

The «Painted» Hypogeum of *Crispia Salvia* (Marsala-TP) – 2nd Century C.E. Preliminary Anthropological and Archaeological Report of Tomb 3 and Tomb 4

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PAROLE CHIAVE: antropologia, archeologia, ipogeo, Lilibeo, età romana.

RIASSUNTO — L'«Ipogeo dipinto di *Crispia Salvia*» costituisce il più importante monumento dell'antica necropoli punico-romana di Lilibeo (l'odierna Marsala) ed è finora l'unico esempio paradigmatico, in Sicilia, per la decorazione pittorica parietale. Il monumento è stato commissionato da *Iulius Demetrius* in memoria della defunta moglie *Crispia Salvia*, una nobildonna discendente da due famiglie molto importanti dell'isola.

Di seguito viene riportato uno studio Antropologico preliminare, delle Tombe 3 e 4 (*Crispia Salvia* e *Iulius Demetrius*) al fine di integrare i dati storico-culturali con quelli osteologici. I risultati degli studi condotti in laboratorio affiancati a quelli archeologici confermano la presenza di due individui di alto rango sociale le cui condizioni e lo stile vita erano esclusivi delle famiglie patrizie romane.

KEY WORDS: physical anthropology, archaeology, necropolis, Lilibeo, roman age.

SUMMARY — The «Painted Hypogeum of *Crispia Salvia*» is the most important monument of the ancient Punic-Roman necropolis of Lilibeo (today's Marsala). It is the only known paradigmatic example in Sicily of pictorial wall decoration. *Iulius Demetrius* commissioned the monument in memory of his wife *Crispia Salvia*, a noblewoman descended from two very important Sicilian families. Here we report on a preliminary anthropological study of Tombs 3 and 4 (*Crispia Salvia* and *Iulius Demetrius*). We integrated the historical-cultural context with the osteological data. The results combining laboratory and archaeological research confirm the presence of two high-ranking individuals characterized by conditions and lifestyle that were exclusive to Roman patrician families.

INTRODUCTION

The hypogeum of *Crispia Salvia* is the most important monument of the ancient necropolis of Lilibeo (Marsala-Trapani). Notably it is the only one

known in Sicily with rich pictorial wall decorations, including scenes alluding to the delicate trespass from life to death. This exceptional monument was discovered in 1994 during the demolition of a building. It was located in a sector of the Punic necropolis mostly characterized by returned pit tombs attributable to the IV-III century. B.C. However, the site continued to be used until the late Roman-Imperial age in the middle of the 2nd-century C.E. The excavations revealed a large underground chamber, with six burials (4 within rectangular niches, while 2 are of the *arcosolium* type) carved along the walls of the limestone bank, used for a long period.

Here we present an anthropological study of the human skeletal remains found during the 1994 excavation campaign conducted by the Superintendency BB.CC.AA. of Trapani and integrated with other remains derived from «micro-excavation» *in situ* in 2019. These remains are now stored at the Lilibeo Museum (museum of the Archaeological Park of Lilibeo-Marsala).

During the archaeological research of 2019, the complete cleaning of the tombs revealed two irregularly shaped «pillows», dug into a rock bank that were useful to better understand the original orientation of the buried inside the tombs. Our results presented here provide a contribution to the interpretation of the anthropological, historical and archaeological context of the site.

THE NECROPOLIS OF LILIBEO - HISTORICAL NOTES

The necropolis occupies about a 90,000 square meter area along the north-eastern side of the town, outside the walls of the ancient Punic-Roman *Lilybaeum*. The area, bounded to the northwest by the sea, by the outer edge of the Punic moat at the southwest and to the east by the modern church of *Santa Maria Della Grotta*. It was used from the foundation of the Punic city in the 4th century B.C. up to the late imperial age. There was a continuous superimposition of new burials, consequent tampering and readjustments over the centuries.

