TOLEMAIC AND ROMAN VESSELS OF SCENTED OIL FROM KIMAN FARIS – KROKODILOPOLIS

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ABSTRACT

Small pottery vessels of scented oil were discovered during salvage excavations held between 1960 and 2005 at Kiman Faris (Medinet El-Fayoum) led by the Inspectorate of Antiquities of Fayoum. This study aims to identify the differences between these vessels and compare them to similar examples from Egyptian sites and abroad. The majority of them are made of Egyptian fabrics, with both alluvial and marl clays. These vessels reflect the Greek influence on culture and technology, through perfumes and cosmetics during the Ptolemaic and Roman periods.

KEYWORDS

Cosmetics – Perfume – Ptolemaic – Roman - Fayoum

INTRODUCTION

Around 280 vessels and 140 stamped handles of Aegean amphorae were revealed during excavations held from 1963 at the site of Kiman Faris. Recent archaeological explorations uncovered more ceramic, whose context is well-known thanks to the efforts of the Fayoum University. Among this site’s assemblage of ceramics, the study focuses on the small pots for oil, perfumes, and ointments, called *unguentaria, alabastra*, and *aryballoi*. Approximately thirty of these have been discovered from 1963 to 2005, and more fragments during the latest 2016-2019 excavations.

Kiman Faris, the north-western part of Medinet El-Fayoum, is the location of the regional capital of Fayoum since the Old Kingdom. The ancient Egyptians called it Shedet (Šdt). It was known as Krokodeilon Polis (Κροκοδίλων πόλις), Ptolemais Euyergetis (Πτολεμαίς εὐεργετής).
It was a centre for the cult of Sobek, the crocodile god.² Lying about 90 km southwest of Cairo, it is located on the bank of Bahr Youssef, the main water source in the region, at the beginning of its delta.³ The original coverage of the archaeological area was about 2.8 km² in 1887.⁴

In 1963, the Governorate decided to use the site’s land to develop a new residential district of Medinet El-Fayoum. The Governorate relied on the students of the secondary schools to carry out rescue excavations under the supervision of the Inspectorate of Antiquities to locate the areas free of archaeological buildings. After that, a significant part of the Kiman Faris archaeological area was used for urban development. More rescue excavations were conducted to make more parts of the site available for building projects; the latest was in 2018.⁵

About 280 vessels and 140 stamped handles of Aegean amphorae were revealed during these excavations. These ceramic materials are kept at Kom Aushim Store of Antiquities. The entire assemblage has not yet been published.⁶ In 2016-2019, a mission from Fayoum University conducted two seasons of excavations at one of the areas of the ruins of Kiman Faris, which is called “Ptolemy’s Temple Area.” These excavations and surveys revealed more ceramic.

The ceramic assemblage from Kiman Faris has various types and shapes, used for many aspects of ancient daily life, e.g., tableware, cooking wares, and a variety of other utilitarian wares. The assemblage had a chronological range running from the Early Ptolemaic to the Late Roman Periods. A few sherds could be dated to the Islamic Period (9ᵗʰ - 10ᵗʰ century AD).

**Oils and perfumes in Ptolemaic and Roman Egypt**

Oil is an essential commodity in the life of people. It is a primary dietary ingredient and an essential ingredient of all perfumes, drugs, and cosmetics. It is also a principal fuel for lighting.⁷ Olive was cultivated in the Thebaid, Fayoum, and Mareotis during the Ptolemaic-Roman Period, but Egypt continued importing olive oil to fill the production

