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STAKLENE BOČICE OBLIKA DATULJA SA ZADARSKOG PROSTORA*

U članku se obrađuje šest reljefnih staklenih bočica oblika datulja pronađenih u grobnim kontekstima na širem zadarskom području. One su dio veće skupine staklenih predmeta antropomorfnih, zoomorfnih i fitomorfnih oblika koji se izrađuju tijekom 1. i 2. stoljeća. Riječ je o predmetima ispuhanima u dvodijelnim kalupima s naknadno dorađenim vratom i obodom i tijelom prekrivenim valovitim naborima koji imitiraju kožu zrele datulje. Više ili manje stilizirana, odnosno realno izvedena narebrena dijele ovakve predmete u dvije varijante, hiperrealistične i stilizirane primjerke. Realističan izgled mnogih bočica oblika datulja, kojemu osim izvedbe reljefnog ukrasa doprinosi i njihova boja koja je najčešće žučkasta, smeđa ili smeđe-crvena odnosno jantarna, pojedine je autore naveo na zaključak da je pri izradi kalupa korišteno pravo voće. Njihova popularnost ili bolje rečeno popularnost njihova sadržaja posvjedočena je širokom distribucijom diljem ondašnjeg Carstva u čemu brojem ne zaostaje ni zadarski prostor. S obzirom na to da je većina poznatih primjera pronađena na prostoru istočnog Mediterana, ondje im se i određuje mjesto produkcije. Iako je statistika varljiv kriterij za određenje radionice, u ovom je slučaju potvrđena ne samo popularnošću istonomediteranskog prostora u izradi staklenih predmeta puhanjem u kalup nego i popularnošću ondašnjih datulja, o čemu svjedoče brojni antički izvori.

KLJUČNE RIJEČI: *zadarsko područje, rimsko staklo, bočice oblika datulje*

UVOD

*A vitibus oleisque proxima nobilitas palmis.*¹ Plinije Stariji u svom epohalnom enciklopedijskom dijelu *Naturalis Historia* u XXIII. knjizi opisuje medicin-

SMALL GLASS BOTTLES IN THE SHAPE OF DATE FRUIT FROM THE ZADAR AREA*

The paper studies six small relief glass bottles in the shape of date fruit, unearthed in grave contexts in the broader Zadar area. They are part of a larger group of anthropomorphic, zoomorphic and phytomorphic glass artefacts produced in the course of the 1st and 2nd centuries. These are artefacts blown in two-part moulds with a subsequently worked neck and rim, and a body covered with wavy folds imitating the skin of ripe dates. Depending on whether the ribbing was more stylised or more realistic, such artefacts are classified into two variants: hyperrealistic and stylised specimens. The realistic appearance of many small bottles in the shape of date fruit, which is partly due to their ornamental relief style, and also partly their colour, which is mostly yellowish, brown, brown-red or amber, has led certain authors to the conclusion that real fruit was used for the production of the moulds. Their popularity, or rather the popularity of their content, is confirmed by their wide distribution across the area of the Empire, including the Zadar region. Given that the majority of specimens have been found in the Eastern Mediterranean, this area has been determined as the site of their production. Although statistics can be a misleading criterion for determining the location of workshops, in this instance it is confirmed not only by the widespread production of glass artefacts by means of mould-blowing in the Eastern Mediterranean area, but also by the popularity of dates in this region, as confirmed by numerous antique sources.

KEYWORDS: *Zadar area, Roman glass, small date-shaped bottles*

INTRODUCTION

*A vitibus oleisque proxima nobilitas palmis.*¹ Pliny the Elder in Book XXIII of his epochal encyclopedic work, *Naturalis Historia*, gives an account of

* Tekst posvećujemo našem dragom kolegi i prijatelju prof. dr. sc. Zdenku Brusiću koji je hrvatskoj arheološkoj znanosti svojim radom dao iznimani doprinos i ostavio neizbrisiv trag. Ostao nam je u trajnom pamćenju ne samo kao vrstan znanstvenik već i kao čovjek koji je u svakom trenutku bio spremjan za suradnju, za pomoći i dobronamjeran savjet. Njegov odlazak na „drugi svijet“ ostavio je veliku prazninu kod kolega koji su ga dobro poznavali.

¹ Plin. *Nat. Hist.* XXIII, 51.

1 Plin. *Nat. Hist.* XXIII, 51.

ske pripravke koji se dobivaju iz kultiviranih biljaka. Većina se poglavlja knjige odnosi na pripravke dobivene od vina odnosno vinove loze zatim masline, a kao treću najvažniju drvoliku biljku spominje datuljinu palmu.