The Lilibeo necropolis has been known since the 18th century thanks to numerous occasional finds. However, the first systematic research activities were undertaken only at the end of the 19th century by a local scholar, *Salvatore Struppa*, and by the archaeologist *Antonino Salinas*. Excavations intensified after the Second World War in the 1960s, as a consequence of the massive building expansion of the modern Marsala that overlaps the ancient city (Giglio, 2016a).

The necropolis represents the most explored sector of ancient *Lilybaeum*, and today is well-known, thanks to the systematic excavations conducted first by the Archaeological Superintendence of western Sicily (Bisi, 1969-

1971; Di Stefano, 1974-1980), and then by the Superintendence of Cultural and Environmental Heritage of Trapani, established in 1987 (Bechtold, 1999; Giglio, 1987). In particular, the monograph by *Babette Bechtold* (Bechtold, 1999) provides a detailed account of the sector of the necropolis investigated between 1987 and 1998. The monograph provides information on areas that were obscured by the superimposition of the modern city on the necropolis.

THE HYPOGEUM OF *CRISPIA SALVIA*

The painted hypogeum of *Crispia Salvia* represents an example of a private tomb. The underground burial chamber, currently accessible to the public by steps dug into the limestone bank, unfolds as a large 25 m², trapezoid (Fig. 1) oriented in NW-SE direction (Giglio, 1996a).

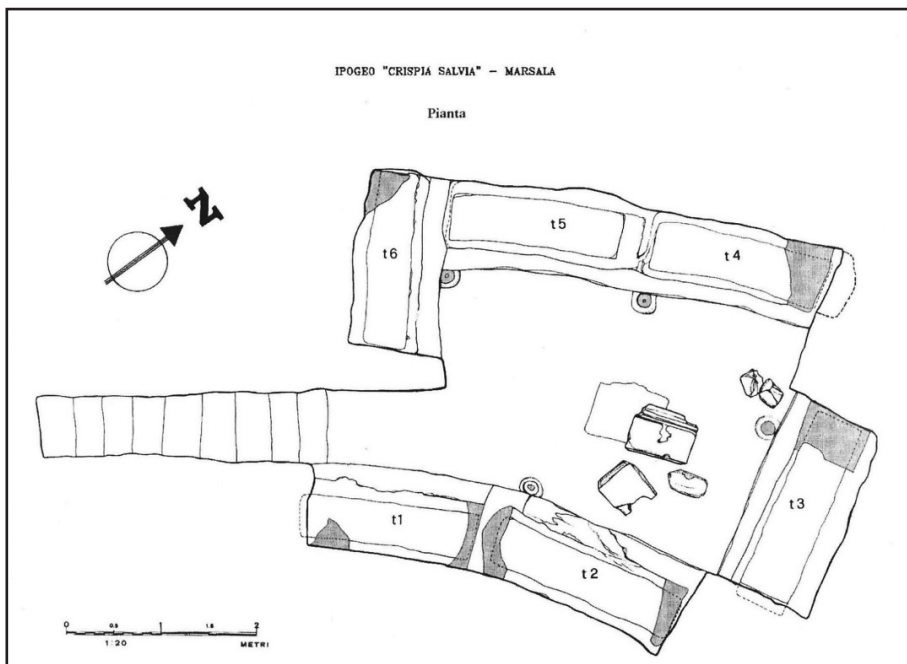


Fig. 1. Planimetry of the Hypogeum (drawn by E. Abbate).

There are six tombs in the walls of the burial chamber. They are numbered counterclockwise starting from the entrance. The most ancient tombs (n. 2, 3, 4 and 5) are dated to the middle of the 2nd century C.E. (thanks to the epigraphic characters of the Latin inscription of T3 and the pictorial decoration). These early tombs are rectangular case inside niches carved into the rock while the latter tombs belongs to the *arcosolium* type.