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1 Davoli ,P., “The archaeology of the Fayum”, in Ch. Riggs (ed.), The Oxford Handbook of Roman Egypt, Oxford University Press, (2012), 149; Hewison, R. N., *The Fayoum: History and Guide*, American University in Cairo Press, (2008), 19; all the names of the ancient town are according to Trismegistos database, TM Geo 327 (www.trismegistos.org/place/327 accessed on 28th March (2020).  
2 Hewison, *The Fayoum: History and Guide*, 18.  
3 Beadnell  ,H. J. L., *The Topography and Geology of the Fayum Province of Egypt*, Survey Department, Egypt, (1905), 11; Hewison, *The Fayoum: History and Guide*, 20.  
4 Davoli, *L’archeologia urbana nel Fayyum di età ellenistica e romana*, 149.  
5 Davoli, P & Ahmed, N., “On Some Monuments from Kiman Faris (Medinet El-Fayyum)”, in Fabrizio Serra (ed.) *Studi di egittologia e papirologia 3*, Pisa – Roma, Istituti editoriali e poligrafici internazionali, (2006), 85-87; Davoli, “The archaeology of the Fayyum”, 153-155; Personal study of the official documents of Fayoum inspectorate archive of Kiman Faris.  
6 These numbers are based on the register book of Kiman Faris at Kom Aushim Museum Store.  
7 Rotroff , S., *Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material*, The Athenian Agora 29, (1997), 169; Newton, C& Terral, J and Ivorra, S., “The Egyptian olive (Olea europaea subsp. europaea) in the later first millennium BC: Origins and history using the morphometric analysis of olive stones”, *Antiquity* 80, (2006), 405.
shortage. Egypt has exported palm oil since the 6th century BC. The papyri from the Roman Period indicate that the oil tax was paid in kind. It was also a portion of the salary of the nurses to take care of infants usually paid monthly, and workers received oil in a few cases.

In Fayoum, sesame, croton, safflower, and linseed were the main crops planted for oil production. Olive cultivation was introduced to the region in the Early Ptolemaic Period. By the beginning of the Roman Period, olive trees were remarkable elements in the region’s landscape, but the productivity was low. Strabo regarded the fruit as inferior quality, and Pliny said that this olive was meaty but yielded little oil.

Egypt was well known throughout the ancient world for its diversity of scents. During the Ptolemaic and Roman Periods, Alexandria became a famous centre of ointments with a variety of favoured scents, e.g., Mendesium (myrrh and cassia with assorted gums and resins), and Metopium (Balanus oil flavoured with bitter almond oil) that were highly praised. Pliny listed the necessary ingredients used in the elaboration of perfumed unguents; first, a liquid, usually oil, to which was added the scent or odour, a dye to give it the colour, and a resin or gum to fix the scent to the liquid. The oils of the crops listed above were considered more receptive to scents, and the ointments made with them lasted longer.

Vessels of Scented Oils

Various types of vessels were used to store, distribute, and consume oil, but amphorae were the main container for long-distance trade and storage. Other vessels, such as lekythoi, were the primary pots used in food preparation or service. Small containers as unguentaria, alabastra, and aryballoi, were used to conserve aromatic oils and ointments. About 30 vessels of the three later types were revealed in Kiman Faris during the rescue excavations of 1963-1966. They are kept in the Storeroom of Ali Radwan at Kom Aushim. Many sherds of the same shapes were revealed during the season of 2016 of the excavations of Fayoum University. Only five sherds of three different vessels nos. 2, 3, 17 [Fig. 2] are illustrated in the catalogue.

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1 De Rodrigo, A., “Basket-Handle Jars: Their Origin and Function”, in D. B. Redford (ed.), Excavations at Mendes. Vol.1. The Royal Necropolis, Culture and History of the Ancient Near East 20, Rill, (2004), 215; Newton, Terral and Ivorra, “The Egyptian olive”, 407.
2 Voudouri, D&Tesseromatis, Ch., “Perfumery from Myth to Antiquity”, International Journal of Medicine and Pharmacy 3, No. 2, (December 2015), 47.
3 Johnson, A., Roman Egypt. To the Reign of Diocletian, An Economic Survey of Ancient Rome, Vol. II, the Johns Hopkins Press, Baltimore, (1936), 59, 286-289, 301.
4 Bowman, A., Egypt after the Pharaohs 332 BC-Ad 642 from Alexander to the Arab Conquest, University of California Press, 2nd print, (1996), 101-102.
5 Johnson, Roman Egypt. To the Reign of Diocletian, 6.
6 The Mendesium was named after the city of Mendes in the Delta. It was the centre of production of this scent. The name of the Metopium scent was derived from the name of the tree (metopion), which they extract the scent from. Pliny, Natural History, book XIII, chap. 4,17; Johnson, Roman Egypt. To the Reign of Diocletian, 4; Byl, The Essence and Use of Perfume in Ancient Egypt, 94-95; Voudouri and Tesseromatis, “Perfumery from Myth to Antiquity”, 47.
7 Pliny, Natural History, book XIII, chap. 2.
8 Amphorae were also discovered, but they are not included in this paper. See: Mahmoud and Marchand, “Amphorae of Kiman Faris - Krokodilopolis (Fayoum) from Ptolemaic - Late Roman Period”, (forthcoming).
9 Rotroff, Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material, 169.
Small pots for oil, perfumes, and ointments are well attested to have been produced in several centres from the Ptolemaic and Roman periods, e.g., the workshops of Tell Atrib,\(^1\) Tell al-Faraein.\(^2\) The pots of perfume and cosmetics were made of various materials, such as pottery, stones, wood,\(^3\) faience, and glass. Three types of small vessels of scented oils and ointments were discovered at Kiman Faris: *unguentaria*, *alabastra*, and *aryballoi*, coming in various forms. This study describes these vessels and compares them with similar examples from the Fayoum region, Egypt, and elsewhere. It aims to precise the chronology and to identify the function of each shape.

