



MERSİN ÜNİVERSİTESİ KILIKIA ARKEOLOJİSİNİ ARAŞTIRMA MERKEZİ  
YAYINLARI  
MERSIN UNIVERSITY PUBLICATIONS OF THE RESEARCH CENTER OF  
CILICIAN ARCHAEOLOGY



# OLBA XXXI





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# OLBA XXXI

# KAAM YAYINLARI

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**BİLİMSEL SÜRELİ YAYINI ‘OLBA’**

**YAYIN İLKELERİ**

**Amaç**

Olba süreli yayını; Anadolu, Akdeniz dünyası ve ilişkili bölgelere dair orijinal sonuçlar içeren Arkeolojik çalışmalara yer verir; ‘Eski Çağ Bilimleri’ni birbirinden ayırmadan ve bir bütün olarak benimseyerek bilim dünyasına değerli çalışmalar sunmayı amaçlar.

**Kapsam**

Olba süreli yayını Mayıs ayında olmak üzere yılda bir kez basılır.

Yayınlanması istenilen makalelerin her yıl 31 Ağustos - 31 Ekim tarihleri arasında gönderilmiş olması gerekmektedir.

Yayın için değerlendirmeye alınacak makalelerde aşağıdaki kriterler gözetilir:

- Prehistorya, Protohistorya, Klasik Arkeoloji, Klasik Filoloji (ile Eskiçağ Dilleri ve Kültürleri), Eskiçağ Tarihi, Nüvizmatik ve Erken Hıristiyanlık Arkeolojisi (İS 7. yüzyıla kadar) alanlarında yazılmış makaleler, yayın için değerlendirmeye alınır.
- Makaleler tanıtım veya katalog niteliklerinin ötesinde, araştırma sorusuna/ problemine dayanmalı, somut kanıtlar ve tartışmalarla desteklenen, verilerin tartışıldığı ve bağlantıların kurulduğu içeriklere sahip olmalıdır. Tartışma içermeyen ve kontekslerinden kopuk şekilde ele alınan arkeolojik malzemeler, kataloglar, buluntu raporları, derleme yazılar değerlendirmeye alınmaz.
- Olba Dergisi, Arkeoloji bilim dalını temsil eden bilimsel bir süreli yayındır. Bu sebeple, verileri farklı bilim dallarının (Harita Mühendisliği, Mimarlık, Arkeometri, Jeofizik ve Antropoloji vb.) işbirliği ile oluşturulan çalışmaların makalelerinde, arkeolojik değerlendirmenin ön planda tutulması beklenir.

**Yazım Kuralları**

1. a- Makaleler, Word ortamında yazılmış olmalıdır.  
b- Metin 10 punto; özet, dipnot, katalog ve bibliografya 9 punto olmak üzere, Times New Roman (PC ve Macintosh ) harf karakteri kullanılmalıdır.  
c- Dipnotlar her sayfanın altına verilmeli ve makalenin başından sonuna kadar sayısal süreklilik izlemelidir.

d- Metin içinde bulunan ara başlıklarda, küçük harf kullanılmalı ve koyu (bold) yazılmalıdır. Bunun dışındaki seçenekler (tümünün büyük harf yazılması, alt çizgi ya da italik) kullanılmamalıdır.

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c) Metin içinde yer alan “fig.” ibareleri, parantez içinde verilmeli; fig. ibaresinin noktasından sonra bir tab boşluk bırakılmalı (fig. 3); ikiden fazla ardışık figür belirtiliyorsa iki rakam arasına boşluksuz kısa tire konulmalı (fig. 2-4). Ardışık değilse, sayılar arasına nokta ve bir tab boşluk bırakılmalıdır (fig. 2. 5).

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**Bibliyografya (makaleler için):**

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**Dipnot (kitaplar ve makaleler için)**

Richter 1977, 162, res. 217.

**Diğer Kısaltmalar:**

age.	adı geçen eser
ay.	aynı yazar
vd.	ve devamı
yak.	yaklaşık
v.d.	ve diğerleri
y.dn.	yukarı dipnot
dn.	dipnot
a.dn.	aşağı dipnot
bk.	Bakınız

4. Tüm resim, çizim, tablo ve haritalar için sadece “fig.” kısaltması kullanılmalı ve figürlerin numaralandırılmasında süreklilik olmalıdır. (Levha, Resim, Çizim, Tablo, Şekil, Harita ya da bir başka ifade veya kısaltma kullanılmamalıdır).
5. Bir başka kaynaktan alıntı yapılan figürlerin sorumluluğu yazara aittir, bu sebeple kaynak belirtilmelidir.
6. Makale metninin sonunda figürler listesi yer almalıdır.
7. Metin yukarıda belirtilen formatlara uygun olmak kaydıyla 20 sayfayı geçmemelidir. Figürlerin toplamı 10 adet civarında olmalıdır.
8. Makaleler Türkçe, İngilizce veya Almanca yazılabilir. Türkçe yazılan makalelerde yaklaşık 300 kelimelik Türkçe ve İngilizce yada Almanca özet kesinlikle bulunmalıdır. İngilizce veya Almanca yazılan makalelerde ise en az 300 kelimelik Türkçe ve İngilizce veya Almanca özet bulunmalıdır. Makalenin her iki dilde de başlığı gönderilmelidir.
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12. Dizilim (layout): Figürler ayrıca mail ekinde bir defada gelecek şekilde yani düşük çözünürlükte pdf olarak kaydedilerek dizilimi (layout) yapılmış şekilde yollanmalıdır.

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**Scope**

The Journal 'Olba', being published since 1998 by the 'Research Center of Cilician Archeology' of the Mersin University (Turkey), includes original studies on Prehistory, Protohistory, Classical Archaeology, Classical Philology (and ancient languages and cultures), Ancient History, Numismatics and Early Christian Archeology (up till the 7<sup>th</sup> century AD) of Asia Minor, the Mediterranean and related regions.

Articles should present new ideas and not only have catalogues or excavation reports as their contents. The articles of archaeological studies undertaken together with other disciplines such as geophysics, archaeometry, anthropology etc should give more emphasis to the archaeological part of the work as the Journal Olba is an archaeological journal.

Olba is printed once a year in May. Articles can be sent from 31 August - 31 October each year.

**Submission Criteria**

1. a. Articles should be written in Word programs.  
b. The text should be written in 'Times New Roman' in 10 puntos; the abstract, footnotes, catalogue and bibliography in 9 puntos (for PC and for Macintosh).  
c. Footnotes should take place at the bottom of the page in continuous numbering.  
d. Titles within the article should be written in small letters and be marked as bold. Other choises (big letters, underline or italic) should not be used.
2. Punctuation (hyphen) Marks:
  - a) One space should be given after the comma in the sentence and after the dot at the end of the sentence.
  - b) The footnote numbering within the sentence in the text, should take place before the comma in the sentence or before the dot at the end of the sentence.
  - c) The indication fig.:

\* It should be set in brackets and one space should be given after the dot (fig. 3);

\* If many figures in sequence are to be indicated, a short hyphen without space between the beginning and last numbers should be placed (fig. 2-4); if these are not in sequence, a dot and space should be given between the numbers (fig. 2. 5).

d) In the bibliography and abbreviations, if the author has two family names, a short hyphen without leaving space should be used (Dentzer-Feydy); if the article is written by two or more authors, after each author a space, a long hyphen and again a space should be left before the family name of the next author (Hagel – Tomaschitz).

3. The ‘Bibliography’ and ‘Abbreviations’ should take part at the end of the article. The ‘Abbreviations’ used in the footnotes should be explained in the ‘Bibliography’. The bibliography used in the footnotes should take place as abbreviations: Name of writer, year of publishment, page (and if used, number of the illustration). This rule should be applied even if a publishment is used only once.

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Richter 1977      Richter, G., Greek Art, New York.

#### **Bibliography (for articles):**

Corsten 1995      Corsten, Th., “Inschriften aus dem Museum von Denizli”, Ege Üniversitesi Arkeoloji Dergisi III, 215-224, pl. LIV-LVII.

#### **Footnotes (for books and articles)**

Richter 1977, 162, fig. 217.

#### **Miscellaneous Abbreviations:**

op. cit. : in the work already cited

idem : an author that has just been mentioned

ff : following pages

et al. : and others

n. : footnote

see : see

infra : see below

supra : see above

4. For all photographs, drawings and maps only the abbreviation ‘fig.’ should be used in continous numbering (remarks such as Plate, Picture, Drawing, Map or any other word or abbreviation should not be used).
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7. The text should be within the remarked formats not more than 20 pages, the drawing and photographs 10 in number.
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## THE LAMP MOLDS AND LAMP PRODUCTION OF TLOS IN THE ROMAN PERIOD

Çilem UYGUN – Bilsen ÖZDEMİR – Taner KORKUT\*

### ÖZ

#### Roma Dönemi'nde Tlos Kandil Kalıpları ve Kandil Üretimi

Tlos Antik Kenti meclis binası yapı kompleksinde gerçekleştirilen kazı çalışmaları esnasında çok sayıda kandil kalıbı beraberinde bu kalıplarından üretilmiş kandillerle birlikte ele geçmiştir. Yerel kandil üretiminin önemli kanıtlarından olan bu malzeme grubu, kentin diğer kazı alanlarında bulunan kandil kalıplarıyla birlikte ele alınmıştır. Tlos buluntuları içerisinde üst, alt ve kulp aplik süslemesi olmak üzere üç farklı kalıp türünden örnekler tespit edilmiştir. Buluntular arasında sayısal yoğunluk gösteren üst kalıplardan kandil formu belirlenebilenler profil özelliklerine göre kronolojik dizin içinde gruplanmıştır. MS 1. yüzyıla tarihlenen Broneer Tip XXIV (kat. no.1-10) ve XXV (kat. no.11), Erken Roma İmparatorluk Dönemi'nin en yaygın formlarından olup, Tlos kalıplarında her iki form da görülür. Diğer taraftan Broneer Tip XXVII grubuna ait kalıpların çokluğu MS 2.-3. yüzyıl arası kandil üretiminin yoğunluğunu gösterirken, Broneer Tip XXVIII-XXXI grupları ise MS 4.-5. yüzyılda üretimin devam ettiğini göstermesi açısından önemlidir. Kalıplar üzerinde genelde mitolojik figürler, gladyatör mücadeleleri, hayvan figürleri, gemi betimlemeleri ve bitkisel süslemeler gibi çok farklı bezeme şablonları tercih edilmiştir. Attika ve Korinth atölyelerinde üretilen kandillerin bezeme şablonlarının da görüldüğü Tlos kandil repertuarı kente özgü anlatımlarla daha da zenginleşmiştir. Aynı bezeme şablonunun birden fazla kalıpta tekrarlanması üretim kapasitesini ve rağbet gören kandil formlarını göstermesi açısından önemlidir. Üst kalıpların arkasında bulunan yunanca harf ve çizgisel karakterlerden oluşan monogramlar atölyede uygulanan arşiv sistemine dair ipuçları vermektedir. Üst kalıplardan yalnızca kat. no. 49'da usta ismi, alt kalıplardan da yalnızca kat. no. 98'de atölye işareti saptanmıştır.

**Anahtar Kelimeler:** Kandil, Kalıp, Üretim, Likya, Tlos, Seramik.

---

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### ABSTRACT

Many lamp molds and the lamps produced from these molds were found during excavations in the building complex of the parliament building in the Ancient City of Tlos. This material group, evidencing local lamp production, has been evaluated together with lamp molds found in other excavation areas of the city. Among the Tlos finds, three different types of molds were found: upper, lower, and handle shields. Of the numerically dominant upper molds, those with determinable form were grouped according to their profile features in a chronological index. The Broneer Type XXIV (cat. no. 1-10) and Broneer Type XXV (cat. no. 11), dated to the 1st century AD, are the most common forms of the Early Roman Imperial Period, and both of them are seen in the Tlos molds. Furthermore, the molds belonging to the Broneer Type XXVII group show the intensity of lamp production in the 2nd-3rd century AD, whereas the Broneer Type XXVIII-XXXI groups are important in terms of showing that production continued in the 4th-5th century AD. The preferred decoration patterns for these molds included mythological figures, gladiator combats, animal figures, ship descriptions, and herbal ornaments. The Tlos lamp repertoire, which includes the lamps produced in Attic and Corinth workshops, were further enriched with expressions specific to the city. The repetition of the same decoration pattern in more than one mold is important in that it indicates production capacity and popular lamp forms. The monograms consisting of Greek letters and linear characters on the back of the upper molds give us clues about the archive system used in the workshop. Only one (cat. no. 49) of the upper molds was endowed with the lamp maker's name, and one (cat. no. 98) of the lower molds with the workshop emblem.