The walls were entirely smoothed with a white lime coat on which the pictorial decoration was made. The decoration consists of a red perimeter band, which covers the external quay of the burials and by figurative scenes with funerary subjects and decorative motifs. The decorations are characterized by lively polychromy, whose recurring theme is the floral element, providing a clear allusion to a heavenly environment (Bonacasa-Carra, 2002; Giglio, 1996a).

The north wall of the hypogeum was occupied by T3, a rectangular niche oriented in the EW direction, dedicated to *Crispia Salvia*. Above the T3 are depicted two winged figures, in convergent flight, holding a garland of red flowers arranged in a festoon (Fig. 2), while in upper-west position, inside a recess, is affixed a terracotta slab with a Latin inscription concerning the deceased (Bivona, 2000). The slab reports the name, *Crispia Salvia*, 45 years old, to which the husband, *Iulius Demetrius*, dedicates the epigraph remembering her as a very sweet wife with which he lived for 15 years «*libenti animo*» (Giglio, 1996a) (Bivona, 2000).



Fig. 2. Overview of the Hypogeum (photo by L. Pomara in Giglio, 1996a).

The tomb of *Iulius Demetrius* (T4) was placed on the western corner on the north wall and, also in this case, it was a rectangular niche. The deceased was placed in supine decubitus inside the burial (this type of burial have been already described in the Punic necropolis and Romans Time by Rosaria Di Salvo (Di Salvo, 2016).

The onomastics of the woman reveals her noble origins. She belonged to

two *gentes* of considerable importance: the *Crispius* and the *Salvii*. The origins of the husband are less clear. Indeed, the name *Iulius Demetrius* was common in all the cities of the island and he could have been a person of high rank (such as a magistrate), a simple Roman citizen or even a freedman (Bivona, 2000). The clearest proof of the family social rank is found in the richness and complexity of the pictorial decoration of the entire burial chamber; if it is really to be considered contemporary with the burial of *Crispia Salvia* (2nd century C.E.) based on the epigraphic characters and the discovery of a lamp, as claimed by R. Giglio (Giglio, 1996a and 2002), and not later (attributable instead to the following century) as R.M. Bonacasa-Carra (Bonacasa-Carra, 2002). In support of the dating of the T3, it seems worthy of note that in 2019 a fragment of an African pan (Hayes 181-A form) was found dating back to the first half of the second century C.E., which confirms the known chronological horizon.

MATERIALS AND METHODS

Preliminary operations

The skeletal materials are stored in the Regional Archaeological Museum Lilibeo (Marsala, TP). These materials derive mostly from the original excavation performed by Rossella Giglio as part of the recovery activity of the Superintendence for Cultural and Environmental Heritage of Trapani (Giglio, 1996a and 1996b). The collection was integrated with new material recovered in 2019. Furthermore, the soil taken during the «micro-excavation» *in situ* (Borgognini *et al.*, 1993; Mallegni, 2005) was sieved, as recommended by current methodologies, to recover all the small remains such as phalanges, or teeth. The osteological materials of Tombs 3 and 4 are attributable to two adult individuals (Fig. 3 and Fig. 4).

All the skeletal elements were reconstructed in anatomical positions to facilitate the analysis (White *et al.*, 2005) and for the consistency evaluation of the skeletons. Conservation forms and photographic documentation completed the study. The anthropological evaluations were based on the measurements and indices of Martin and Saller (Martin and Saller, 1957) and modifications (Canci and Minozzi, 2005; Mallegni and Lippi, 2009).

Determination of Sex

Sex determination was made using the «combined method» of Acsàdi and Nemeskèri (Acsàdi and Nemeskèri, 1970) and the methods of Ferembach, Iscan, Bruzek and Novotny (Ferembach, 1979; Iscan *et al.*, 1986; Bruzek, 2002; Krogman and Iscan, 1986; Novotny, 1986).