Phoenix dactylifera L. zbog svojih jestivih plodova već tisućljećima kultivira u pustinjskim oazama jugozapadne Azije i sjeverne Afrike. S obzirom na ekstremne uvjete u takvim sušnim regijama, gdje malo koja kultura opstaje, njezini jestivi plodovi – datulje – iznimno su važan faktor u tamošnjoj ishrani. Bogat su izvor ugljikohidrata i prehrambenih vlakana, ali i širokog spektra esencijalnih vitamina i minerala zbog čega se koriste i u medicinske svrhe. Naime, nekoć empirijski prepoznati blagotvorni učinci na ljudski organizam danas su potvrđeni fitokemijskim istraživanjima koja su pokazala da datulje sadrže antocijanine, fenole, sterole, carotenide, procijanide i flavonide, odnosno za ljudsko zdravlje vrlo korisne spojeve.² Ne ulazeći u detaljnija objašnjenja konkretnijih pozitivnih učinaka svih esencijalnih nutrijenata, općenito se može zaključiti da imaju antihiperlipidemische, antikancerogene, gastroprotективne, hepatoprotективne i nefroprotective učinke na zdravlje.³

Dakle, zaista široka primjena ne samo ploda nego ponegdje lista i kore kao medikamenata opravdava Plinijevo pozicioniranje datuljine palme na po važnosti treće mjesto kultiviranih biljaka. U tri poglavlja spomenute XXIII. knjige osim različitih pripravaka i njihovih učinaka ističe i za njih najpogodnije vrste plodova. Tako za tebanske datulje navodi da su izvrsne za snagu i ublažavanje žđi te da su dobre i za one koji „pljuju krv“. Za tzv. *Caryotae* kaže da se u kombinaciji s ponekim drugim sastojcima primjenjuju lokalno na želudac,

remedies obtained from cultivated plants. The majority of the book's chapters relate to remedies obtained from wine, i.e. from grapevines, followed by olives, while the third most significant plant that Pliny mentions is the date palm.

Phoenix dactylifera L., due to its edible fruit, has been cultivated in the desert oases of Southwest Asia and North Africa for millennia. Given the extreme conditions in such arid regions, where only a few cultures persist, its edible fruit (dates) are an extraordinarily important factor in the local diet. They are a rich source of carbohydrate and dietary fibre, but also a wide spectrum of essential vitamins and minerals. They are therefore also used for medicinal purposes. In fact, the empirically identified beneficial effects on the human organism have now been confirmed by phytochemical research, which shows that dates contain anthocyanins, phenols, sterols, carotenoids, procyanidins and flavonoids, i.e. very useful compounds in terms of human health.² Without entering into detailed explanations of the more concrete positive effects of all their essential nutrients, it can generally be concluded that they have antihyperlipidemic, anti-carcinogenic, gastroprotective, hepatoprotective and nephroprotective effects on the health.³

Thus, the widespread application of not only the fruit but sometimes also the leaves and bark as medication justifies Pliny's ranking of date palm trees as third in terms of medical properties among cultivated plants. In three chapters of the abovementioned Book XXIII, apart from different remedies and their effectiveness, he also discusses the best varieties of the fruit. Thus, he states that Theban dates give strength and allay thirst, and are also very useful “for persons troubled with spitting of blood”. He claims caryota dates,

2 M. S. BALIGA *et al.*, 2011, 1812.

3 M. S. BALIGA *et al.*, 2011, 1820; Datulje sadrže vitamine A, B1, B2, B3, B6, B9 i C, folnu kiselinu, niacin, kalcij, kalij, magnezij, željezo te velik broj aminokiselina. Izvrsne su stoga protiv anemije, za jačanje tijela, smanjenje kolesterol u krvi, u reguliranju probave, kao zaštita od parazita i bakterija, za liječenje jetre i čišćenje organizma od otrovnih tvari, a smatra se čak da smanjuju porodajnu bol. Bogat su izvor antioksidansa koji su vrlo važni za zaštitu od srčanih oboljenja. Osim toga sadrže lutein i zaeksantin, pa se nazivaju „vitaminima za oči“, te fluor, bitan mineral u borbi protiv karijesa. Vjeruje se da su datulje učinkovite i u liječenju raka, za što je zaslužan element selen. Sok od datulja pomaže između ostalog i u liječenju grlobolje, različitih vrsta groznice i prehlade.