Thirty little oil and ointment containers were discovered during rescue excavations of the Organisation of Egyptian Antiquities at Kiman Faris between 1963-2005. Many sherds of the *fusiform unguentaria* were revealed during the 2016-2017 excavation of Fayoum University, as illustrated in Fig. 2 (nos. 2,3, 17).

It is challenging to identify the vessels’ function due to the insufficient information available about their contexts of discovery. The register book of Kiman Faris antiquities in the Storeroom of Kom Aushim indicates that a significant part of this collection was revealed from rescue excavations without connecting them to any architectural elements. Only seven specimens are referred to be from specific buildings. Six pots were discovered from baths nos. 4, 8, 18 [Fig. 2Fig. ], nos. 26, 29 [Fig.3] and one from a tomb no. 22 [Fig.3].\(^4\)

In the following discussion, the full description of each pot is not given, but necessary information is gained quickly from the illustrations [Fig. 2-Fig. 3] and the list of fabric below.

**Fabrics’ list**

The fabrics of the vessels are listed and described. This description is based on examining the surface of the pots; no fresh breaks were made. There are four alluvial fabrics [NA I, NB I, ND I, and NA I.1], and one is marl [M4].

NA I: It is medium-fine alluvial clay; it is medium dense. The paste includes a few scattered mica spikes, very few fine vegetal inclusions, and few fine white particles. The colour of the surface is red.

NB I: the texture of the clay is fine, dense, well-cooked. The paste includes a lot of mica, a few fine chaff, and a few limestone particles. The colour of the surface is red.

ND I: It is medium-fine alluvial clay, which is medium dense. It includes many limestone particles and very few slight vegetal inclusions. The colour of the surface is red.

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\(^1\) The workshops of Tell Atrib were active since the Early Ptolemaic Period; they imitated many Greek types, e.g., *krater*, *oinochoe*, amphora, *hydria*, *aryballos*, and flat-based *unguentarium*. Ballet, “Potiers et fabricants de figurines dans l'Égypte ancienne”, Cahiers de la céramique égyptienne 4, (1996), 113-126.

\(^2\) Ballet, P& Vichy, M., “Artisanat de la céramique dans l'Égypte hellénistique et romaine. Ateliers du Delta, d'Assouan et de Kharga”, Cahiers de la céramique égyptienne 4, (1992), 96.

\(^3\) Marchand, S., “Petits vases à parfum en bois de Tebtynis (Fayoum) époques ptolémaïque et romaine”, in Paola Davoli and Natascia Pellé (eds) *Πολύσσα. Studi Classici offerti a Mario Capasso*, Lecce, (2018),762-764.

\(^4\) It is hard to affirm the funeral role of the vessel, because no information about any discovery of tombs at Kiman Faris in the available reports of excavations; It might be a mistake of interpretation of one of the excavators in the early discovery of a bath building.
NA I.1: It is fine and dense alluvial clay; it contains much sand, a lot of quartz granules, slight vegetal inclusions, and a few white particles (limestone or shells). It was cooked in a reduced atmosphere; the colour is black.

M 4: a marl clay with a fine sandy paste. It includes a few fine white particles and a few quartz particles.