**Keywords:** Lamp, Mold, Production, Lycia, Tlos, Pottery.

### Introduction

The lamp molds found during excavations of the important Lycian settlement of Tlos<sup>1</sup>, which is comprised mainly of building complexes such as the acropolis and the stadium, are important in revealing the existence and quality of ceramic production in the city. So far, a total of 131 molds have been found in Tlos. The parliament building complex of Tlos was integrated into the fortification wall surrounding the eastern slope of the acropolis and was first constructed during the Early Hellenistic Period<sup>2</sup>. The 128 lamp molds found within the complex differentiate it from other structures (fig. 1). These lamp molds were found in a 7-meter-high deposit in the northern part of the two-room building<sup>3</sup>. This group consists predominantly of Asia Minor type lamp molds, which were favored in the Roman Imperial Period. However, Late Antique lamp molds with original decoration compositions were also identified within the group.

Of the 131 molds found in the ancient city of Tlos, 96 are upper, and 31 are lower molds. Four molds are characterized by the leaf depiction on their handles (cat. no. 87-90). The 99 mold samples intact enough to determine their lamp form were included in

1 Korkut 2015a; Korkut 2015b; Korkut – Uygun 2017, 236-248.

2 Korkut – Uygun – Özdemir 2020, 279-280; Korkut – Uygun – Özdemir – Usanmaz 2022, 337-338.

3 Since the building located in an area used from the Classical Period to the Byzantine Period, the pottery belongs to these periods were found at the same level in deposit. Coins dated between the Hellenistic Period and the Byzantine Period also support this long term of use. See Korkut – Uygun – Özdemir 2020, 279-280; Korkut – Uygun – Özdemir – Usanmaz 2022, 337-338.



the article catalog. Due to the large number of molds, similar examples in the catalog were eliminated and the drawings and photographs of the selected molds were given in figures. Molds were typologically categorized based on body, discus, and nozzle profiles. The first group is comprised of rounded lamp molds with volute edges and nozzles (cat. no. 1-10). A rooster figure is engraved on the discus of these molds, which were found in the Parliament Building Complex, belongs to the Broneer Type XXIV group, and date back to the 1st century AD. The second group is rounded lamp mold with roughly heart-shaped nozzle and decorated a bust of Serapis, belongs to the Broneer Type XXV (cat. no. 11). The mold found in the stadium area and, like the previous form, dated to the 1st century AD. The third group of lamps have a round body, wide discus, and short nose and belong to the Broneer Type XXVII group (cat. No. 12-71). The number of designs is also abundance; the molds are decorated with mythological characters, subjects from daily life, herbal ornaments, and theatrical masks. The fourth group of samples, which have a narrow body and a slightly longer nose profile, fall into the Broneer Type XXVIII group and are generally decorated with animal figures (cat. no. 72-81). In group, there are round or almond-shaped, long-nozzled, deep discus lamp molds, dated between the 4th and 5th century AD (cat. no. 82-83). Broneer Type XXIX (cat. no. 84-85) and Broneer Type XXXI (cat. no. 86) forms were discovered among the well-preserved samples. In both forms, the lamp's body has narrowed, the nose has significantly elongated and has taken on an almond shape. The upper molds with large, round discuses which feature lion and deer figures along with a long-necked waterbird are included in the Late Antique due to their exaggerated linear style features (cat. no. 80-81).

Comparing these samples with those made in other workshops will determine which mold decoration pattern was preferred in each workshop and how the trends of the period were interpreted by lamp makers from Tlos (fig. 37). Based on the lamp molds found in the ancient city of Tlos, we can understand the extent of Western Anatolia-centered lamp production, which had been influenced by the Attic and Corinthian workshops, and to what degree it was reflected in the Lycian region. This will help us to further understand the local elements found in the design repertoire of Tlos's lamp workshop.

### **1. Broneer Type XXIV**

Rooster (cat. no. 1-10, fig. 2): The lamp mold with a round body and protruding nose features a depiction of a plant behind a rightward-facing rooster. The plant ends with two (cat. no. 2-4, 8, fig. 2a) or four (cat. no. 1, 5-7) points representing buds. The filling hole is located in front of the rooster's leg in the two-bud samples of the lamps molded from the aforementioned molds. The filling hole is behind the rooster's neck in the molds with four buds, whose lamp samples were not found. A volute was added to both sides of the body and nozzle (cat. no. 9-10). Lamp maker's marks consisting of letters and linear characters are found on the back of five out of nine of the molds (cat. no. 1, 3-4, 6-7).

The rooster has been depicted in Roman Imperial lamps since the 1st century AD<sup>4</sup>. The lamp with a rooster depiction found in Rhodes was identified as a product of Corinth<sup>5</sup>. In Anatolia, lamps with rooster figures are seen in Parion<sup>6</sup>, Pergamon<sup>7</sup>, Ephesus<sup>8</sup>, Laodicea<sup>9</sup>, Cnidus<sup>10</sup>, Cibyra<sup>11</sup>, Tarsus<sup>12</sup>, and Antioch<sup>13</sup>. The Laodicea sample dates to the Tiberius Period, while the Tarsus sample dates to the 1st-2nd century AD based on its mixed stratigraphy. Similar depictions found among Carthaginian lamps show that they also spread to the African Province of the Empire<sup>14</sup>. The rooster and plant compositions seen in the Tlos mold are found only in the Parion lamp of the Broneer Type XXIV group, dated to the 2nd century AD. In line with the geographical distribution of the finds, it is understood that the rooster was used as a decoration element on the discus of different lamp models in Western Anatolian workshops. Considering both its form and elaborate style, the Tlos mold has been dated to the 1st century AD.

## 2. Broneer Type XXV

Serapis (cat. no. 11, fig. 3): Serapis is depicted in a circular discus bordered by two grooves, a round body, and a straight rim. Although the details of the figure were left indistinct in this highly worn mold, a high modius, deep eyes, large nose, fleshy lips, parted hair, and beard are evident on the head of the god. The mold with roughly heart-shaped short nozzle and round body is showing the features of Broneer Type XXV<sup>15</sup>, which date to 1st-2nd century AD.

Serapis, himself a blend of the gods Osiris and Apis, remains important together until the Roman Period along with the goddess Isis. In reliefs found on the discus or handle, Serapis is generally depicted in a bust version of the Bryaxis cult statue<sup>16</sup>. Lamp with bust of Serapis in the British Museum are of Ephesian and Egyptian origin. The samples found in excavations of Antioch are important in that they evidence the existence of the Serapis cult<sup>17</sup>. The plain Serapis depiction in the Tlos mold is different from Ephesian and Egyptian lamps, in which he rises from the center of acanthus leaves or is depicted on an eagle. Isis accompanies the god on the handle decoration

4 Loeschcke 1919, 235 pl XIII cat. no. 732; Menzel 1969, 40 abb. 32, 20; Bussière – Rivel 2012, 137 cat. no. 198.

5 Katsiotti 2017, 27 cat. no. C 7.

6 Yılmaz 2012, 95, 138 kat. no. 19 (mid 1st century AD), kat. no. 62 (2nd century AD).

7 Heimerl 2001, beilage 9, 203-212.

8 Ladstätter 2010, 580 taf. 235, B-K 448.; Kara 2014, ek sf. 5-6 kat. no. 5-6, ek sf. 14 kat. no. 14, ek sf. 32 kat. no. 30, ek sf. 48 kat. no. 43.

9 Şimşek et al. 2011, 81-82 pl. 75, 145

10 Kılınç 2020, 100 kat. no. 71.

11 Metin 2012a, 65-66 K520-522.

12 Goldman – Jones 1950, 126 fig. 108 cat. no. 366.; Velenis – Zachariadis 2011, 193 cat. no. 92 (4th – 5th century AD).

13 Kayaş 2019, 34 kat. no. 1 lev. 1 res. 1.

14 Deneauve 1969, pl. XLI cat. no. 360; Bonifay 2005, 35 (5th-6th century AD).

15 Broneer 1930, 83-87 pl. X 505, 507; Rosenthal – Sivan 1978, 40-42 cat. no. 153-168.

16 Bailey 1988, 21-22 fig. 28 Q 1920, Q 1923-1927 (handle); fig. 28 Q 2064, 3053 (discus).

17 Waage 1934, 62 pl. IX cat. no. 2017, 2031; For the cult of Serapis in Antioch, see Pamir 2008, 355-368.

of a ship-shaped lamp in the Cnidus<sup>18</sup>. Considering the period in which the Ptolemaic Kingdom dominated the Lycian Region, it is not surprising that Serapis iconography, which is uncommon in Athenian and Corinthian lamps, was preferred in the local lamp typology of Tlos during the Early Roman Imperial Period<sup>19</sup>.

## 2- Broneer Type XXVII

One of the most common forms of Roman Imperial lamps, Broneer Type XXVII<sup>20</sup>, is a product of Corinth and almost immediately an Attic product. The lamp in question can be characterized by its circular body, wide discus, nozzle joining with the body line, and handle decorated with two grooves. In some samples, the mouth may be flanked on both sides by single or double vertical lines, or they may extend back to the discus through a thin canal<sup>21</sup>.

Most of the molds evaluated in the article fall into this group, some of the examined are Attic imitations, considering that Corinthian production is rarely found in islands and Asia Minor in comparison to Attic. These lamps and the different subjects depicted on their discuses are both numerically extensive. Depictions consist primarily of mythological characters, gladiators, ships, theater masks, and plant and linear motifs. While Athena, Eros, Leda-swan, satyr-nymph, and Europa-bull stand out as mythological characters, the oyster motif associated with Aphrodite and the vine symbolizing Dionysus are the most common decorations.

Athena (cat. no. 12-13, fig. 4): A standing figure of Athena, facing left, is engraved on a round discus bordered by a spray motif (fig. 36, 4). The helmeted goddess holds her spear in one hand and her shield in the other. One end of the himation wrapped around her hip is hung over her right shoulder. One of the two molds is almost completely whole while only a small piece of the other remains.

The lamps from the Roman Imperial Period, depict Athena holding a spear and shield or in the form of a bust<sup>22</sup>. Her clothing and accessories and the way she is holding the objects vary across the depictions. The busts of Athena that more suitable for the discus form were found in the iconography of Parthenos and Promachos in Corinthian workshops. These date to the 1st-2nd century AD and were produced simultaneously with Italian samples. In contrast, the imitations produced in Attic workshops don't appear until the 3rd century AD<sup>23</sup>. On the discus of lamps found in Ephesus<sup>24</sup> and Pergamon<sup>25</sup>, we see the goddess in bust form, as in the samples from the Athenian Agora. On the other hand, the depiction of Athena in bust form and carrying a spear

18 Waage 1934, 62 pl. IX cat. no. 2017, 2031; For the cult of Serapis in Antioch, see Pamir 2008, 355-368

19 In connection with the Ptolemy I cult in the ancient city of Tlos, see Korkut 2015a, 33-34; Korkut – Özdemir 2019, 812

20 Broneer 1930, 91-102 Pl. XI-XII, XXVI-XXIX cat. no. 545-785; Broneer 1977, 64-72, cat. no. 2781-2963 (Isthmia), Bailey 1988, pl. 116-117, Q3241-3261

21 Broneer 1930, 105 fig. 49.

22 For Italy examples, see Bailey 1980, 13; For Cyprus samples, see Oziol 1977, 11, 202-203 Pl. 23, 440; Pl. 33, 590 (Salamis); Lightfoot 2021, 268-269 cat. no. 344-346.

