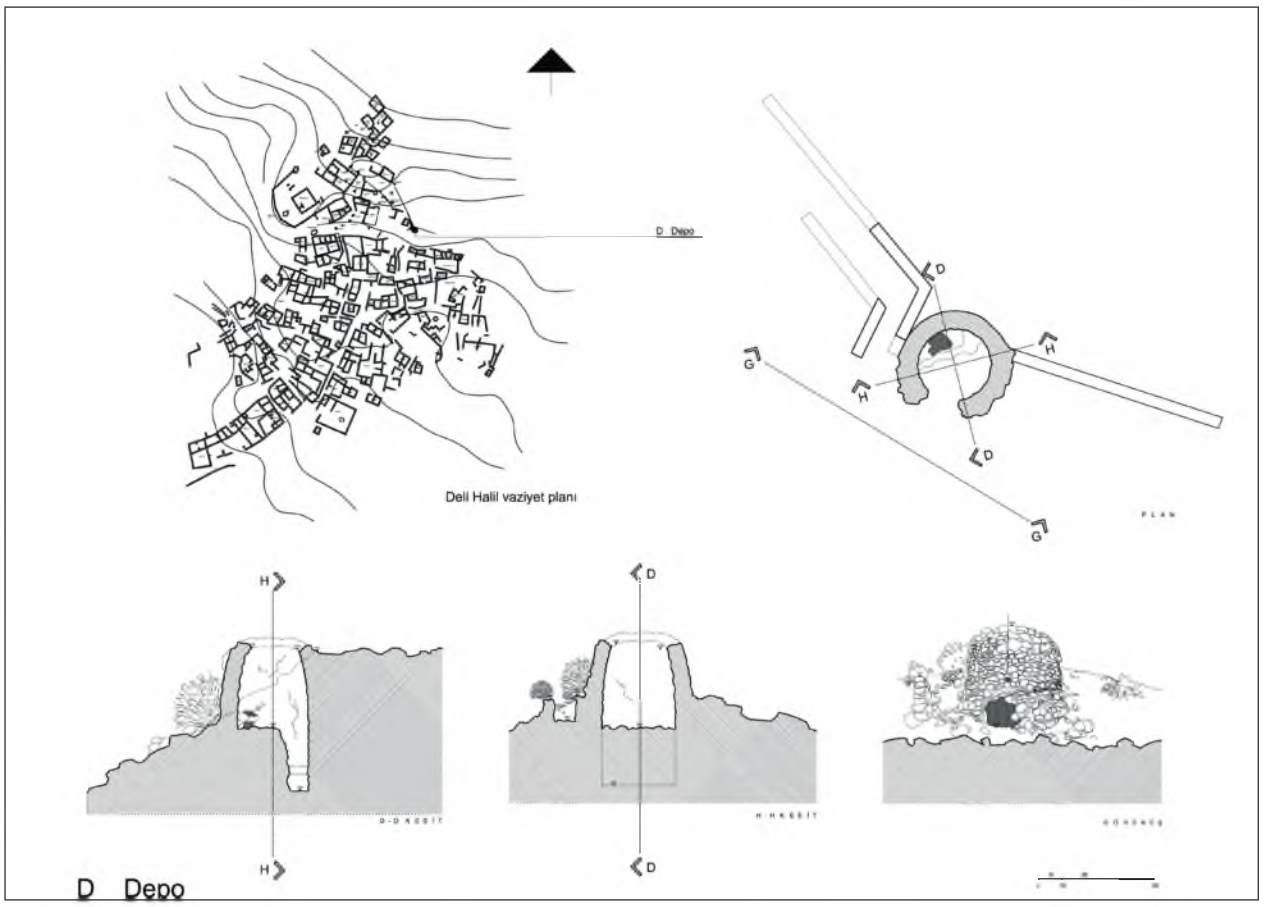


Fig. 8. Deli Halil Settlement, The West Section Storehouse No 1 Plan

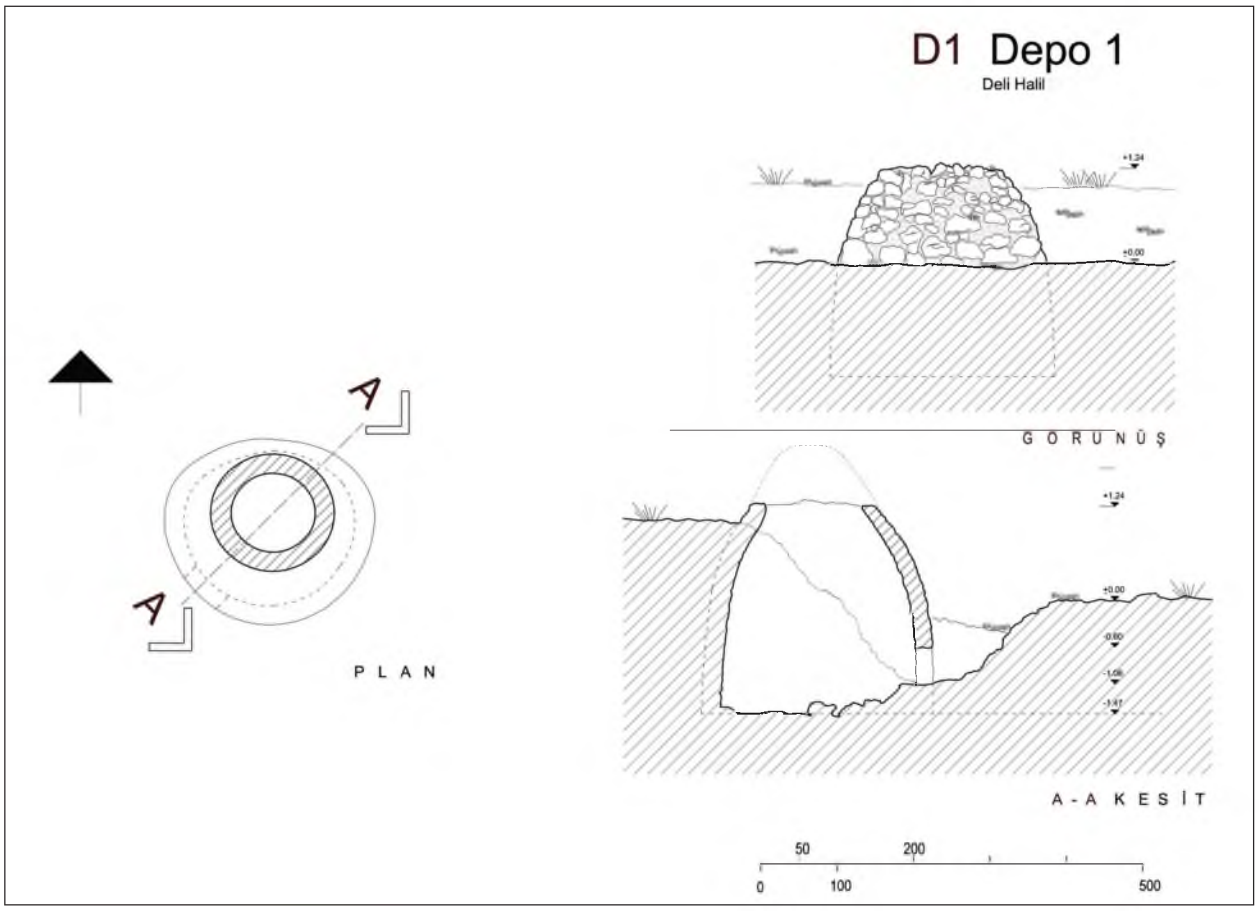