Unguentaria

Unguentaria (singular: unguentarium) are a small pottery or glass containers found in large quantities in the entire Mediterranean region. They were produced between the late 4th century BC and the 8th century AD. During the Hellenistic and Roman imperial periods, the primary function of these vessels was to keep perfumed oils and cosmetic lotions fresh. They were used in domestic contexts, such as bathing and personal hygiene; also, they were intensively used in religious and funeral contexts as votive objects in graves and temples. They were manufactured at many centres all over the Mediterranean. Moreover, they circulated across the area, from Palestine to Spain throughout the Hellenistic and early Roman sites.²

The unguentaria were manufactured in two simple forms; the first is fusiform with a long cylindrical neck, downturned rim, spindle-shaped body, cylindrical stem, and a small distinct ring foot. These fusiform unguentaria were produced and distributed since the 4th century BC. It was the most common Hellenistic unguentarium. A second type is a bulbous form with a long neck, rounded body, and a flat base, which started to be produced in the Roman Period.³ Both of these shapes occur in Kiman Faris.

In Alexandria, the unguentaria of marl fabrics are numerous in the necropolis of el-Gabbari.⁴ At Tebtynis, they were of Egyptian manufacture of alluvial and marl fabrics; these unguentaria were fired in an oxidising or reduced atmosphere. The quantity of the assemblage is small compared to other sites due to it being domestic contexts.⁵

A. Fusiform Unguentaria [Fig. 2. nos 1-20]

This type is subdivided into three variations of the vessels’ form. The first sub-type of the fusiform unguentaria is the most common; 16 examples were discovered in Kiman Faris nos. 1-16 [Fig. 2]; they are generally pear-shaped with a small flat base and a long neck with an outer rolled rim. The base is in a disk shape (nos. 1 and 4, [Fig.2]). The majority

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1 Laflı, E., “An introduction to unguentarium studies. Editorial remarks to the abstract booklet of the symposium”, in Laflı (Ergün) and Kan Şahin (Gülsener) (eds.), Unguentarium. A Terracotta Vessel form and other Related Vessels in the Hellenistic, Roman and Early Byzantine Mediterranean. An International Symposium May 17-18, 2018 / Izmir, Turkey. Abstracts, Colloquia Anatolica et Aegaea Congressus Internationales Smyrnenses X, The Research Center for the Archaeology of Western Anatolia – EKVAM, Dokuz Eylul University – DEU, (2018), 7.
2 Saraçoğlu, A., “Hellenistic and Roman Unguentaria from the Necropolis of Tralleis”, Anadolu / Anatolia 37, (2011), 3-4.
3 Saraçoğlu, “Hellenistic and Roman Unguentaria”, 4; Anderson-Stojanović, V., “The Chronology and Function of Ceramic Unguentaria”, AJA 91, No. 1 (Jan. 1987), 106-108.
4 Ballet, P& Harlaut, C., “Introduction à la céramique de Gabbari”, in J.-Y. Empereur and M.-D. Nenna (éd.), Nécropole 1, Études Alexandrines 5, (2001), 313.
5 Ballet, P& Poludnikiewicz, A., Tebtynis V. La céramique des époques hellénistiques et impériales. Campagnes 1988-1993. Production, consommation et réception dans le Fayoum méridional, FIFAO 68, Cairo, (2012), 129-131.
of this group’s examples are in fine alluvial clay with a pale red coating. An example in fine white calcareous fabric no.1 [Fig. 2] could be an importation.

There are two levels of production quality; vessels nos. 1-9 [Fig. 2] have a slenderer shape and better finish without apparent deformation. On the other hand, the nos. 10-16 [Fig. 2] are shorter than its maximum diameters and bulgier in shape with visible deformations of the body. This sub-type has relevant examples from Alexandria, 1 Hawara, 2 Tebtynis, 3 Bakchias, 4 Karanis, 5 and Soknopaiou Nesos. 6 These date to the Ptolemaic Period, from the 2nd - 1st centuries BC, and the one from Tebtynis to the 3rd century BC, close to no. 4 [Fig. 2]. 7

A second subtype is represented by the unguentarium no. 17 [Fig. 2 Fig. ], which is very close in shape to the first group, but its rim is thickened and triangular; the neck is short and has a ring base. The vessel is also wider from the inside. It is close in form to an oval unguentarium of the Ptolemaic Period from Alexandria. 8