23 Perlzweig 1961, 111-112, cat. no. 648-670.

24 Ladstätter 2010, 278, taf. 117, A-K 953.

25 Heimerl 2001, 191 motiv 37-40.

and shield was used in Cibyra local lamps<sup>26</sup>. Interestingly, the form closest to the Tlos mold, which differs from the others with its distinctive features, is seen in the gem repertoire<sup>27</sup>. The mold is dated to the 2nd century AD, in line with the goddess's stance and dress style.

Eros (cat. no. 14, fig. 5): Eros is depicted standing, facing left, and playing an aulos on a discus surrounded by a spiral motif (fig. 36, 6b). The raised left foot of Eros, who is seen from the side, is in the air in front of a cylindrical altar topped with fruits. The letter "M" is engraved on the back of the mold, the mark of the lamp maker.

The lamps depicting Eros playing an aulos produced in Attic workshop from the Athens Agora feature a different rim pattern than the Tlos molds<sup>28</sup>. The Athenian examples dated to the 3rd century AD feature an exaggerated linear style on the discus. These Late Antique lamps belong to the Broneer Type XXVIII group in Corinth. This depiction continued uninterruptedly in Attic workshops until the 5th century AD, with those samples featuring Eros facing left produced in the Corinth workshop and similar samples produced in Attic workshops during the same period. Lamps depicting Eros playing an aulos are also found in Rhodes<sup>29</sup>. In Anatolia, it is seen in the lamps of Ephesus<sup>30</sup> and Cibyra<sup>31</sup>. In both of these cities as well as in Tlos, local molds were modelled after imported Attic lamps. Examples of lamps produced from the Tlos mold and dated to the 3rd century AD, one intact and the other broken, were also found (Fig. 5a-b).

Satyr-Nymph (cat. no. 15, fig. 6): There is one mold with a broken nozzle, a round body, a rim decorated with a spiral motif sequence, and a discus profile flanked by two grooves (fig. 36, 6a). A nymph escaping from a satyr is depicted on its discus. The half-naked nymph has turned back to release her himation from the satyr's grasp; while pulling her dress with her left hand, she pushes satyr's arm with her right hand. A linear motif with a pointed and rounded end is engraved on the back of the mold and serves as the mark of the lamp maker.

The satyr-nymph composition was first used in the Loeschke Type IA<sup>32</sup> group dated to the Early Roman Imperial Period. This composition, also used in North African workshops<sup>33</sup>, was only found in the lamps of Pergamon<sup>34</sup> in Anatolia. This theme, also used on gems<sup>35</sup>, also adorns the mosaics of the Late Antiquity<sup>36</sup>. A total of four lamps with satyr-nymph depictions, one of which is intact, were found during

26 Metin 2012a, 150, K203-204, K802.

27 For the depiction of Athena with spear and shield, especially preferred by gem makers in the late Roman Republican Period and the Roman Imperial Period, see Henig 1975, 18 pl. 2 cat. no. 27; Zwierlein-Diehl 1979, 192, taf. 137, 1422 (2nd-3rd century AD).

28 Perlzweig 1961, 114-115 pl. 16, 707, 711, 714.

29 Katsioti 2017, 105-107 cat. no. A 10-16.

30 Evren 1996, 54-55 çizim 6:D37 (standing Eros), çizim 7: D52 (sitting Eros).

31 Metin 2012a, 33-34 K467-470 Eros is depicted playing aulos in a sitting position (5th-6th century AD).

32 Bailey 1988, 233 fig. 13 Q 1890.

33 Deneauve 1969, pl. XXXIX cat. no. 335 (Carthage).

34 Heimerl 2001, taf. 1, kat. no. 6, motiv 60.

35 Schmidt 1972, 207 taf. 327-328, kat. no. 3482-3484.

36 In the mosaic dated between the 4th century AD and the early 5th century AD in the city of Hammamet (Tunisia), the satyr-nymph composition depicted as in the Tlos mold, see Muth 1998, 212 taf. 18, 4.

the excavations of the building complex of the Tlos parliament building (fig. 6a). The spiral rim decoration of the existing mold was not used in any of the lamps; instead, either a series of short, diagonal lines consisting of two rows or a simple wreath motif was applied. Thus, we can surmise that there should be two more molds featuring satyr-nymph compositions with different rim decoration. The Tlos lamp mold is dated to between the 2nd-3rd century AD.

Leda-Swan (cat. no. 16, fig. 7): The discus of the mold with a broken nozzle features an engraving of Leda with a swan on her lap and Eros standing right behind her. The circumference of the discus is decorated with a dotted circle alongside three dots (fig. 36, 10). The inscription “Λ?ΛΗ” is engraved on the back of the mold, signifying the mark of the lamp maker.

As in the Tlos mold, the figure of Eros was added to the Leda-swan composition frequently used on the Roman Imperial Period lamps produced in Italy or the provinces<sup>37</sup>. Iconography of Leda and the swan is depicted without Eros on the discus dated to the first half of the 3rd century AD, produced in the Attic workshop of Preimos<sup>38</sup>. Leda is portrayed in a standing or lying position in Pergamon<sup>39</sup> produced lamps dating back to the 1st-2nd century AD. The same template was almost unchanged in 5th century AD Cibyra<sup>40</sup> and Ephesus<sup>41</sup> lamps. The Tlos mold dating back to the 3rd century AD is a unique to the city, with Leda’s blanket reminiscent of seashell-like curves and the differences in the details of her face and hair.

Europa-Bull (cat. no. 17, fig. 8): Europa is depicted on a bull on the discus which is surrounded by a wreath motif. The head of the dressed Europa figure is portrayed in profile with her body in a 3/4 position. Since the lower half of the mold is broken, only the back part of the bull can be identified.

This composition, favored in ceramic art from the Archaic Period, continued to be used until Late Antiquity<sup>42</sup>. While the Europa iconography seen in 1st-2nd century AD lamps<sup>43</sup> was not popular in the workshops of Attic and Corinth, it is seen in lamps from Parion<sup>44</sup> and Pergamon<sup>45</sup> in Anatolia. The lamps in both cities differ in detail from the Tlos mold.

Gladiator Combat (cat. no. 18-22, fig. 9): Both gladiator combats (*munera*) and wild animal combats (*venatio*) are found in Tlos lamp molds. The most numerous group is the *munera* narrative, depicted with *Samnite* clothing and weapons. The discus is bordered by four grooves, the grooves on the rim follow a pattern of one wide one narrow, and both are decorated with short oblique lines (fig. 36, 9a-c). Two

37 Bailey 1980, 10 fig. 4 pl. 12 Q871 (Italy); Bussi ere – Lindos-Wohl 2017, 252 cat. no. 358 (Tunisia)

38 Perlzweig 1961, 119-120 cat. no. 781.

39 Heimerl 2001, 192 motiv 50-51 taf. 18-19 kat. no. 831-833.

40 Metin 2012a, 748 K113-114.

41 Kara 2014 kat. no. 31 ek s. 33-34.

42 Muth 1998, taf. 30 abb. 1.; For the cameo example, see LIMC IV, 2, 45 Europe I 185-186.

43 LIMC IV 1, 87 Europe I 193-196; Rosenthal – Sivan 1978, 21 cat. no. 47 (Iudea); 97-98 cat. no. 395 (Nabataea)

44 Yilmaz 2012, 109, 115, 117 kat. no. 33, 39, 41.

45 Heimerl 2001, 183 kat. no. 1071-1072. (1st-2nd century AD).

gladiators with helmets (*galea*) on their heads, shields (*scutum*) and swords (*gladius*) in their hands, carry leg (*ocrea*) and arm armor (*manica*). The gladiator on the right is depicted lifting his sword and the one on the left slightly stretching backward in a defensive position with his shield. The mouth of the mold's intact lamps extends back to the second groove on the rim (Fig. 9a). Although the decoration composition is the same, the measurements of the five molds are different. On the back of four molds are lamp maker marks consisting of letters ( $\Delta$ , N) and linear monograms.

During the Roman Imperial Period, lamps with gladiator figures were used frequently in workshops in capital and provinces<sup>46</sup>. The same combat scene portrayed on the Tlos lamps is also found on the lamps uncovered from Corinth<sup>47</sup>, the Athens Agora<sup>48</sup>, and Rhodes<sup>49</sup>. The fact that the varying gladiator combat depictions of Rhodes lamps are considered to be of Corinthian origin indicates the high demand of this lamp group in the 2nd-3rd century AD<sup>50</sup>. Similar gladiator combat narratives were found in Cibyra<sup>51</sup>, Pergamon<sup>52</sup>, the British Museum's Cnidus lamps<sup>53</sup>, and the collections of the Silifke Museum<sup>54</sup>, evidencing the commonality of this form. The mold of Cyprus origin depicting gladiator combat from the Metropolitan Museum is evidence of local production<sup>55</sup>. The Tlos molds are dated to the second half of the 2nd century AD and the beginning of the 3rd century AD.

Bull and Gladiator Combat (cat. no. 23, fig. 10): Another popular type of gladiator game is the combat of wild animals called *venatio*. A half-broken sample depicting a gladiator crushed by a bull is among the molds recovered from the parliament building complex. Lying on the ground, the gladiator maintains his balance with his right hand while trying to protect himself from the front legs of the rampant bull with the shield he holds in his left hand. Only a small part of the ovules sequence surrounding the rim is preserved (fig. 36, 1). The *venatio* narratives consist of two parts: leading wild animals to the arena and combat in the arena<sup>56</sup>. The Tlos mold is unique because it displays *venatio* iconography which is less common than *munera*. This sample is thought to be from the same date as the other gladiator mold.

Mask (cat. no. 24-25, fig. 11): A tragedy mask with an onkos, whose hair ends at the chin level, is depicted on the discus of two molds, one of which is poor condition. There are panels on the sides of the rim of both molds. One of the molds has a lamp maker's mark consisting of the letter "+" (cat. no. 24).

46 Goethert-Polaschek 1985, taf. 30, 122, 235, 282, 150, 276.; Bailey 1988, 301 pl. 62 Q 2361 (The lamp from Cyprus is dated to the Augustus-Tiberius Period.)

47 Broneer 1930 fig.124 cat. no. 646

48 Perlzweig 1961, 123-124 cat. no. 836-837.; Gill – Hedgecock 1992, 416 fig. 18.

49 Katsioti 2017, 109 cat. no. A 20 (3rd-4th century AD).

50 Katsioti 2017, 27 C 6

51 Metin 2012b, 245 fig. 15.

52 Heimerl 2001, 114 taf. 5 kat. no. 207; taf. 14, 537, 583. (The second half of the 1st century AD and the first half of the 2nd century AD).

53 Bailey 1988, 335 pl. 75 Q 2678 (80-120 AD)

54 Öz 2014, 145 lev. 14 kat. no. 27.

55 Lightfoot 2021, 343 cat. no. 453

56 Berns – Ekinci 2015, 167-205 fig. 26-33.

Masks, indispensable parts of Greek tragedy, were used as decoration elements in public buildings, especially theaters, during the Roman Imperial Period. Being synonymous with the theater, these objects were thusly related to the cult of Dionysus and it was believed that they held apotropaic properties and protected people from evil forces<sup>57</sup>. The masks found on lamps covered the entire discus or were found in small-scale groups of three surrounding the filling hole. An oil lamp recovered from Andriake is an example of the decoration type of the first group<sup>58</sup>. The composition featuring three masks surrounding the filling hole was preferred on the lamps of Cibyra<sup>59</sup>, Ephesus<sup>60</sup>, and Pergamon<sup>61</sup>. The mask of the Tlos mold is stylistically closest to the terracotta masks found in excavations of the Agora and dated to the 3rd century AD<sup>62</sup>.

Ship (cat. no. 26-32, fig. 12-13): A merchant ship with rectangular sails and a symmetrical hull is depicted in two different ways in the Tlos molds. The narrative depicting two figures, the helmsman and a lookout, is the most frequently seen on the five molds (cat. no. 28-32). In these samples, the sail opens backward with the wind and is emphasized with square lines. There is a more elaborate and detailed depiction of the same type of ship found on two molds (cat. no. 26-27). In the first group, four figures, two on the bow of the oval-hulled ship, one on the back, and one on the mast were depicted on a wide discus. It was decorated with a pattern of ovules and panels on the edge of the rim (fig. 36, 1). One of the molds has the letter “E” on the back, and the other features a star shape, both marks of the lamp makers.