SCHEDA DI CONSERVAZIONE: SOGGETTO ADULTO

Anno: _____ Sito: **IPSEO CRISPIA SALVIA** N° Inv. _____ Autore: _____
U.S. CRAI 3

M2	M1	C	I2	I1	I2	C	M1	M2	M3	M2	M1	P2	P1	C	I2	I1	I2	C	P1	P2	M1	M2									
D									I														S								

LEGENDA DEL DIAGRAMMA DENTARIO

- I Elemento presente in situ
- L L'elemento isolato presente è identificato con certezza
- O Solo la radice è presente in situ
- X Agenesia dentaria
- X Dente perso ante mortem (alveolo chiuso)
- I Gemma presente in situ
- ? Uno di questi elementi è presente
- ? L'identificazione dell'elemento isolato non è possibile

LEGENDA DEL DIAGRAMMA ANATOMICO

- Regione presente ed identificata con certezza
- Regione frammentata
- Situazione non conosciuta con esattezza

NOTE:

Fig. 3. Skeleton Recording Sheet of Tomb 3 – Crispia Salvia.

SCHEDA DI CONSERVAZIONE: SOGGETTO ADULTO

Anno: _____ Sito: **IPOGEO CRISPIA SALVIA** N° inv. _____ Autore: _____
 U.S. **010474**

M2	M1	C	I2	I1	I2	C	M1	M2	M3	M2	M1	P2	P1	C	I2	I1	I2	C	P1	P2	M1	M2			
D									I													S			

LEGENDA DEL DIAGRAMMA DENTARIO

- Elemento presente in situ
- L'elemento isolato presente è identificato con certezza
- Solo la radice è presente in situ
- Agenesia dentaria
- Dente perso ante mortem (alveolo chiuso)
- Gemma presente in situ
- Uno di questi elementi è presente
- L'identificazione dell'elemento isolato non è possibile

D

S

NOTE:

Cervicali	Toraciche	Lombari

Regioni

- Regione presente ed identificata con certezza
- Regione frammentata
- Situazione non conosciuta con esattezza

Fig. 4. Skeleton Recording Sheet of Tomb 4 – Iulius Demetrius.

Determination of the Biological Age of Death

The methods employed refer to the degree of dental wear proposed initially by Brothwell (Brothwell, 1981) and then by Lovejoy (Lovejoy, 1985), and to the ribs' sternal extremity (margins and surface) morphological changes based (Iscan *et al.*, 1984; Oettlé and Steyn, 2000).

Anthropometry

As mentioned above, skeletal remains measurements and related index were taken and calculated on what is proposed by Martin and Saller (Martin and Saller, 1957).

The height (or stature) was estimated according to the methods of Trotter and Gleser (Trotter and Gleser, 1952; 1958; 1977).

Skeleton biology - Determination of Diseases and MOS

Pathologies were identified through a non-invasive analysis according to Canci and Minozzi (Canci and Minozzi, 2005), Ortner (Ortner, 2003) and Capasso (Capasso, 1985). Special attention was dedicated to the Markers of Occupational Stress (MOS) (Capasso *et al.*, 1999). For the MOS related to the dentition, the reference was Hillson (Hillson, 1996).

RESULTS AND DISCUSSION

We have divided the results into two sections, concerning Tomb 3 and Tomb 4 of the Hypogeum. The osteological recognition provided the biological profile and the main anthropological features of the buried. The study contributed new data useful to understand the lifestyle and the general conditions of the buried individuals, corollary to the knowledge of the historical and archaeological contexts.

Anthropological Analysis «Tomb 3»

Tomb 3 is a primary burial with osteological remains of an individual. Thanks to the epigraph dedicated by *Iulius Demetrius to his dead wife* we know the tomb was that of *Crispia Salvia* (Fig. 5). She was a woman of noble origins who died at about 45 years old (Giglio, 1996a; Bivona, 2000).