Fig. 9. Deli Halil Settlement, The North Section Storehouse No. 1

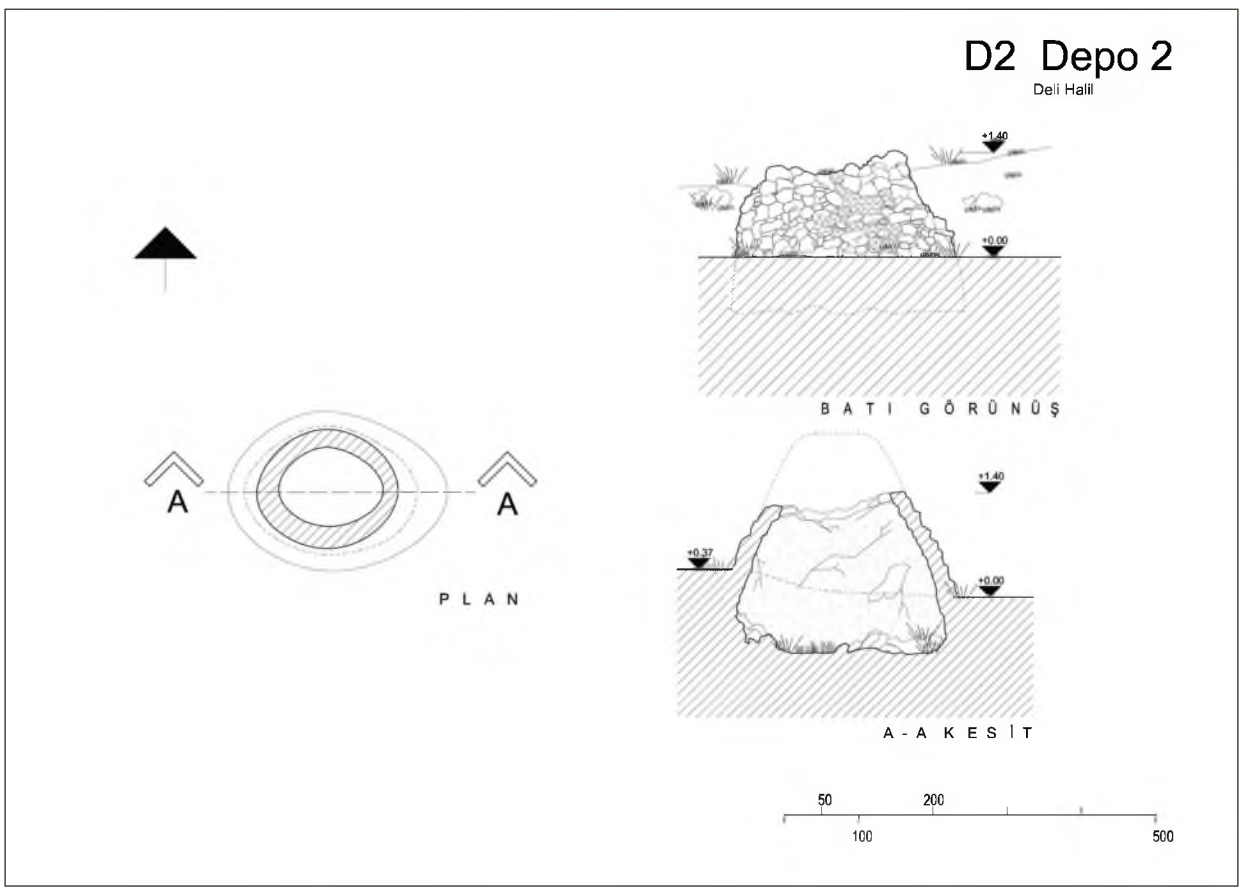