A third form has different morphological characteristics, such as the outturned rim with a triangular section and a long cylindrical neck. The three examples are nos. 18-20 [Fig. 2], they are similar to the first form, but the diameter of the body is larger than the previous ones, and the top of the vessel is mushroom-shaped no. 18 [Fig. 2]. Similar unguentaria of the 2nd -1st centuries BC were found at Hawara 9 and Bakchias. 10

**B. Bulbous Unguentaria [Fig. 3]**

The second form of unguentaria, manifested by four vessels, has a bulgy body with a flat or small ring base, e.g. nos. 21-24 [Fig. 3]; the bulgy body is topped with a long wide neck that ends with an outer rolled rim. All the examples are fine to medium-fine alluvial clay with many small limestone particles inclusions (ND I). They have a red coating on the external surfaces. The general appearance of these vessels indicates a fast production process and a careless moving of the freshly formed vessels. This resulted in many deformations; not one has a straight profile. This type of unguentaria is common in many Mediterranean sites, especially in burials and other contexts of the 1st - 2nd century AD. Some early examples date to the second half of the 1st century BC. 11 Similar unguentaria from Hawara date to the Ptolemaic Period (2nd - 1st centuries BC). 12 The sample from

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1 Harlaut, C & Hayes, J., “Hellenistic Pottery Deposits from Alexandria”, in: Cézile Harlaut and John W. Hayes, Pottery in Hellenistic Alexandria, Études Alexandrines 45, CEALEX, (2018), 203, pl. 23. H34-H35.
2 Marchand, S., “Appendix 2. Hawara 2000 – The Pottery from Hawara”, in I. Uytterhoeven (ed.), Hawara in the Graeco-Roman Period. Life and Death in a Fayum Village, OLA 174, (2009), 766, fig. 80. a-b+d.
3 Ballet, Poludnikiewicz, Tebtynis V, 130-131, pl. 59, nos. 562, 567.
4 Gasperini, V., «I materiali ceramici e vitrei di Bakchias», in E. Giorgi, P. Buzi (ed.), Bakchias. Dall’archeologia alla storia, Bologna University Press, Bologna, (2014), 249.
5 Johnson, B., Pottery from Karanis. Excavations of the University of Michigan, Kelsey Museum of Archaeology, Studies 7, the University of Michigan Press, Ann Arbor, (1981), 10, 50- 51, 115, pl. 41. nos. 255-265.
6 Dixneuf, D., “Introduction à la céramique de Soknopaiou Nesos”, in M. Capasso, P. Davoli (eds.), Soknopaiou Nesos Project. I. (2003-2009), Pisa - Roma, (2012), 330, 346, figs. 88-92.
7 Ballet, Poludnikiewicz, Tebtynis V, 131, pl. 59, no. 567.
8 Éaigne, S., La vaisselle fine de l’habitat alexandrin. Contribution à la connaissance de la mobilité des techniques et des produits céramiques en Méditerranée du IIe siècle av. J.-C. à l’époque claudienne, Etudes Alexandrines 21, IFAO, (2012), 189, fig. 59. 10104/13.
9 Marchand, “The Pottery from Hawara”, 766, fig. 80. c + e.
10 Gasperini, “I materiali ceramici e vitrei di Bakchias”, 297, tav. 33. no. 346.
11 Saraçoğlu, “Hellenistic and Roman Unguentaria”, 7.
12 Marchand, “The Pottery from Hawara”, 782, fig. 100. c-d.
Karanis, a complete parallel from Fayoum, dates to a period later than the early 3rd century AD.¹

Bulbous unguentaria were also produced in glass; several thousand of these glass vessels were found all over the Roman Empire. In Egypt, many examples were discovered at Quseir al-Qadim and Karanis, dating to the 2nd century AD.² The glass blowing was discovered around 50 BC, approximately at the same date as the appearance of the bulbous form. This innovation may have motivated imitations of the glass unguentaria. By the 2nd century AD, the glass versions became more common and pushed the ceramic imitations off the market.³

Alabastra [Fig. 3]

Alabastra (singular: alabastron) are a type of small bag- or drop-shaped pot with its largest diameter at a low point of its body. In Greece, it was used for scented oil, particularly for myrrh.⁴ Kiman Faris’s assemblage contains three alabastra nos. 25-27 [Fig. 3] They are made from fine marl clay and have a smoothed external surface covered with red, e.g. nos. 25, 27 [Fig. 3] or white coating with red bands, e.g. no. 26 [Fig. 3].