T3 Determination of Sex

Considering that the skull was fragmented and incomplete, the analysis of the skeletal sex focused on the pelvic fragments (Ferembach, 1979; Iscan *et al.*, 1986; Bruzek, 2002; Novotny, 1986). All the diagnostic characters available (right iliac wing and the sacrum) show female characteristics (ample and

U-shaped ischial incisura and sacrum with the classic «spoon» shape). Moreover, a suite of characters such as the short (left) scapula, the femura with a slightly harsh line and the small ribs and vertebral bodies supported this conclusion (Krogman and Iscan, 1986).

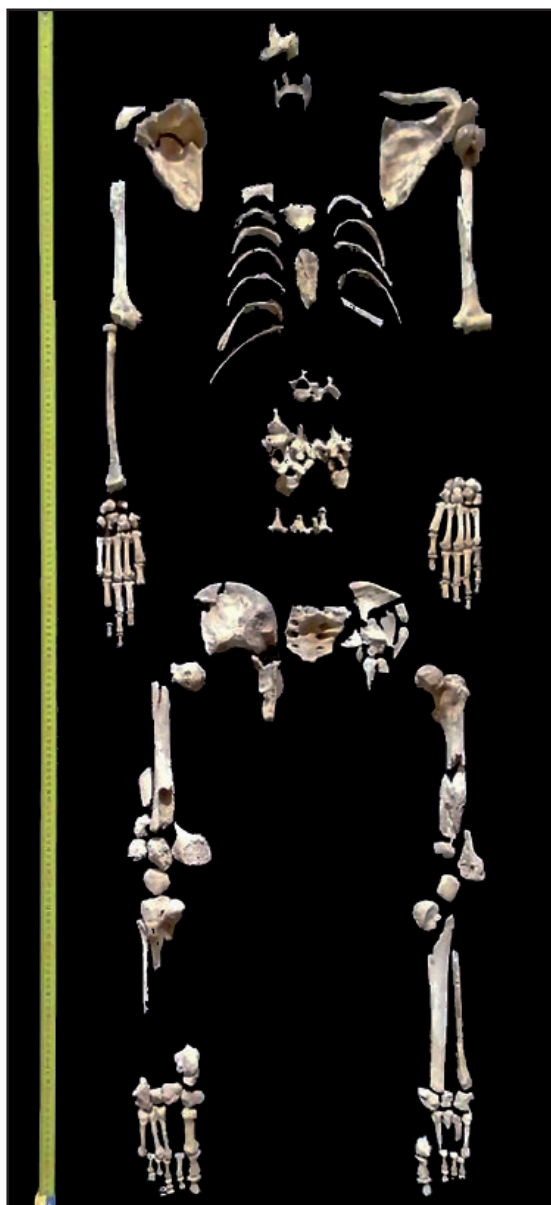


Fig. 5. Skeleton of burial in Tomb 3 – Crispia Salvia.

T3 Determination of the Biological Age of Death

In accordance with the epigraph which reports that *Crispia Salvia* died at 45 years old (considerable for that period), the skeleton was that of an adult. To corroborate this conclusion, a first evaluation was based on the degree of dental wear (Brothwell, 1981; Lovejoy, 1985). The method (with its diagnostic limits) showed an uncommon light wear not coherent with the age inferred from the funerary epigraph. At this point, we considered the ribs' sternal extremity (margins and surface) morphological changes, all of which showed irregular and raised margins (with the widened surface) attributable to the range 35-54 years (Iscan *et al.*, 1984; Oettlé and Steyn, 2000), in accordance with the age reported in the epigraph.

T3 Anthropometry

Measuring the right radius (the only entire long bone of T3), we calculated some anthropometric indices, such as the diaphyseal index and robustness index (Martin and Saller, 1957), that attested to a general slender body constitution and a height of about 163 cm (Tab. 1-I) (Trotter and Gleser, 1952; 1958; 1977).