The second ship depiction is found on five molds. In all the patterns, the rim is decorated simply with panels. The oarsman is depicted on the ship’s left side, and the lookout is on the right. Single or triple “B” and single “T” letters and stylized leaf motifs are used as lamp maker’s marks. The lamps produced from the intact mold lack any symbols of their workshop (fig. 13a).

Similar lamps found in the Athenian Agora were produced in the workshop of Eutyches and are dated to the second half of the 3rd century AD<sup>63</sup>. The stylized leaf motif, which is the symbol of this workshop, is also seen in Tlos molds, suggesting that Attic lamps were used as models. The fact that the ship depiction in the Tlos mold is seen on the lamps found in Erythrai<sup>64</sup>, Ephesus<sup>65</sup>, and Cibyra<sup>66</sup> supports the view that these were produced many workshops as a popular depiction. Regional differences in ship details and the figures around it are present in the lamps from the Metropolis<sup>67</sup> and Cibyra. The importance of maritime trade in the Roman Imperial Period, as in every period, is especially recognizable in the visual expositions of port

57 Söğüt – Yılmaz 2012, 3

58 Özdelek 2015, 97, fig. 28

59 Metin 2012a, 59 K176-189.

60 Ladstätter 2010, 581 taf. 224 B-K 452 (1st-2nd century AD).

61 Heimerl 2001, 195 beil. 7 motif 121.

62 Grandjouan 1961, 59-61 cat. no. 524-529

63 Perlzweig 1961, pl 21 cat. no. 1023.; Gill – Hedgecock 1992, 420 fig. 29.

64 Akyüz 2019, 145 lev. 5 kat. no. 95 (Mid 4th century AD).

65 Kara 2014, kat. no. 44 ek sf. 49 (3rd-4th century AD).

66 Metin 2012a, 50-51 K 117, K 251 (3rd-4th century AD).

67 Güngör-Alper 2018, 111, pl. 24, 318-319.

cities. Examples include marble reliefs<sup>68</sup> depicting the port of Ostia, frescoes<sup>69</sup>, and the harbor panorama mosaic of Kelenderis<sup>70</sup>. The Tlos molds dated to the 3rd century AD show the continuation of this decoration tradition in lamps.

Oyster (cat. no. 33-35, fig. 14): The handle and round body are preserved in two of the three molds whose discus is decorated with oyster motifs. Only panels decorate the straight rim. Although the nozzle is not intact in any of the samples, we can surmise from the solid lamp sample produced from these molds that the short nozzle is flanked by curved lines (fig. 14a). On the back of the molds, there are lamp maker's marks consisting of a square motif divided into two, diagrammatical star and "N" letter.

Bailey identifies the oyster motif lamps as originating in Cyprus and belonging to the Broneer Type XXVII group that dates to the 3rd-4th century AD<sup>71</sup>. Broneer states that the oyster motif is preferred in the Type XXVIII group<sup>72</sup>. This motif, used in the Loeschke Type IB<sup>73</sup> group, is also seen among the Athenian Agora<sup>74</sup> finds from the same period and continues to be used until the 6th century AD<sup>75</sup>. Different forms of the motif are seen on the discuses of Cypriot lamps from the Early Roman Imperial Period to the 4th century AD<sup>76</sup>. Lamps of Cypriot and Corinthian origin recovered from Rhodes confirm this dating<sup>77</sup>. An oyster motif found in Ephesus, similar to the Tlos sample, was dated to the 2nd-3rd century AD by Gassner. The oyster motif is also seen in the lamps of Pergamon<sup>78</sup>. In addition to excavation finds, the oyster motified lamps in the Paul Getty Museum<sup>79</sup> and Silifke Museum<sup>80</sup> were also dated to the same period. Considering similar examples, the Tlos molds were dated to the second half of the 2nd century AD and the beginning of the 3rd century AD.

Rosette (cat. no. 36-49, fig. 15-17): The second most frequent motif among the Tlos lamp molds is the rosette pattern. This group, consisting of 14 molds, is evaluated in three different groups according to the leaf shape of the rosette motif. Broad-leaved rosettes with rounded ends are in the first group (cat. no. 36-38). The second group consists of rosettes with rounded ends but narrow leaves (cat. no. 39-45). Distinctly different from the others with its pointed leaves, the third group is divided into two subgroups based on ornamental details (cat. no. 46-49). The rims of all three groups feature various wreath designs (fig. 36, 8a-e). In the second group, there are also molds with plain rims. The cat.

68 Meiggs 1960, pl. 24, A.

69 Baldassarre et al. 2003, 355.

70 Tekocak 2008, fig. 7.

71 Bailey 1988, 314 Q 2566-2567 pl. 69.

72 Broneer 1930, 107 pl. XV 1089, 1093, 1098.

73 Goethert-Polaschek 1985, 35 taf. 42, 238, 240

74 Perlzweig 1961, 85-86 pl. 6, cat. no. 143, 158.

75 Perlzweig 1961, 177 pl. 39 cat. no. 2437-2438.

76 Lightfoot 2021, 202-209 cat. no. 261-270.

77 For Cyprus, see Katsioti 2014, 155 fig. 8; For Corinth, see Katsioti 2017, 26 cat. no. C 3 (2nd-3rd century AD).

78 Heimerl 2001, 57, 125, taf. 8, 339

79 The oyster motif on the discus of the lamp belonging to the Loeschke Form IIIa group is more elegantly depicted in the style of the first half of the 1st century AD, see Bussière – Lindos-Wohl 2017, 86 cat. no. 114.

80 Öz 2014, 141 lev. 10 kat. no. 20.



no. 44 sample, which has an oblique-line and sprays with two bud on the rim, is unique in that two different decoration patterns are used simultaneously (fig. 36, 13). In addition to the molds, intact lamps belonging to the first and second groups were also recovered (fig. 15a, 16a.). Although the leaves with rounded ends and broad leaves are similar to some of the lamps found in the same area, the recovered pieces are not large enough to determine the molds from which they were produced. Behind the molds in the group are seen lamp maker's marks consisting of one or two Greek alphabets, linear device and, Greek personal name "Γηράσιμος" (cat. no. 49).

The tradition of decorating the discus with a rosette motif begins in the Early Roman Imperial Period<sup>81</sup> and continues until the 5th-6th century AD<sup>82</sup>. In addition to those produced in the workshops of Athens and Corinth<sup>83</sup>, we can presume that the rosette lamps produced in Cyprus<sup>84</sup> and found in Antioch<sup>85</sup> spread over a wide area. There are 328 rosette lamps defined as Attic productions and dating back to the 3rd-4th century AD in the Athens Agora. The diversity found in rosette motifs is also reflected in rim decorations. Discuses are surrounded by ovules, sphere, dot array, wreath, vine plant, and fishbone motifs<sup>86</sup>. Anatolian lamps with a rosette motif were recovered from Alexandria Troas<sup>87</sup>, Ephesus<sup>88</sup>, Pergamon<sup>89</sup>, Cnidus<sup>90</sup>, Cibyra<sup>91</sup>, and in the collections of the Antalya Museum<sup>92</sup>. Based on their form and decoration schemes, the Tlos molds are dated to between the 3rd and 4th century AD.

Vine-Ray (cat. no. 50-71, fig. 18-19): Among the Tlos molds, the most numerically dominant group with 22 samples consists of molds with vines decorating the rim and ray decorating the discus (fig. 36, 2a-c). The most common decoration scheme starts with a vine leaf on the handle edge and ends with a branch on the nozzle (cat. no. 50-70). The opposite pattern was applied in a single instance (cat. no. 71, fig. 19). The thickness and frequency of the lines running to the filling hole in the middle of the discus are different in each lamp mold, as are the vine decorations. Marks of the lamp makers consisting of B, Θ, K, Π, T, and Y are found on the back of the molds. The letters "B" and "Φ" are repeated on two molds with different characters and writing techniques. On the back of the cat. no. 60 mold, the lamp maker's mark is written with a red slip instead of engraving. The lamps of the Type 1 group were recovered in greater numbers in parallel with their corresponding molds (fig. 18a).

The vine-ray combination is one of the most common decorations of Roman Imperial Period lamps. The great number of molds (22) with this decoration scheme found in the ancient city of Tlos are in line with this general trend. Lamps similar to the

81 Perlzweig 1961, 73 pl. 1, 9; Bussière – Rivel 2012, 135 cat. no. 194

82 Gassner 1997, taf. 65, 829-834.

83 Broneer 1930, pl. XII 695, 700; pl. XIV 965, 1042, 1059, 1085, 1088.

84 Katsiotti 2014, 162-164 fig. 5-7, 10-15.

85 Waage 1934, 62 pl. IX kat. no. 2015.

86 Perlzweig 1961, 149-155.

87 Firat 2014, 219-221, 234 kat. no. 19-20 (2nd-3rd century AD).

88 Gassner 1997, taf. 64, 818.

89 Heimerl 2001, beil. 13, 378-393.

90 Kılınc 2020, 129 kat. no. 28

91 Metin 2012a, 77-80.

92 Yüksel 2019, 131 res. 8 kat. no. 8 (2nd century AD).

Tlos molds in terms of both form and decoration in the Athens Agora<sup>93</sup> and Corinth<sup>94</sup> are dated to between the 2nd and 3rd century AD. The lamp decorated with a vine-ray motif imitating the Broneer Type XXVII in the collection of the British Museum is, like the Athenian and Corinthian samples, dated to the end of the 2nd century AD and the first half of the 3rd century AD<sup>95</sup>. The same model was also produced in the Attic workshops<sup>96</sup> in the 3rd-4th century AD with production continuing until the 6th century AD<sup>97</sup>. In addition, the vine motif was also used on Byzantine lamps decorated with crosses, which came into fashion in the 5th century AD<sup>98</sup>. Samples of lamps with vine and ray motifs found in the Metropolitan Museum<sup>99</sup>, Ionia<sup>100</sup>, and Macedonia<sup>101</sup> are dated to the same period as the Attic samples. The lamps recovered in Anatolia whose rims are decorated with vine branches and discuses decorated with ray motifs are also seen in Erythrai<sup>102</sup>. The lamp with a flat discus whose rim is decorated with vines, was identified as originating in southern Anatolian in the catalog of the Paul Getty Museum and dated to the 3rd century AD<sup>103</sup>. This along with a pear-shaped lamp belonging to the 5th-6th century AD found in Tarsus Donuktaş<sup>104</sup>, indicate that this style of decoration continued to be used in different forms for many centuries. The Tlos molds are thought to belong to the 3rd-4th century AD of this long period of use.

### 3- Broneer Type XXVIII

Mold with Vine Depiction (cat. no. 72, fig. 20): This mold features a central filling hole, and its convex discus is decorated with a vine depiction; half of it is intact (fig. 36, 3a). Although the general contour of the body is similar to the vine/ray lamps, its convex discus profile makes it unique. The Tlos mold, which features the most common decoration scheme of Roman Imperial Period lamps, is dated to the 4th century AD, with a body profile similar to the lamps of Late Antiquity<sup>105</sup>.

Molds with Dog Depictions (cat. no. 73-74, fig. 21): A seated dog figure facing the left is engraved into two molds, one of which is mostly intact. Multiple lines expressing the large, deep eyes, blunt nose, open mouth and folded skin of the dog are distinct. Its fur is accentuated with deep dots. The rims of both, same-sized molds are decorated with a spiral chain (fig. 36, 6c). The well-preserved lamp with the depiction of a dog found during the excavations of the parliament building complex is compatible with

93 Perlzweig 1961, 94 pl. 8, 271-274

94 Broneer 1930, 90-91 pl. XI cat. no. 570.

95 Bailey 1988, 252 pl. 44 Q 2070.

96 Perlzweig 1961, 146 pl. 12, 1512.

97 Perlzweig 1961, 189 pl. 43, 2754.

98 Perlzweig 1961, 178 pl. 39, 2447-2448

99 Lightfoot 2021, 106 cat. no. 122

100 Bussière – Rivel 2012, 200-201 cat. no. 230. The Broneer Type XXVIII lamp discovered in Kuşadası was dated the 3rd-4th century AD by Bussière and Rivel.