The base is flat or slightly raised from the centre to allow the edge to form a pseudo-ring base. No. 27 has an extra piece of clay at the centre of the base because of a manufacturing inaccuracy, preventing it from standing straight. The inside shows deep marks of wheel movement during the formation. There are examples from Tebtynis dated to the 3rd-2nd centuries BC.⁵ A late date of the 3rd century AD for the examples from Karanis is not secure due to the material not being stratigraphically controlled.⁶

Aryballoi [Fig. 3]

Aryballoi (singular: aryballos) are oil vessels with a short neck, a flat disc rim, and a full strap handle. Its shape may be spherical, oval, piriform, or round.⁷ Ceramics from the Athenian agora include a diverse array of local and imported aryballoi, ranging in height between 7 and 9 cm.⁸

Kiman Faris’s aryballoi have hemispherical or pear-shaped bodies with a ring base and a short neck. There are various shapes of rims: flaring outside as nos. 28, 30, thick rolled outwards, e.g. no.29 and convex such as no. 31 [Fig. 3]. They are made from fine alluvial clays, rich with fine limestone particles (ND I). The external surfaces are usually covered with a polished red coating. There are two cases with different colours; on no. 31 [Fig. 3],

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¹ Johnson, *Pottery from Karanis*, 10, 51, 115, pl. 41. no. 267.
² Meyer, C., *Glass from Quseir Al-Qadim and the Indian Ocean Trade*, Chicago, Ill: Oriental Institute of the University of Chicago, (1992), 28-29.
³ Anderson-Stojanović, “The Chronology and Function of Ceramic Unguentaria”, 111-113.
⁴ Myrrh was a thick, sticky substance used exclusively by women. Venit, M., “Two Early Corinthian Alabastra in Alexandria”, *JEA* 71, (1985), 186.
⁵ Ballet, Południkiewicz, *Tebtynis V*, 131-132, pl. 60 no. 576.
⁶ Johnson, *Pottery from Karanis*, 10, 50, 115.
⁷ Venit, M., *Greek Painted Pottery from Naukratis in Egyptian Museums*, Catalogs 7, American Research Center in Egypt. (1988), 61.
⁸ Rotroff, *Hellenistic Pottery*, 171.
the potter covered the lower part of the vessel with a white coating, and on no. 32 [Fig. 3], a brown colour band is drawn on the upper part of the neck and the ring base. The surface could also be smoothed without adding any coating, e.g. no. 30 [Fig. 3].

Datable parallel aryballoi from the Fayoum region are limited. No. 29 [Fig. 3] has parallels from Tebtynis dated to the end of the Ptolemaic or the early Roman Period\(^1\) and Hawara dating to the 1\(^{st}\) century BC.\(^2\) No.31 [Fig. 3] has parallels in Bakchias dating to the 2\(^{nd}\) half of the 2\(^{nd}\) century BC,\(^3\) Tebtynis from the end of the Ptolemaic to the early Roman Period\(^4\) and Hawara from the 1\(^{st}\) century BC.\(^5\) No. 32 [Fig. 3] has an undated equivalent in Tebtynis.\(^6\)

**CONCLUSION**

This paper presents 32 small pots of scented oils and ointments in Greek style; they were discovered at Kiman Faris. These pots represent three different types, which are the unguentaria, alabastra, and aryballoi. The vessels are mostly unguentaria with two primary forms; the fusiform one from the Ptolemaic Period and the bulbous one during the Roman Period. The comparative examples for the alabastra are Ptolemaic. Lastly, the aryballoi date to the Late Ptolemaic and Early Roman Periods.

The bulk of the collection is manufactured in Egypt in alluvial clay and a few specimens in marl. In addition, two could be imported. These vessels of Greek origin were produced and used on a large scale in Egypt, where they were widely distributed. This indicates that the inhabitants experienced Greek cultural influences. The production of the bulbous unguentaria shows the demand for easily produced vessels that have the same form as blown glass vessels during the Roman Period.