Fig. 10. Deli Halil Settlement, The North Section Storehouse No. 2

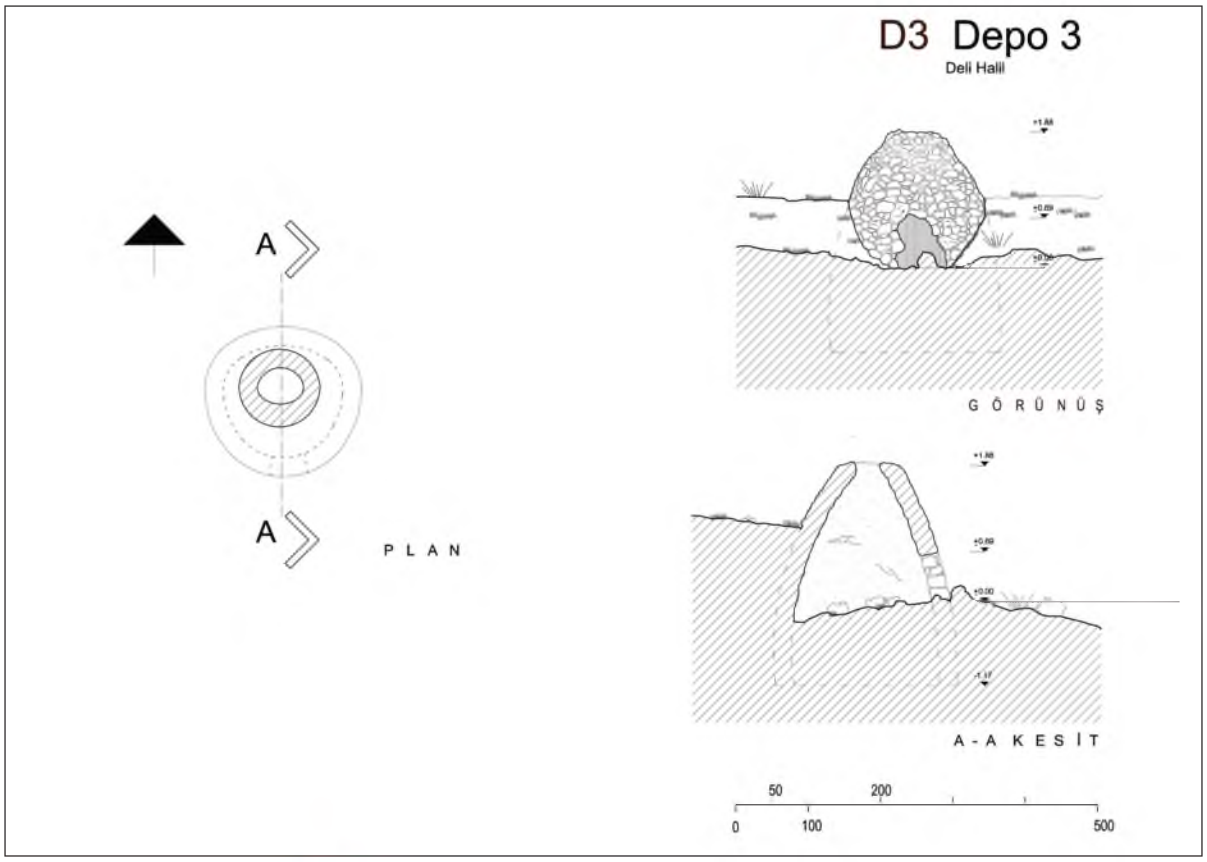


Fig.11. Deli Halil Settlement, the North Section Storehouse no 3