101 Velenis – Zachariadis 2011, 191 cat. no. 88.

102 Akyüz 2019, 129 lev. 3, kat. no. 55. (A dating between the 2nd and 3rd century AD can be suggested for the lamp dated to the 4th century AD.)

103 Bussière – Lindos-Wohl 2017, 299 cat. no. 429.

104 Özcihan 2018, 122-130 kat. no. 70-78.

105 Broneer 1930, pl. XVII cat. no. 1272.

both molds, both in size and rim decoration (Fig. 21a). There are lamp maker's marks consisting of the letters "A" and "X" on the back of the molds.

The Tlos mold is identical to the lamps recovered from the Athens Agora dated to the second half of the 3rd century AD and the first half of the 4th century AD<sup>106</sup>. Another lamp mold with a dog figure was found in excavations of Ephesus's Tetragnonos Agora; this sample dates back to the 5th-6th century AD<sup>107</sup>. There are depictions of dogs running and sleeping in the local Cibyra lamps of the 1st-2nd century AD<sup>108</sup>. The running dog figure on the discus of the Loeschke VIII lamp found in Cnidus is different from the Cibyra lamp<sup>109</sup>. The Tlos mold differs from the other lamps and molds found in Anatolia as it is an exact copy of the Attic lamps. Therefore, it has been dated to the 3rd-4th century AD.

Molds with Lion Depictions (cat. no. 75, fig. 22): The rim of this mold is undecorated while the discus portrays a lion in a sitting position facing right. Although the details of the lion cannot be clearly distinguished due to wear on the mold, a large head, deep eyes, voluminous mane, and tail are evident. The symbol of the lamp maker consists of the letter "N" and is found on the back of the mold.

Lion figures have been seen in the lamp repertoire of the Roman Imperial Period since the 1st century AD<sup>110</sup>. The lion figure in the Tlos lamp mold is similar to those found on lamps from Corinth<sup>111</sup>, the Athens Agora<sup>112</sup>, and the Roman Baths of Isthmia<sup>113</sup>. Lamps from the Athenian Agora were produced in the workshop of Preimos, which was active at the beginning of the 3rd century AD<sup>114</sup>. Although it is known that the same workshop had been producing in Corinth since the second half of the 2nd century AD, the Preimos stamp was not found on the lamps with lion depictions in Corinth. A lion similar to the one found on the Tlos mold was recovered during excavations of Erythrai in Anatolia. This discus fragment, which was too damaged to provide a full profile, was dated to the end of the 3rd century AD and into the 4th century AD, in line with the samples in Greece<sup>115</sup>. Although lion figures with different decorative features and forms are seen in the Early Roman Imperial Period in Anatolia, the only samples parallel to the Corinthian and Attic molds are currently limited to those of Erythrai and Tlos<sup>116</sup>. On the other hand, lamps produced in Ephesus<sup>117</sup>, Cibyra<sup>118</sup>, and Cyprus<sup>119</sup> are

106 Perlzweig 1961, 128-129 pl. 20, 924.

107 Gassner 1997, 208 taf. 67 kat. no. 854

108 Metin 2012a, 68 K131-K132

109 Kılınc 2020, 74 kat. no. 45 (2nd century AD).

110 Bailey 1988, 303 pl. 63 Q 2403; Bussière – Rivel 2012, 94 cat. no. 127

111 Broneer 1930, pl. XVIII cat. no. 1216-1218.

112 Perlzweig 1961, 130 pl. 21 cat. no. 970 (3rd quarter of the 3rd century AD); Gill – Hedgecock 1992, 419 fig. 26.

113 Lindros-Wohl 1981, 127 pl. 34, 6.

114 Perlzweig 1961, 48-50.

115 Akyüz 2019, 136 lev. 4 kat. no. 72.

116 For the lion lamp from Ephesus Terrace Houses, see: Kara 2014, ek sf. 18, 20 kat. no. 18,20.: A side-profile lion is carved on the Loeschke Form I type lamp from the Malatya Archeology Museum, see: Canpolat 2019, 53 kat. no. 8.

117 Evren 1996, 57 çiz. 12: D36.

118 Metin 2012a, 60-61

119 Bailey 1988, 315 pl. 70 cat. no. 2580.

important for demonstrating diversity in their compositions. The Tlos sample, parallel with the Attic molds, is dated to the 3rd-4th century AD.

Mold Depicting Horse (cat. no. 76, fig. 23): A horse figure is depicted in an upright, walking position facing right on the discus of the mold without any decoration on the rim. The left part of the nozzle and discus is broken, and it lacks a lamp maker's mark. The horse figures adorning the discuses of the 6th century AD Roman Imperial Period lamps of Cibyra in Anatolia were, unlike the Tlos mold, depicted in a rampant position<sup>120</sup>. Horses were depicted galloping on the lamps of Pergamon<sup>121</sup>. Based on its body form, which is different from the lamps in both cities, the Tlos mold is dated to between the 3rd-4th century AD.

Molds Depicting Bull Head (cat. no. 77-78, fig. 24): A bull's head is depicted in the *bucranium* form on the intact discus of this lamp mold. The wide rim is decorated with two rows of wavy lines (fig. 36, 7). The letter “μ” is engraved on the back of the mold. The Tlos mold resembles the bull head depicted in the Attic lamps of the 3rd-4th century AD<sup>122</sup>. The bull heads here are depicted in the same pattern as Roman Empire Period coins which commemorate the *Dipoleia* festivals held in honor of Zeus in the city of Athens<sup>123</sup>. Cultic depictions of bull heads, which were commonly portrayed in *bucephalus* and *bucranium* forms as garland bearers in architectural decoration, especially during the Roman Imperial Period, thusly gained a decorative function. As understood from the samples found in the Athenian Agora and Corinth<sup>124</sup>, these depictions became fashionable on Roman Imperial Period lamps, especially in the 3rd-4th century AD. Samples of Rhodian lamps indicate that this trend continued until the 5th century AD<sup>125</sup>.

Molds with Panther Depictions (cat. no. 79, fig. 25): The discus of this mold features a panther figure facing backwards, its rim is bordered by a row of ovules, and its handle is broken. The symbol of the lamp maker is found on the back of the mold and consists of the letter ‘X’. The panthers on 4th century AD lamps from the Attic workshop are depicted facing right or left and sometimes looking back<sup>126</sup>. Lamps produced in Cibyra indicate that the right-facing panther figure depiction continued until Late Antiquity in Anatolia<sup>127</sup>. The panther figure sitting on its hind legs and looking back, as in the Tlos sample, is seen on the discus of a lamp found in the Ephesus Terrace House I and is dated 100 years earlier than the Attic samples<sup>128</sup>. Based on the decoration pattern of the Ephesian lamp, the Tlos mold, which is similar in form, must also be from the same date (3rd century AD).

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120 Metin 2012a, 62

121 Heimerl 2001, 111, 166, 201 beil. 10 271-272 (First half of the 1st century AD and 1st-2nd century AD).

122 Perlzweig 1961, 132 cat. no. 1054-1064; Gill – Hedgecock 1992, 420 fig. 30.

123 Shear 1936, 301 fig. 11.

124 Broneer 1930, 268-269 cat. no. 1301-1307.

125 Katsioti 2017, 175 cat. no. R 9.

126 Perlzweig 1961, 130-131 cat. no. 989-996 (4th century AD).

127 Metin 2012a, 68-69 K491-K493.

128 Kara 2014, ek. s. 60 kat. no. 55 (3rd century AD).

Molds with Lion-Deer Depictions (cat. no. 80, fig. 26): The large discus of this mold depicts a lion figure lying under a tree and a deer turning its head towards the lion. Muscle movements are clearly emphasized on the frontal face of the lion and the eyes and ears of the deer are exaggerated. The discus is surrounded by a guilloche motif decorated with dots in between (fig. 36, 5.). Although no similar lamps were identified, the exaggerated facial parts of the lion and deer bear the style features of the 4th century AD.

Molds with Crane Depictions (cat. no. 81, fig. 27): On the discus of this mold, discovered during excavations of the stadium, a crane is depicted in profile facing right, pecking the plant in front of it. With its large almond-shaped eyes and curved neck and wings, chest, and tail feathers detailed with short lines, the elegance of waterfowl anatomy is at the forefront of this depiction. The curved stem of the thin-leaved plant adds to the elegance of the scene. There is a decorative panel on the rim consisting of short lines spaced far apart from each other. The cranes of Roman Imperial Period lamps have been most commonly depicted alone from the front or side profile since the 1st century AD<sup>129</sup>. The depiction pattern here is unique to the ancient city of Tlos, and the bird's large eye profile is parallel to the style in the lion-deer mold. The convex rim of the lamp supports a date of the 4th century AD.

Double Dot Decorated Lamp (cat. no. 82, fig. 28): The filling hole, surrounded by four grooves, is decorated with two rows of dots (fig. 36, 12). There is a stylized volute decoration between the nozzle and discus. The almond-shaped body, concave discus, and sloping rim profile are similar to the Cibyra lamps dated to the 5th-6th century AD<sup>130</sup>.

Dot Decorated Mold (cat. no. 83, fig. 29): The filling hole in the center of the concave discus is surrounded by dots. The rim is decorated with a three-point motif separated by a wavy line. The mold, displaying a form and features similar to the Cat. No. 82, is dated to the 5th-6th century AD.

#### 4. Broneer Type XXIX

Ringed Discus, Vine-Decorated Molds (cat. no. 84, fig. 30): This mold features a round body, narrow discus, and a short, rounded nozzle profile, with a wide filling hole (fig. 36, 3b). Its rim is decorated with a vine in the Howland Type 50 form<sup>131</sup>, dated between the second half of the 1st century BC and 1st century AD, but also displays Late Roman lamp typology with its concave discus profile. A near duplicate of the mold belonging the Broneer Type XXIX group is found in the lamps of Cibyra<sup>132</sup>. Although the counterparts found in Cnidus are dated to a wide range spanning from the 3rd-6th centuries AD, evaluations of this group in general lean towards the 5th

129 Goethert-Polaschek 1985, 41 taf. 40 kat. no. 107; 45 taf. 41 kat. no. 124. On the Loeschcke Type 1B recovered in the Trier necropolis, two different types of cranes are depicted, in side profile and from the front.

130 Metin 2012a, 556-557 K528-K529.

131 Howland 1958, pl. 50 type 50 A-D.; For the Howland Type 50 sample in the Schloessinger collection, see Rosenthal – Sivan 1978, 18 cat. no. 38.

132 Metin 2012a, K614-623.

century AD<sup>133</sup>. The Cibyra lamps, which closely resemble the Tlos mold but display minor differences among themselves, are dated to the 5th-6th century AD. In line with the samples of Cnidus and Cibyra, the Tlos mold is thought to also belong to the 5th century AD, the period in which this form is most common.

Vine-Decorated Molds (cat. no. 85, fig. 31): The surface of this mold, with a solid outer contour, is heavily worn. It features an oval body, a rim decorated with a vine, and a narrow discus connected to the nozzle with a thin canal (fig. 36, 3c). There is a lamp maker's mark consisting of the letter "X" on the back of the mold. Almond-shaped long-nozzled lamps of the Hellenistic Period became fashionable again in the Late Roman Imperial Period. Similar forms, which were produced intensively between the 4th-5th centuries AD in Corinth, are divided into four subgroups<sup>134</sup>. Although the Tlos mold is different from the lamps produced in the workshops of Attic and Corinth, it is dated to the 5th-6th century AD based on its elongated nozzle channel.