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1 Ballet and Południkiewicz, *Tebtynis V*, 129, 297, pl. 59 no. 560.
2 Marchand, “The Pottery from Hawara”, 767, fig. 81.c.
3 Gasperini, “I materiali ceramici e vitrei di Bakchias”, 297, 354, tv. 33 no. 352.
4 Ballet and Południkiewicz, *Tebtynis V*, 131, 297, 59 no. 556.
5 Marchand, “The Pottery from Hawara”, 767, fig. 81.a.
6 Ballet and Południkiewicz, *Tebtynis V*, 129, 297, pl. 59 no. 569.
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BIBLIOGRAPHY

- Anderson-Stojanović, V., “The Chronology and Function of Ceramic Unguentaria”, AJA 91, No. 1 (Jan. 1987), 105-122.
- Ballet, P& Harlaut, C., “Introduction à la céramique de Gabbari”, in J.-Y. Empereur and M.-D. Nenna (éd.), Nécropolis I, Études Alexandrines 5, (2001), 295-368.
- Ballet, P& Poludnikiewicz, A., Tebynis V. La céramique des époques hellénistiques et impériales. Campagnes 1988-1993. Production, consommation et réception dans le Fayoum méridional, FIFAO 68, Cairo, (2012).
- Ballet, P& VICHY, M., “Artisanat de la céramique dans l'Égypte hellénistique et romaine. Ateliers du Delta, d'Assouan et de Kharga”, Cahiers de la céramique égyptienne 4, (1992), 109-120.
- Ballet, P., “Potiers et fabricants de figurines dans l'Égypte ancienne”, Cahiers de la céramique égyptienne 4, (1996), 113-126.
- Beadnell, H. J. L., The Topography and Geology of the Fayum Province of Egypt, Survey Department, Egypt, (1905).
- Bowman, A., Egypt after the Pharaohs 332 BC-AD 642 from Alexander to the Arab Conquest, University of California Press, 2nd print, (1996).
- Byl, Sh, The Essence and Use of Perfume in Ancient Egypt, Dissertation for Master of Arts in Ancient Near Eastern Studies, University of South Africa, (2012).
- Davoli, P., “Reflections on Urbanism in Graeco-Roman Egypt: A Historical and Regional Perspective”, in E. Subias et al. (ed.), The Space of the City in Graeco-Roman Egypt. Image and Reality, Documenta 22, Universitat Rovira i Virgili et Institut Català d’Arqueologia Clàssica (ICAC), Tarragona, (2011), 69-92.
- Davoli, P., “The archaeology of the Fayum”, in Ch. Riggs (ed.), The Oxford Handbook of Roman Egypt, Oxford University Press, (2012), 153-170.
- Davoli, P., L’archéologie urbaine au Fayyum de l’Antiquité à l’époque médiévale, G. Procaccini, Napoli, (1998).
- Davoli, P& Ahmed, N., “On Some Monuments from Komic Faris (Medinet El-Fayyum)”, in Fabrizio Serra (ed.) Studi di egittologia e papirologia 3, Pisa – Roma, Istituti editoriali e poligrafici internazionali, (2006), 81-109
- De Rodrigo, A., “Basket-Handle Jars: Their Origin and Function”, in D. B. Redford (ed.), Excavations at Mendes. Vol. I. The Royal Necropolis, Culture and History of the Ancient Near East 20, Rill, (2004), 211-220.
- Dixneuf, D., “Introduction à la céramique de Soknopaiou Nesos”, in M. Capasso, P. Davoli (eds.), Soknopaiou Nesos Project. I. (2003-2009), Pisa - Roma, (2012), 315-361.
- Élaigne, S., La vaisselle fine de l’habitat alexandrin. Contribution à la connaissance de la mobilité des techniques et des produits céramiques en Méditerranée du IIe siècle av. J.-C. à l’époque claudienne. Études Alexandrines 21, IFAO, (2012).
- Gasperini, V., «I materiali ceramici e vetri di Bakchias», in E. Giorgi, P. Buzi (ed.), Bakchias. Dall’archeologia alla storia, Bologna University Press, Bologna, (2014), 243-368.
- Harlaut, C& Hayes, J., “Hellenistic Pottery Deposits from Alexandria”, in: Cécile Harlaut and John W. Hayes, Pottery in Hellenistic Alexandria, Études Alexandrines 45, CEALEX, (2018), 161-297.
- Hewison, R., The Fayoum: History and Guide, American University in Cairo Press. 2008.
- Johnson (Allan Chester), Roman Egypt. To the Reign of Diocletian, An Economic Survey of Ancient Rome, Vol. II, the Johns Hopkins Press, Baltimore, (1936).
- Johnson, B., Pottery from Karanis. Excavations of the University of Michigan, Kelsey Museum of Archaeology, Studies 7, the University of Michigan Press, Ann Arbor, (1981).
- Lafli, E., “An introduction to unguentarium studies. Editorial remarks to the abstract booklet of the symposium”, in Lafli (Ergün) and Kan Şahin (Gülseren) (eds.), Unguentarium. A
Terracotta Vessel form and other Related Vessels in the Hellenistic, Roman and Early Byzantine Mediterranean. An International Symposium May 17-18, 2018 / Izmir, Turkey. Abstracts, Colloquia Anatolica et Aegaea Congressus Internationales Smyrnenses X. The Research Center for the Archaeology of Western Anatolia – EKVAM, Dokuz Eylul University – DEU, (2018), 7-10.