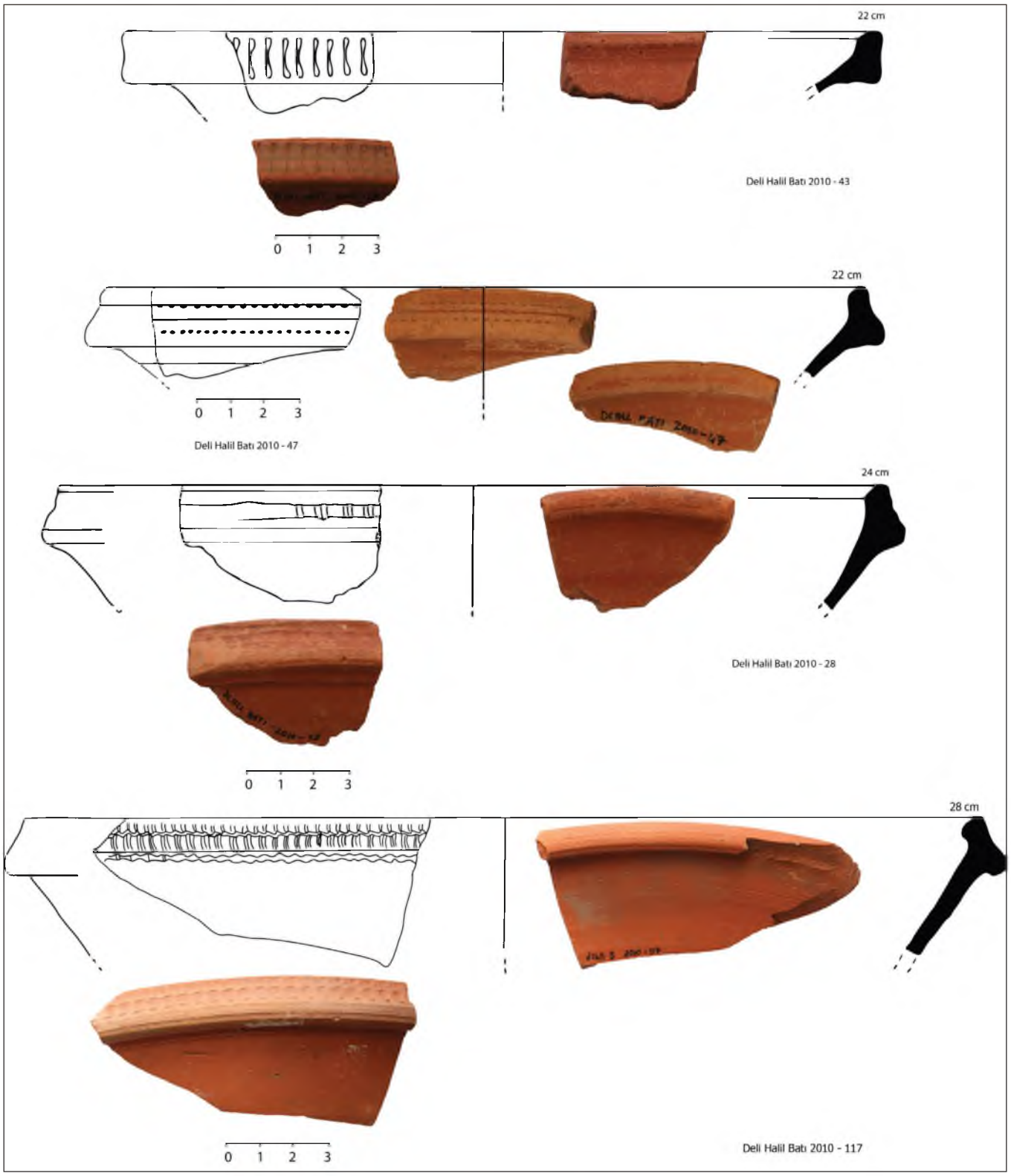


Fig.12. Deli Halil Settlement, drawings of the Phocae Red Slip fine ware shards