(I) T3 <i>Crispia Salvia</i> - Right Radius		(II) T4 <i>Iulius Demetrius</i> - Left and Right Fibulae	
1-Maximum Length	23 cm		
2-Physiological length	21 cm	1-Maximum length	38,5 cm
3-Minimum circumference	4 cm	2-Maximum diameter	1,8 cm
4-Transverse diameter	1,45 cm	3-Minimum diameter	1,3 cm
5-Sagittal diameter	1,10 cm	4.a-Minimum circumference	5,5 cm
Diaphyseal Index (5/4x100)	76	Diaphyseal Index Index (3/2x100)	72
Robustness Index (3/2x100)	19	Robustness Index (4a/1x100)	14,3
Calculated Total Body Height	163,95 cm ± 4,24 cm	Calculated Total Body Height	175 cm ± 3,29 cm

Tab. 1. Table Reporting Anthropometry and Height of (I) *Crispia Salvia* and (II) *Iulius Demetrius*.

T3 Diseases and MOS

In summary, the anthropological data of the T3 skeleton allowed us to determine that the specimen belongs to a female 35-54 years old, about 163 cm in height. The lack of skeleton diseases and MOS (for instance arthrosis and osteophytes), combined with a slender build (long fingers and toes, narrow ribs, no evidence of muscle insertion on the long bones and small kneecaps and sacrum) suggested that the specimen had a quite comfortable lifestyle (Canci and Minozzi, 2005; Ortner, 2003). Further, the platycnemia and platymeria of the left tibia and femur, and the body constitution, suggest that the specimen carried out a limited physical activity (Capasso, 1985). In contrast to this observation, we observed a general flattening of the left tibia

sometimes associated with walking on steep or uneven ground (Capasso *et al.*, 1999). Teeth affected by very limited damage and the absence of diseases related to mechanical stress indicated proper chewing and access to foods that are not particularly stressful (only a few mild cavities and tartar linked to the bad oral hygiene at the times – Hillson, 1996). It is reasonable to assume, according to historical and archaeological references, that the T3 female individual lived in a comfortable environment enjoying the good health prerogative of the patrician families of Lilibeo.

T3 Special Finds

The accuracy of the funerary ritual and the integrity of T3 was attested by the discovery of the ossified «thyroid cartilage» which is a rare and extremely breakable element, difficult to find intact especially in a disturbed context.

Anthropological Analysis «Tomb 4»

T4 is a single burial that holds the skeleton of the husband of *Crispia Salvia*, *Iulius Demetrius* who homaged his deceased wife with this priceless monument. The discovery of the two fibulae, still *in situ*, in supine position suggests that it was a single primary burial (Fig. 6).

T4 Determination of Sex

During the preliminary step, part of the neurocranium was restored and reconstructed. A very marked inion and nuchal line, both typical male sexual characters, were described. Moreover, the large and robust mastoid process supported the hypothesis that it was an adult male.

T4 Determination of the Biological Age at Death

Through the T4 teeth recovered (listed in Fig. 3) it was possible to estimate an age at death between 35 and 45 years old (Brothwell, 1981; Lovejoy, 1985). Considering the limits of the method age of death was also determined by the ribs' sternal extremity changes. The extremities showed irregular and raised surface edges and, on this base, the age at death was estimated to range between 35 and 54 years (Iscan *et al.*, 1984; Oettlé and Steyn, 2000).

T4 Anthropometry

To estimate the height of the T4 specimen we analysed the fibulae (the only two intact long bones of the skeleton) recovered in 2019. All the necessary measurements were taken and the anthropometric indices obtained (the diaphyseal index and the robustness index) attested to a robust body constitution (Martin and Saller, 1957). The fibulae maximum lengths

provided a height of about 175 cm (Tab. 1-II) (Trotter and Gleser, 1952; 1958; 1977) that is above the average of the time (Di Salvo and Schimmenti, 2008; Di Salvo *et al.*, 2008; La Torre and Raffa, 2016; Lauria, 2020).