- Mahmoud, Y&Marchand, S., Amphorae of Kiman Faris - Krokodilopolis (Fayoum) from Ptolemaic - Late Roman Period, Bulletin de Liaison de la céramique égyptienne 30, IFAO, (2020) (forthcoming).
- Manniche, L., “Perfume”, in Willeke Wendrich (ed.), UCLA Encyclopedia of Egyptology, Los Angeles, (2009), http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz001nf6gj, accessed on June 15, 2020.
- Marchand, S., “Appendix 2. Hawara 2000 – The Pottery from Hawara”, in I. Uytterhoeven (ed.), Hawara in the Graeco-Roman Period. Life and Death in a Fayum Village, OLA 174, (2009), 685-813.
- __________, “Petits vases à parfum en bois de Tebtynis (Fayoum) époques ptolémaïque et romaine”, in Paola Davoli and Natascia Pellé (eds) Πολύμαθεια. Studi Classici offerti a Mario Capasso, Lecce, (2018), 762-772.
- Meyer, C., Glass from Quseir Al-Qadim and the Indian Ocean Trade. Chicago, Ill: Oriental Institute of the University of Chicago, (1992).
- Newton, C& Terral, J and Ivorra, S., “The Egyptian olive (Olea europaea subsp. europaea) in the later first millennium BC: Origins and history using the morphometric analysis of olive stones”, Antiquity 80, (2006), 405–414.
- Poludnikiewicz, A., “Local Imitations of Greek Pottery Found in Tell Atrib”, Cahiers de la céramique égyptienne 4, (1992), 95-102.
- Rotroff, S., Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material, The Athenian Agora 29, (1997).
- Saraçoğlu, A., “Hellenistic and Roman Unguentaria from the Necropolis of Tralleis”, Anadolu / Anatolia 37, (2011), 1-42.
- Venit, S, “Two Early Corinthian Alabastra in Alexandria”, JEA 71, 1985, 183–189.
- ________, Greek Painted Pottery from Naukratis in Egyptian Museums, Catalogs 7, American Research Center in Egypt, 1988.
- Voudouri, D& Tesseromatis, Ch., “Perfumery from Myth to Antiquity”, International Journal of Medicine and Pharmacy 3, No. 2, (December 2015), 41-55.
- Pliny, Natural History, via: http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3atext%3a1999.02.0137 accessed on October 15, 2020.
- www.trismegistos.org/place/327 accessed on June 15, 2020.
Plates

Fig. 1: Google Earth shows the location of Medinet el-Fayoum. The yellow line is the border of the ruins in 1887. The red areas are the visible parts of the ruins of Krokodilopolis ©Yahya Mahmoud
Fig. 2: Fusiform *unguentaria* from Kiman Faris ©Yahya Mahmoud.
Fig. 2: Bulbous *unguentaria* [21-24], *alabastra* [25-27] and *aryballoi* [28-32] ©Yahya Mahmoud.