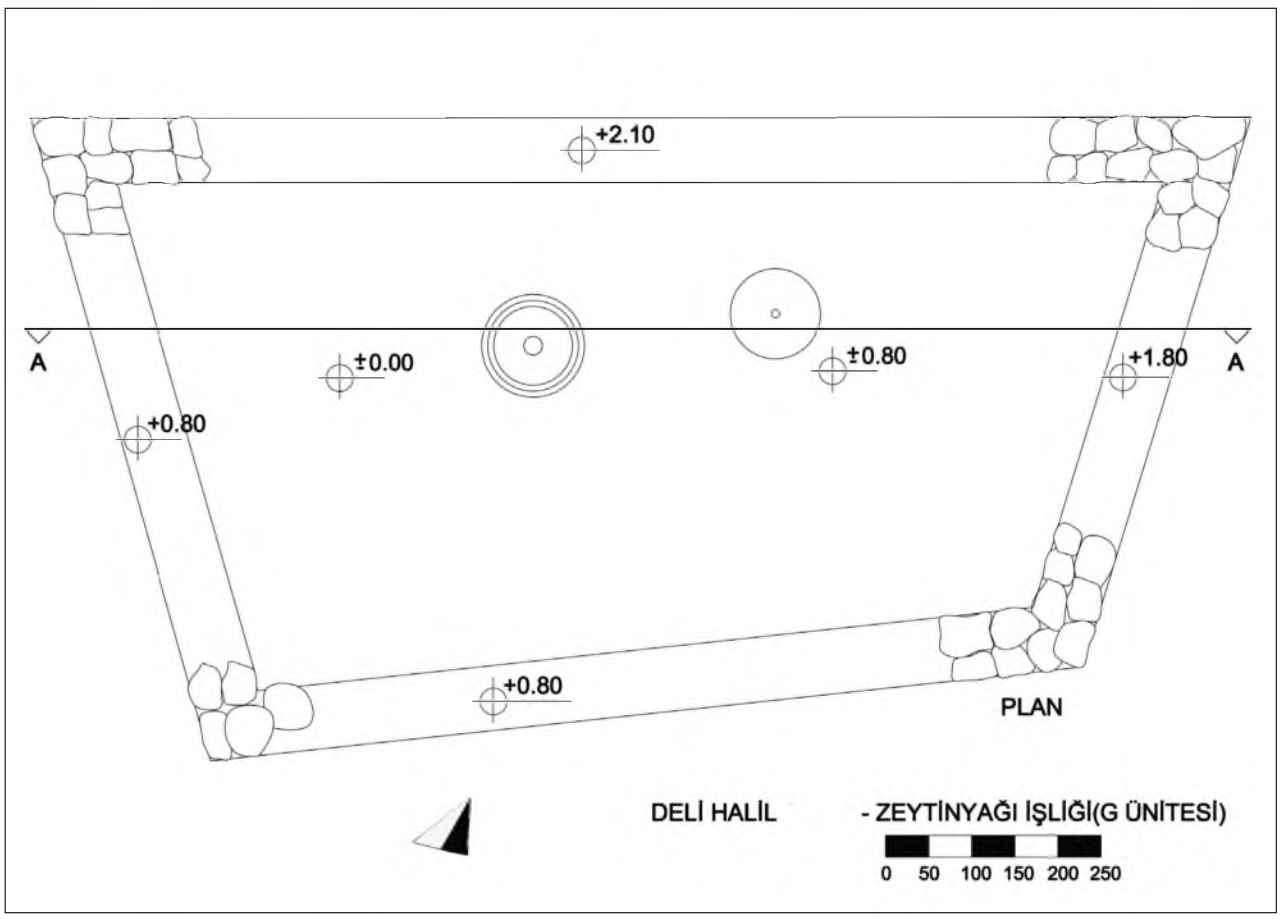


Fig.13. Deli Halil Settlement, the North section, plan of the olive oil press

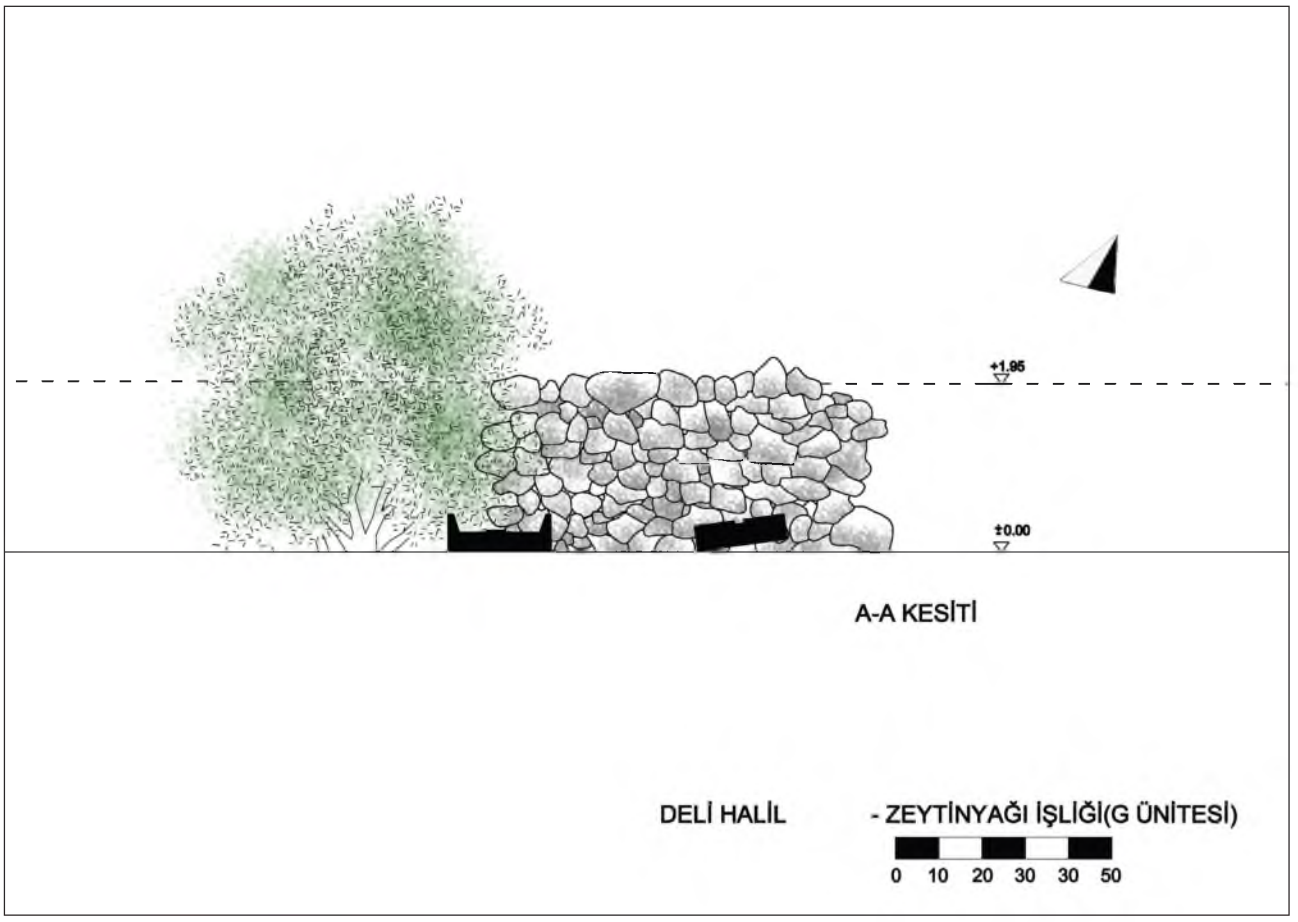


Fig.14. Deli Halil Settlement, the North section, olive oil press section drawing



Fig.15. Deli Halil Settlement, the West Section layout illustrating olive oil presses



Fig.16. Roman road stretching from ±2km South-east of the Mutallip Mound (Courtesy of M.-H. Gates)