Fig. 6. Skeleton of burial in Tomb 4 – Iulius Demetrius.

T4 Diseases and MOS

Degenerative arthrosis and arthritic processes accompanied by vertebral «osteophytes beaks» were evident on T4 bones. Several strong MOS characterized the whole skeleton that appeared robust and with no signs of nutritional deficiencies (Canci and Minozzi; Capasso, 1985; Ortner, 2003).

Notable were the powerful ribs (and their strong connection with the vertebral bodies), and the remarkable muscular imprints (in particular on the right shoulder blade and on all the legs and feet bones). These traits were presumably due to intense physical training, probably in the martial arts (Capasso *et al.*, 1999). The right femur characterized by a marked hypertrophy and a huge ossification of the *linea aspera* was highly significant. On the left femur, great and lesser trochanters carried powerful gluteal muscular insertion; the very robust patellae were characterized by osteophytic formations on the anterior surface and around the *quadriceps femoris* insertion site area. The fibulae also had strong muscular insertions (more accentuated on the *vastus lateralis* insertion area) while on the heels' posterior side bony spicules, with vertical development, occupied the whole area of the insertion of the *tendo calcaneus*.

The enthesal changes listed above precisely describe the so called «knight markers» which means a robust skeletal structure highly stressed by intense use of the entire body (Capasso *et al.*, 1999). The findings could be the evidence that T4 was a man prepared for the art of war (the elite soldiers, as knights were generally privileged rich members of the society).

CONCLUSION

The newly available data presented above, confirm and support the archaeological deductions, further clarifying the anthropological and historical-archaeological context. According to our analysis, the human remains belong to two individuals a male and a female between 35 and 54 years old. A general slender build and a height of about 162 cm characterize the female remains (T3- *Crispia Salvia*). On the contrary, the male remains (T4- *Iulius Demetrius*) are rather robust with strong muscular insertions and a height of about 175 cm. The palaeopathological analysis of T3 female revealed only mild and occasional osteoarticular degenerative pathologies with no signs of functional stress except for a general flattening on the left tibia and femur. Instead, the T4 male remains had evidence of widespread arthrosis and vertebral osteophytic beaks. Several entesial changes on the muscle and tendon insertion areas (especially in the legs and the feet) are, reasonably, the consequence of intense physical activity and equestrian practice (Capasso *et al.*, 1999). T3 and T4 teeth show slight attrition, with some cavities and tartar.

Overall, the osteological analysis clearly shows that both the specimens belonged to high-ranking individuals characterized by conditions and lifestyles that were exclusive to Roman patrician families.

The onomastics of the name of the buried (*defuntam*) in T3, *Crispia Salvia* allowed us to infer her origins from two families (*gentes*) of considerable importance, the *Crispii* and the *Salvii* (previously attested in Lilibeo and western Sicily). The gentilitial *Crispius* (testified by several tools discovered in various sites and Segesta by tiles bearing the C.A.) was connected to a family that had considerable economic interests in the area. Even the *Salvii*, attested to Lilibeo by another funerary inscription, belonged to a high social rank. However, the origins of the husband are less clear indeed, given the widespread distribution of the name *Iulius Demetrius* in all the Sicilian cities. He could have belonged to high-ranking personalities, (such as magistrates and municipal), Roman citizens and even to freedmen (Bivona, 2000).

This work highlights the importance of combining anthropological study, where possible, with archaeological evaluations. Specifically, the anthropological study consisted in defining the parameters of skeletal biology on two individuals that the archaeological and epigraphic context placed in a well-defined social and elitist stratum of the Lilibeo context. The possibility of evaluating age with anthropological methods on a sample of known age (the age of *Crispia Salvia* is epigraphically attested) has also highlighted the possibility that the skeletal or dental morphological analysis may give results that do not correspond to other evidence.

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