### **5-Broneer Type XXXI (cat. no. 86, fig. 32)**

This mold features an oval body and a long nozzle profile connected to the discus by a wide channel. Found among other molds in the Parliament Building complex, this mold indicates that North African lamp types were also imitated in Tlos. Despite severe damage to the discus, the edges of the dot-decorated star motif and the concentric circle motif on the rim have been preserved (fig. 36, 11). The cross motif is generally seen on North African lamps, which spread through maritime trade over a wide area, especially the Mediterranean, starting in the 5th century AD<sup>135</sup>. The motif on the discus of the Tlos mold was not found on other imported and local North African lamps. It has been stated that North African lamps, which have been produced since the 4th century AD but peaked between the 5th and 6th centuries AD, were produced locally<sup>136</sup> in Miletus and Cibyra as well as in Attic<sup>137</sup> and Corinth. This conclusion was reached after observing the profile and ornamental features of Western Anatolian lamps on those originating from North Africa and is further supported by the mold recovered in the ancient city of Tlos. The Tlos molds, which bear the characteristics of the imitated group, are dated the 5th-6th century AD.

### **Leaf-Shaped Handle Molds (cat. no. 87-90, fig. 33)**

Among the molds, there are four leaf-shaped samples added to lamp handles. Two molds have sycamore leaves with a large surface and a pointed tip. The leaves' veins are stylized with geometrical lines, one ending in a pelta motif and the other a spiral motif. With its narrow surface, the third mold seems to have been formed by combining olive leaves.

133 Pastutmaz 2001, 22 kat. no. 152-157

134 Broneer 1930, 114-116.

135 Perlzweig 1961, pl. 10, cat. no. 327, 342.

136 Metin 2012a, 160-163, K246-249.

137 Perlzweig 1961, pl. 39, cat. no. 2444.

Leaf ornaments were added to the handles of the Loeschcke Type III group lamps<sup>138</sup>. This tradition dates back to Hellenistic<sup>139</sup> bronze lamps and continued into the Early Roman Imperial Period<sup>140</sup>. These additions to the handles of terracotta lamps results from an effort to imitate bronze lamps produced for luxury consumption. This effort, which was usual for the Roman Imperial Period, was continued in the Christian Period with Byzantine lamps featuring anthropomorphic, zoomorphic, palmette, and cross-shaped handles<sup>141</sup>.

The large, detailed samples of leaf-shaped applique molds found in the ancient city of Tlos are similar to the Broneer Type XXI sample in the Cnidian lamp collection of the British Museum. The next most similar samples are the Attic productions recovered from the Athens Agora and dated to the 3rd-4th century AD<sup>142</sup>.

### Lower Molds (cat. no. 91-99, fig. 34)

Many lower molds were also found during the excavations. As in the upper molds, lamp maker's symbols were found on these as well. The letters K, Δ, and Φ are among these marks. A workshop mark added under the lamp and thus visible to the purchaser is only found in the cat. no. 98. Monograms, defined as lamp maker's marks, serve as serial numbers for classifying molds. The lower molds vary in chronological order from round body to almond form and complete the upper molds of similar form.

### General Evaluation and Conclusion

131 lamp molds were found in the ancient city of Tlos, mostly from the parliament building complex. Ninety-nine of the better-preserved samples that could be evaluated typologically were included in the article. The molding technique, which became widespread in the Roman Imperial Period, was used uninterruptedly until Late Antiquity. Mold-made lamps, whose discuses and rims are decorated with a rich ornamental repertoire compared to lamps shaped on the wheel, spread over a wide area with the influence of trade. As indicated in the samples produced in central and local workshops, they became an important branch of the ceramic industry. The molds, lamps, and amorphous fragments of these molds evaluated within the scope of this article indicate that lamps were produced continuously from the Early Roman Period to the Late Antiquity in the ancient city of Tlos. The upper molds with a wide decoration repertoire are more numerous than the lower molds. The lower molds are less numerous because the existing samples fit the upper molds of similar form and size.

The molds evaluated in the article indicate that the Broneer Type XXIV, XXV, XXVII-XXIX, and XXXI forms were produced intensively in the workshops of Tlos.

138 Bussière – Rivel 2012, 112 cat. no. 156-157.

139 Loeschcke 1919, 472 abb. 44, 1a-b.

140 Loeschcke 1919, 452 taf. XXI kat. no. 1050. Bussière – Lindos-Wohl 2017, 457, 458 cat. no. 620, 621. In both of the lamps identified as originating in Anatolia, a leaf motif was added onto the round handle.

141 Aydın-Tavukçu – Güllünay 2018, 2315-2332.

142 Perlzweig 1961, 159 pl. 33 cat. no. 2036.

The richest group in the decoration repertoire is the Broneer Type XXVII, with 60 molds. The most common decoration scheme of the group are the molds with vine-ray depictions, which are divided into three subgroups (cat. no. 50-71). The vine was the main ornamental element in Tlos lamp molds until the 5th century AD. Molds whose discuses are decorated with rosette patterns come in second (cat. no. 36-49). The density of these two groups shows that the Tlos workshops also focused on plant and linear motifs, following the trends of the 2nd century AD. In scenes consisting of figures, mythological subjects such as Athena, Eros, satyr-nymph, Leda-swan, and Europa-bull were preferred. Gladiators and ship depictions are the most common discus decorations across molds.

The Broneer Type XXIV with 10 molds, a rooster figure depicted on them (cat. no. 1-10). In the Broneer Type XXVIII group, which contains 12 molds, animal figures such as a dog, lion, horse, *bucranium*, and panther are predominant. A single mold with its rim surrounded by a vine is the only vegetal-adorned sample of the form (cat. no. 72). The vine decoration was also used in two molds in the Broneer Type XXIX group with a longer nozzle and body profile (cat. no. 84-85). Another single mold with roughly heart-shaped short nozzle and depicted a bust of Serapis on the discus belongs to Broneer Type XXV (cat. no. 11). The last form detected in the molds is a North African lamp belonging to the Broneer Type XXXI group, dated to the 5th-6th century AD, represented by a single sample (cat. no. 86). The discus of the mold is decorated with a dotted star motif. The leaf-shaped appliques are another group included in Tlos lamp molds. These decorations, represented by four molds, came into use in the Augustan Period and continued until the 4th century AD. It is difficult to determine exactly what type of handles these molds were used on in the Tlos workshops since no intact lamp samples were recovered. There are also nine lower mold samples in the catalog.

The color and texture of the molds' clay are homogeneous. Generally varied around four main colors<sup>143</sup>, the clay contains lime, mica, and pebbles as additives. The amount of additives used in the molds varies from low to moderate. The clay edge is generally non-porous, and its surface is rough or smooth, depending on the amount of additives. Chemical and petrographic analyses carried out to determine the location of the clay deposits used in the city's ceramic production revealed that the molds corresponded to the local clay deposits of the region<sup>144</sup>. Additionally, lamp maker's marks provide information about the production technique and workshop. Since the negative (*matrize*) mold obtained from the main model (*patrize*) could become unusable due to surface wear, breakage, etc., the lamp maker made copies of the molds and added monograms consisting of Greek letters and linear motifs to these copies. Many of the symbols on the back of the mold, arranged keeping the discus in the center, were carved imprecisely. The Greek letters include Β, Γ, Λ, Δ, Ν, Χ, Κ, Μ, Ε, Υ, Φ, Π, and Θ (fig. 37). While many molds feature just a single letter, they are also written in groups

143 Munsell Soil-Color Charts: 5 YR 5/8, 6/6, 6/7, 7/3, 7/6, 7/8, 8/4; 2.5 YR 6/8, 7/6, 7/8; 7.5 YR 6/4; 10 YR 8/4; 10 R 7/8.

144 Çolak 2015, 262-287; Sezgin 2017, 1-5.



of two or even three in a few examples. For example, the letter B was used alone and in a group of three in the molds with ship motifs (cat. no. 31). The double or triple use of the same letter in the repetition of the series suggests that each letter corresponds to the reproduced mold. The letters were enclosed in a round or square frame, and sometimes no border was needed. The word “Γηράσιμος”, written in two lines on the back of a mold decorated with a rosette motif, is different from the others because it bears a personal Greek name (fig. 17 cat. no. 49). Unfortunately, this name or its monogram was not found in the lower molds. Linear characters include crosses, circles, stars, double lines, and stylized leaf motifs. Only one of the lower molds has a lamp maker’s mark on the back. The letter “X” with an inverted arm on the inner base of the same mold is the workshop symbol found on the base of the lamp that came out of this mold and is a singular sample (cat. no. 98). The fact that only one of the lower molds found in the ancient city of Tlos has a workshop sign suggests that the production took place around a single center. The lamp maker’s mark is not added to the leaf appliqué molds, and unlike the upper molds, the back was left rough.

Lamp production, which has lasted from the Early Imperial Period to the Early Byzantine Period in the workshops of Attic and Corinth, continued on the islands with mold samples dating from the 6th century AD found in Rhodes and Kos<sup>145</sup>. In Anatolia, the workshops of Pergamon and Ephesus, which were important ceramic production centers of the Hellenistic Period, continued to be active during the Roman Imperial Period<sup>146</sup>. Identified as being produced locally in Menderes Magnesia, other lamps prove the existence of small-capacity workshops producing simultaneously with large and well-established workshops<sup>147</sup>. Cibyra and Kremna<sup>148</sup> are cities that produce thusly. Molds found in both cities show that imported and local lamps have been produced in the south of Anatolia from the Hellenistic to the Early Byzantine Period. In addition to Greece, Anatolia and Cyprus, recovered molds indicate that lamps were produced in the local workshops of Dacia between the 2nd and 4th centuries AD<sup>149</sup>.

The molds found in the ancient city of Tlos are important in demonstrating that there has been uninterrupted lamp production in the Lycian Region from the 1st century AD to the 6th century AD. Numerous lamp fragments matching the mold forms were also found. Some lamps are designed with roosters, Eros playing an aulos, gladiators, ships, oysters, rosettes, vine-rays, and dog figures. The color and texture of the lamps’ clay are similar to the molds in which they were produced, and there are also amorphous pieces with firing defects present (fig. 35). The lamp forms and decorations in fashion in Greece and Western Anatolia during the Roman Imperial Period were either imitated exactly or were minorly changed, giving them a unique character, in the ceramic workshops of the ancient city of Tlos. Eros, satyr-nymph, Leda-swan, Europa-bull, gladiator combat, ship, oyster, rosette, vine-ray, dog, lion, and bull head are among

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145 Katsioti 2012, 555-559 fig. 1, 4

146 For the molds discovered in Pergamon, see Heimerl 2001, 159-160 kat. no. 763-772.; For the molds discovered in Ephesus, see Gassner 1997, 208 taf. 67, 853-856.

147 Vapur 2018, 328.

148 Metin 2013, 255-264.

149 Hamat 2019, 201-220.

these molds. It was possible to change or diversify mold models with rim decorations, thus creating a wide variety of schemes (fig. 36). Bull head and satyr-nymph molds can be given as examples. On the other hand, the depictions of Athena, rooster, horse, mask, *venatio*, the first type of ship, and dot-decorated Late Antique molds are city-specific designs that correspond to the trends of the period. The production of lamps in the ancient city of Tlos, which began in the Early Roman Imperial Period, continued uninterruptedly until Late Antiquity, as understood from the molds of the 5th and 6th centuries AD.

The original usage phase of the parliament building complex, where a large part of the molds was recovered, parallels the that of the molds themselves (fig. 2a, 5a-b, 6a, 9a, 13a-16a, 18a, 21a). In our interpretation, this means the finds were mixed with the deposit from tombs in upper elevations or were transported here as a *bothros* material together with amorphous pieces during the secondary usage phase of the building<sup>150</sup>. The mold samples dating to the 6th century AD recovered from the filling indicate that this process occurred in the Late Antique or Early Byzantine period.

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150 Korkut – Uygun – Özdemir 2020, 279-280; Korkut – Uygun – Özdemir – Usanmaz 2022, 337-338.

**CATALOGUE****Cat. No. 1:**

Upper, Rooster, Mold No 90 (2021)

Clay: 5 YR 6/8 reddish yellow L.: 12.5 cm W.: 9 cm

**Cat. No. 2:**

Upper, Rooster, Mold No 71(2021)

Clay: 5 YR 7/4 pink L.: 13.6 cm W.: 10.4 cm

**Cat. No. 3:**

Upper, Rooster, Mold No 59 (2021)

Clay: 7.5 YR 7/6 reddish yellow L.: 8.4 cm W.: 9.1 cm

**Cat. No. 4:**

Upper, Rooster, Mold No 91 (2021)

Clay: 7.5 YR 6/6 reddish yellow L: 7.9 cm W: 7.8 cm

**Cat. No. 5:**

Upper, Rooster, Mold No 6 (2021)

Clay: 5 YR 5/8 yellowish red L: 7.5 cm W: 7.1 cm

**Cat. No. 6:**

Upper, Rooster, Mold No 27 (2019)

Clay: 5 YR 6/8 reddish yellow L: 7.1 cm W: 7 cm

**Cat. No. 7:**

Upper, Rooster, Mold No 30 (2019)

Clay: 5 YR 7/6 reddish yellow L: 6.6 cm W: 6.1 cm

**Cat. No. 8:**

Upper, Rooster, Mold No 29 (2019)

Clay: 5 YR 7/6 reddish yellow L: 6.6 cm W: 6.1 cm

**Cat. No. 9:**

Upper, Rooster, Mold No 17 (2019)

Clay: 10 R 7/8 light red L: 5 cm W: 6.8 cm

**Cat. No. 10:**

Upper, Rooster, Mold No 15 (2021)

Clay: 7.5 YR 7/8 reddish yellow L: 4.1 cm W: 4.6 cm

**Cat. No. 11:**

Upper, Serapis,

Clay: 5YR 7/6 reddish yellow L: 12,6 cm W: 9.9 cm

**Cat. No. 12:**

Upper, Athena, Mold No 58 (2021)

Clay: 2.5 YR 7/6 light red L: 9,9 cm W: 8,8 cm

**Cat. No. 13:**

Upper, Athena, Mold No 39 (2021)

Clay: 2.5 YR 7/8 light red L: 6.4 cm W: 4.2 cm

**Cat. No. 14:**

Upper, Eros, Mold No 23(2021)

Clay: 2.5 YR 7/8 light red L: 9.1 cm W: 6.4 cm

**Cat. No. 15:**

Upper, Satyr-Nymph, Mold No 28 (2019)

Clay: 5 YR 7/6 reddish yellow L: 7 cm W: 6.5 cm

**Cat. No. 16:**

Upper, Leda-Swan, Mold No 57 (2021)

Clay: 5 YR 6/6 reddish yellow,L:10.5 cm W: 9.1 cm

**Cat. No. 17:**

Upper, Europa-Bull, Mold No 84 (2021)

Clay: 5 YR 6/6 reddish yellow L: 7.5 cm W: 5.5 cm

**Cat. No. 18:**

Upper, Gladiator Combat, Mold No 5 (2019)

Clay: 2.5YR 7/6 light red L: 9.8 cm W: 7.8 cm

**Cat. No. 19:**

Upper, Gladiator Combat, Mold No 10 (2019)

Clay: 5 YR 7/6 reddish yellow L:11 cm W: 8.8 cm

**Cat. No. 20:**

Upper, Gladiator Combat, Mold No 11 (2019)

Clay: 2.5 YR 6/8 light red L: 12 cm W: 9.5 cm

**Cat. No. 21:**

Upper, Gladiator Combat, Mold No 69 (2021)

Clay: 5 YR 7/8 reddish yellow L:11.4 cm W: 8.6 cm

**Cat. No. 22:**

Upper, Gladiator Combat, Mold No 32 (2019)

Clay: 5 YR 7/8 reddish yellow L:11.6 cm W: 9.8 cm

**Cat. No. 23:**

Upper, Bull and Gladiator Combat, Mold No 54 (2021)

Clay: 5YR 7/6 reddish yellow L: 8.9 cm W: 7.2 cm

**Cat. No. 24:**

Upper, Mask, Mold No 5 (2021)

Clay: 5 YR 7/6 reddish yellow L: 7.3 cm W: 7.7 cm

**Cat. No. 25:**

Upper, Mask, Mold No 26 (2021)

Clay: 2.5 YR 7/8 light red L: 7.2 cm W: 8 cm

**Cat. No. 26:**

Upper, Ship, Mold No 2 (2021)

Clay: 5 YR 6/8 reddish yellow L: 9.8 cm W: 7.2 cm

**Cat. No. 27:**

Upper, Ship, Mold No 79 (2021)

Clay: 5 YR 7/6 reddish yellow L: 9.5 cm. W: 8.7 cm

**Cat. No. 28:**

Upper, Ship, Mold No 3 (2019)

Clay: 5 YR 7/8 reddish yellow L: 12 cm W: 8.5 cm

**Cat. No. 29:**

Upper, Ship, Mold No 14 (2019)

Clay: 5 YR 7/6 reddish yellow L: 10.5 cm W: 8.6 cm

**Cat. No. 30:**

Upper, Ship, Mold No 1 (2021)

Clay: 2.5 YR 7/8 light red L: 10.8 cm W: 9.3 cm

**Cat. No. 31:**

Upper, Ship, Mold No 73 (2021)

Clay: 2.5 6/6 light red L: 10.5 cm W: 8.8 cm

**Cat. No. 32:**

Upper, Ship, Mold No 4 (2021)

Clay: 2.5 YR 7/8 light red L: 7.5 cm W: 8.4 cm

**Cat. No. 33:**

Upper, Oyster, Mold No 15 (2019)

Clay: 5 YR 7/6 reddish yellow L: 8 cm W: 8.1 cm

**Cat. No. 34:**

Upper, Oyster, Mold No 56 (2021)

Clay: 7.5 YR 7/3 pink L: 9.8 cm W: 8.8 cm

**Cat. No. 35:**

Upper, Oyster, Mold No 10 (2021)

Clay: 5 YR 7/6 reddish yellow L: 4.3 cm W: 6.6 cm

**Cat. No. 36:**

Upper, Rosette, Mold No 13 (2019)

Clay: 5 YR 6/6 reddish yellow L: 11cm W: 8.4 cm

**Cat. No. 37:**

Upper, Rosette, Mold No 26 (2019)

Clay: 5 YR 7/6 reddish yellow L: 7 cm W: 8 cm

**Cat. No. 38:**

Upper, Rosette, Mold No 80 (2021)

Clay: 5 YR 7/6 reddish yellow L: 11.5 cm W: 7.7 cm

**Cat. No. 39:**

Upper, Rosette, Mold No 31 (2021)

Clay: 2.5 YR 7/6 light red L: 10.6 cm W: 9.2 cm

**Cat. No. 40:**

Upper, Rosette, Mold No 72 (2021)

Clay: 2.5 YR 5/8 red L: 10.6 cm W: 9 cm

**Cat. No. 41:**

Upper, Rosette, Mold No 75 (2021)

Clay: 2.5 YR 6/8 light red L: 10.8 cm W: 8.1 cm

**Cat. No. 42:**

Upper, Rosette, Mold No 52 (2021)

Clay: 2.5 YR 7/8 light red L: 10.8 cm W: 8.2 cm

**Cat. No. 43:**

Upper, Rosette, Mold No 28 (2021)

Clay: 5 YR 7/6 reddish yellow L: 7 cm W: 6.5 cm

**Cat. No. 44:**

Upper, Rosette, Mold No 55 (2021)

Clay: 5 YR 7/6 reddish yellow L: 10.3 cm W: 8 cm

**Cat. No. 45:**

Upper, Rosette, Mold No 32 (2021)

Clay: 2.5 YR 7/6 light red L: 5.2 cm W: 7.5 cm

**Cat. No. 46:**

Upper, Rosette, Mold No 13 (2021)

Clay: 7.5 YR 8/4 pink L: 6.9 cm W: 9 cm

**Cat. No. 47:**

Upper, Rosette, Mold No 11 (2021)

Clay: 5 YR 6/8 reddish yellow L: 6 cm W: 5.8 cm

**Cat. No. 48:**

Upper, Rosette, Mold No 51 (2021)

Clay: 2.5 YR 7/8 light red L: 8.3 cm W: 6.2 cm

**Cat. No. 49:**

Upper, Rosette, Mold No 49 (2021)

Clay: 5 YR 6/6 reddish yellow L: 8.6 cm W: 8.2 cm

**Cat. No. 50:**

Upper, Vine-Ray, Mold No 76 (2021)

Clay: 5 YR 7/8 reddish yellow L: 9.8 cm W: 8 cm

**Cat. No. 51:**

Upper, Vine-Ray, Mold No 7 (2021)

Clay: 5 YR 6/8 reddish yellow L: 9.7 cm W: 7.5 cm

**Cat. No. 52:**

Upper, Vine-Ray, Mold No 29 (2021)

Clay: 5 YR 7/6 reddish yellow L: 9.4 cm W: 7.4 cm

**Cat. No. 53:**

Upper, Vine-Ray, Mold No 8 (2019)

Clay: 10YR 8/4 very pale brown, L: 10.7 cm W: 8.4 cm

**Cat. No. 54:**

Upper, Vine-Ray, Mold No 16 (2019)

Clay: 5 YR 8/4 pink L: 9 cm W: 7.6 cm

**Cat. No. 55:**

Upper, Vine-Ray, Mold No 20 (2019)

Clay: 7.5 YR 6/4 light red L: 6.2 cm W: 3 cm

**Cat. No. 56:**

Upper, Vine-Ray, Mold No 47 (2021)

Clay: 2.5 YR 7/8 light red L: 8.8 cm W: 8.7 cm

**Cat. No. 57:**

Upper, Vine-Ray, Mold No 8 (2021)

Clay: 2.5 YR 6/8 light red L: 7.2 cm W: 8.5 cm

**Cat. No. 58:**

Upper, Vine-Ray, Mold No 35(2021)

Clay: 2.5 YR 7/8 light red L: 6.9 cm W: 8.9 cm

**Cat. No. 59:**

Upper, Vine-Ray, Mold No 50 (2021)

Clay: 2.5 YR 7/8 light red L: 7.2 cm W: 9.1 cm

**Cat. No. 60:**

Upper, Vine-Ray, Mold No 48 (2021)

Clay: 5 YR 6/8 reddish yellow L: 7.7 cm W: 8.8 cm

**Cat. No. 61:**

Upper, Vine-Ray, Mold No 60 (2021)

Clay: 2.5 YR 7/6 light red L: 7.9 cm W: 8.9 cm

**Cat. No. 62:**

Upper, Vine-Ray, Mold No 33 (2021)

Clay: 2.5 YR 7/6 light red L: 6.5 cm W: 6.5 cm

**Cat. No. 63:**

Upper, Vine-Ray, Mold No 81 (2021)

Clay: 5 YR 6/8 reddish yellow L: 4 cm W: 8.2 cm

**Cat. No. 64:**

Upper, Vine-Ray, Mold No 53 (2021)

Clay: 2.5 YR 7/6 light red L: 5.5 cm W: 9.1 cm

**Cat. No. 65:**

Upper, Vine-Ray, Mold No 82 (2021)

Clay: 5 YR 6/6 reddish yellow L: 4.5 cm W: 8.5 cm

**Cat. No. 66:**

Upper, Vine-Ray, Mold No 19 (2019)

Clay: 2.5 YR 7/6 light red L: 4.6 cm W: 3 cm

**Cat. No. 67:**

Upper, Vine-Ray, Mold No 36 (2021)

Clay: 2.5 YR 7/6 light red L: 7.6 cm W: 4.7 cm

**Cat. No. 68:**

Upper, Vine-Ray, Mold No 9 (2021)

Clay: 2.5 YR 7/6 light red L: 7.5 cm. W: 5.8 cm

**Cat. No. 69:**

Upper, Vine-Ray, Mold No 18 (2019)

Clay: 7.5 YR 7/6 reddish yellow L: 3.1 cm W: 3.1 cm

**Cat. No. 70:**

Upper, Vine-Ray, Mold No 31 (2019)

Clay: 5 YR 7/6 reddish yellow L: 5.7 cm W: 4.9 cm

**Cat. No. 71:**

Upper, Vine-Ray, Mold No 6 (2019)

Clay: 5 YR 7/8 reddish yellow L: 11.6 cm W: 9.8 cm

**Cat. No. 72:**

Upper, Vine, Mold No 22 (2019)

Clay: 2.5 YR 6/8 light red L: 11.7 cm W: 4.7 cm

**Cat. No. 73:**

Upper, Dog, Mold No 7 (2019)

Clay: 2.5 YR 8/4 Pink L: 12.4 cm W: 8.8 cm

**Cat. No. 74:**

Upper, Dog, Mold No 24 (2019)

Clay: 5 YR 8/4 pink L: 7.2 cm W: 8.8 cm

**Cat. No. 75:**

Upper, Lion, Mold No 23(2019)

Clay: 7.5 YR 7/6 reddish yellow L: 11.6 cm W: 7.4 cm

**Cat. No. 76:**

Upper, Horse, Mold No 30 (2021)

Clay: 5 YR 7/6 reddish yellow L: 9.7 cm W: cm

**Cat. No. 77:**

Upper, Bull Head, Mold No 12 (2019)

Clay: 5 YR 7/6 reddish yellow L: 9.7 cm W: 6.4 cm

**Cat. No. 78:**

Upper, Bull Head, Mold No 83 (2021)

Clay: 2.5 YR 7/8 light red L: 5 cm. W: 6.7 cm

**Cat. No. 79:**

Upper, Panther, Mold No 85 (2021)

Clay: 5 YR 6/4 light reddish brown L:7.2 cm W: 4.2cm

**Cat. No. 80:**

Upper, Lion-Deer, Mold No 3 (2021)

Clay: 5 YR 7/8 reddish yellow L: 10.1 cm W: 7.6 cm

**Cat. No. 81:**

Upper, Crane,

Clay: 5 YR 8/4 pink L: 7.2 cm W: 7.6 cm

**Cat. No. 82:**

Upper, Double Dot Decorated, Mold No 37(2021)

Clay: 5 YR 8/4 pink L: 9.6 cm W: 7.3 cm

**Cat. No. 83:**

Upper, Dot Decorated,

Clay: 7.5 YR 8/4 pink L: 6.6 cm W: 6.6 cm

**Cat. No. 84:**

Upper, Ringed Discus and Vine-Decorated, Mold No 2 (2019)

Clay: 5 YR 8/4 pink L: 10.7 cm W: 8.5 cm

**Cat. No. 85:**

Upper, Vine-Decorated, Mold No 9 (2019)

Clay: 10 YR 8/4 very pale brown L:11.9 cm W: 6.4 cm

**Cat. No. 86:**

Upper, Dot Decorated Star Motif, Mold No 77(2021)

Clay: 2.5 YR 7/8 light red L: 9.9 cm W: 7.8 cm

**Cat. No. 87:**

Handle, Leaf-Shaped, Mold No 1 (2019)

Clay: 5 YR 7/8 reddish yellow L: 8 cm. W: 7.5 cm

**Cat. No. 88:**

Handle, Mold No 4 (2019)

Clay: 2.5 YR 8/4 pink L: 7.6 cm. W: 7.2 cm

**Cat. No. 89:**

Handle, Mold No 14 (2021)

Clay: 7.5 YR 8/3 pink. L: 6.2 cm. W: 2.6 cm

**Cat. No. 90:**

Handle, Mold No 25 (2019)

Clay: 7.5YR 7/6 reddish yellow L: 8.1 cm W: 7.3 cm

**Cat. No. 91:**

Lower, Mold No 40 (2021)

Clay: 5 YR 7/8 reddish yellow L: 10.1 cm W: 6.6cm

**Cat. No. 92:**

Lower, Mold No 41 (2021)

Clay: 2.5 YR 7/8 light red L: 7.7 cm W: 5.6 cm

**Cat. No. 93:**

Lower, Mold No 87 (2021)

Clay: 2.5 YR 7/6 light red L: 10.3 cm W: 7.2 cm

**Cat. No. 94:**

Lower, Mold No 17 (2021)

Clay: 5 YR 7/6 reddish yellow L: 6.7 cm W: 7.2 cm

**Cat. No. 95:**

Lower, Mold No 16 (2021)

Clay: 5 YR 6/6 reddish yellow L: 6.5 cm W: 7.7 cm

**Cat. No. 96:**

Lower, Mold No 42 (2021)

Clay: 5YR 7/8 reddish yellow L: 9.4 cm W: 9.4 cm

**Cat. No. 97:**

Lower, Mold No 88 (2021)

Clay: 5 YR 7/6 reddish yellow L: 9.6 cm W: 9.4 cm

**Cat. No. 98:**

Lower, Mold No 86 (2021)

Clay: 5 YR 8/4 pink L: 10.4 cm W: 7.1 cm

**Cat. No. 99:**

Lower, Mold No 43 (2021)

Clay: 2.5 YR 7/8 light red L: 7.1 cm W: 6.8 cm

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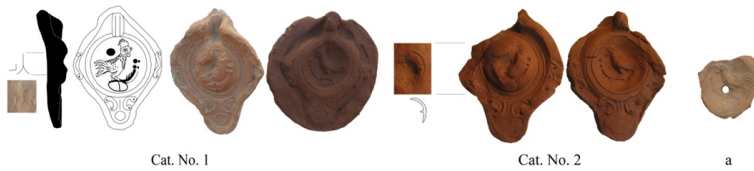


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Fig. 1 Parliament Building Complex



Cat. No. 1

Cat. No. 2

a

Fig. 2 Rooster, Broneer Type XXIV



Cat. No. 11

Cat. No. 12

Fig. 3 Serapis, Broneer Type XXV

Fig. 4 Athena, Broneer Type XXVII



Cat. No. 14

a

b

Fig. 5 Eros, Broneer Type XXVII



Cat. No. 15

a

Fig. 6 Satyr-Nymph, Broneer Type XXVII



Cat. No. 16

Fig. 7 Leda-Swan, Broneer Type XXVII



Cat. No. 17

Fig. 8 Europa-Bull, Broneer Type XXVII



Cat. No. 18

Fig. 9 Gladiator Combat, Broneer Type XXVII



Cat. No. 19



Cat. No. 23

Fig. 10 Bull and Gladiator Combat, Broneer Type XXVII



Cat. No. 24

Fig. 11 Mask, Broneer Type XXVII



Cat. No. 26

Fig. 12 Ship Type 1, Broneer Type XXVII



Cat. No. 27



Cat. No. 28

Fig. 13 Ship Type 2, Broneer Type XXVII



Cat. No. 31



a



Cat. No. 33



Cat. No. 36



Cat. No. 34

a



Cat. No. 37

a

Fig. 14 Oyster, Broneer Type XXVII

Fig. 15 Rosette Type 1, Broneer Type XXVII 1



Cat. No. 39

Cat. No. 41

a

Fig. 16 Rosette Type 2, Broneer Type XXVII



Cat. No. 46

Cat. No. 49

Fig. 17 Rosette Type 3a-b, Broneer Type XXVII



Cat. No. 50

Cat. No. 51

Cat. No. 53

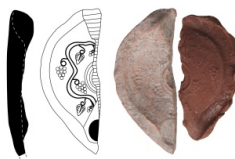
a

Fig. 18 Vine-Ray Type 1, Broneer Type XXVII



Cat. No. 71

Fig. 19 Vine-Ray Type 2, Broneer Type XXVII



Cat. No. 72

Fig. 20 Vine, Broneer Type XXVIII



Cat. No. 73



Cat. No. 74

Fig. 21. Dog, Broneer Type XXVIII



Cat. No. 77

Fig. 24. Bull Head, Broneer Type XXVIII



Cat. No. 80

Fig. 26. Lion-Deer, Broneer Type XXVIII



Cat. No. 82

Fig. 28. Double Dot, Broneer Type XXVIII



Cat. No. 84

Fig. 30. Vine, Broneer Type XXIX



Cat. No. 86

Fig. 32. Broneer Type XXXI



Cat. No. 75

Fig. 22. Lion, Broneer Type XXVIII



Cat. No. 76

Fig. 23. Horse, Broneer Type XXVIII



Cat. No. 79

Fig. 25. Panther, Broneer Type XXVIII



Cat. No. 81

Fig. 27. Crane, Broneer Type XXVIII



Cat. No. 83

Fig. 29. Dot Decoration, Broneer Type XXVIII



Cat. No. 85

Fig. 31. Vine, Broneer Type XXIX



Cat. No. 87

Cat. No. 88

Cat. No. 90

Fig. 33. Leaf-Shaped Handle Molds

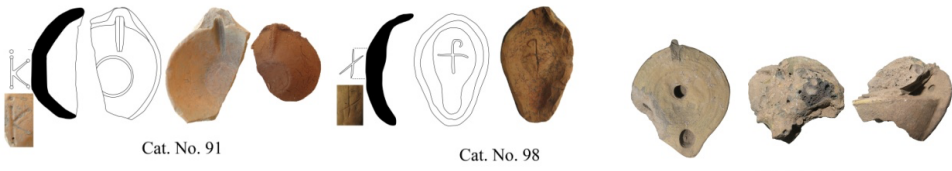


Fig. 34. Lower Molds

Fig. 35. Amorphous

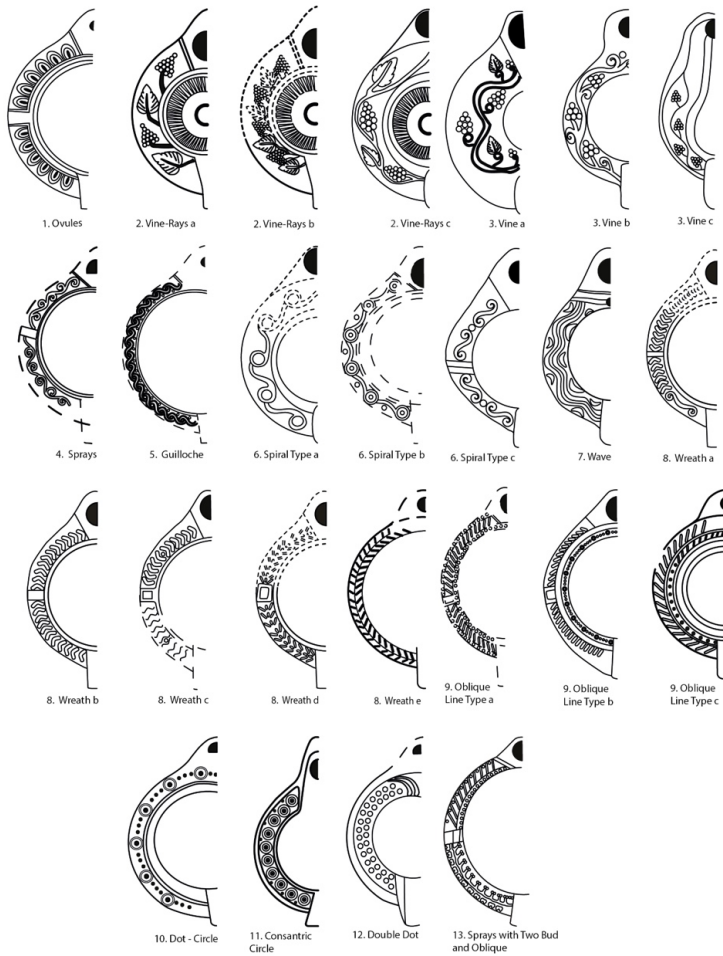


Fig. 36. Rim Decorations of Tlos Lamp Molds

Lamp-Maker's Mark	Cat. No.	Lamp-Maker's Mark	Cat. No.	Lamp-Maker's Mark	Cat. No.	Lamp-Maker's Mark	Cat. No.	Lamp-Maker's Mark	Cat. No.
	73, 84		27		48		83		1
	29		49		86		3		30
	50		85		4, 28		31		51
	91		26		33		53		92
	7		34		54		93		74
	35		58		94		14		36
	60		96		15		37		61
	97		16		38		68		98
	18		39		71		19		40
	6		20		41		74		21
	43		75		24		45		77
	46		79						

Fig. 37. Lamp Maker's Marks