2 M. S. BALIGA *et al.*, 2011, 1812.

3 M. S. BALIGA *et al.*, 2011, 1820. Dates contain vitamins A, B1, B2, B3, B6, B9 and C, folic acid, niacin, calcium, potassium, magnesium, iron, and a great number of amino acids. Therefore, they are excellent against anemia, for strengthening the body, reducing cholesterol levels, regulating digestion, protecting against parasites and bacteria, providing liver treatment, and cleansing the body of toxic substances, and are even considered to reduce labour pain. They are a rich source of antioxidants that are very important in protecting against heart disease. In addition, they contain lutein and zeaxanthin, being called “vitamins for the eyes”, and fluorine, an essential mineral in the fight against tooth decay. It is believed that dates are also effective in the treatment of cancer, which can be attributed to the element selenium. Date juice helps, among other things, in the treatment of sore throat, and different types of fever and colds.

mjehur i crijeva. Ističe i njihove koštice čiji se pepeo koristi u izradi krema za oči.⁴

Za *myrobalanum* vrstu datulja piše da su najbolje one koje rastu u Egiptu za koje tvrdi da za razliku od ostalih nemaju koštice. U kombinaciji s oporim vinom pomažu kod dijareje ili obilnog menstrualnog krvarenja.

Od palme *elate*, navodi, koristi se i plod i list i kora drveta. Lišće za lokalno liječenje torakalne regije, kora drveta za svrbež, ali i u piću za bolesti bubrega mjehura i prsnih organa. Pepeo kore u kombinaciji s bijelim vinom korišten je za bolove u želucu, ali i za liječenje bolesti maternice.

Potvrdu ovim navodima nalazimo u još jednom vrlo značajnom djelu o herbalnoj medicini i općenito potencijalnim lijekovima istaknutog liječnika i Plinijeva istovremenika Pedanija Dioskorida – *Περὶ ὕλης ἰατρικῆς* (lat. *De Materia Medica*).

Datulje su, osim u medicinskom „žargonu“, naravno izuzetno prisutne i u onom kulinarskom, pa ih tako u Apicijevoj kuharici (*De re Coquinaria*) nalazimo u pregršt recepata od vina, salata, umaka, kuhane hrane do različitog mesa i ribe.

Konačno, potvrdu da su ne samo plodovi nego i kora drveta palme korišteni u izradi mirisnih ulja i balzama nalazimo čitajući Teofrasta ili pak fragmentarno sačuvano Antipanovo djelo.⁵

Da su staklene bočice oblika datulje koje ovdje obrađujemo služile upravo u svrhu pohrane kakvoga mirisnog ulja ili balzama, mišljenja su mnogih autora koji se njima detaljnije bave. Čak štoviše, birajući termin balzamarij, namjenski ih se *ad hoc* određuje. Kako do danas ipak nisu napravljene analize sadržaja ovakvih predmeta u raspravama o njihovoj namjeni, valjalo bi uzeti u obzir više faktora, ne samo njihove morfološke karakteristike.

in combination with certain other ingredients, can be taken “topically for affections of the stomach, bladder and intestines”. He also refers to date stones, the ash of which was employed as an ingredient in eye salves.⁴

He says that the most esteemed kind of myrobalan palm is that grown in Egypt, the dates of which, unlike those of other kinds, are without stones. Used with astringent wine, they were said to arrest diarrhoea and catamenia.

He claims the elate palm has buds, leaves, and bark that can be used for medicinal purposes. The leaves were applied to the thoracic regions, while the bark of the tree “heals itch-scab”, and “is given in drink, also, for diseases of the kidneys, bladder, and thoracic organs.” The ashes of the bark were used with white wine for gripping pains in the stomach, and were a remedy for affections of the uterus.

A confirmation of these claims is also found in another very significant work on herbal medicine, and remedies in general, written by the prominent physician and Pliny's contemporary Pedanius Dioscorides – *Περὶ ὕλης ἰατρικῆς* (Lat. *De Materia Medica*).

Besides medicine, dates, of course, also appear in culinary contexts. Thus, in Apicius's cookbook (*De re Coquinaria*) they are found in a number of recipes, including wines, salads, sauces, and various kinds of meat and fish dishes.

Finally, confirmation that not only palm fruit but also palm bark was used in the production of fragrant oils and balms is found in Theophrastus and in the fragments of the preserved work of Antiphanes.⁵

The opinion that the small date-shaped glass bottles studied in this paper served the purpose of storing scent oils or balms is shared by many authors who have studied them in detail. With the selection of the term *balsamaria* or balm vessels, their function was determined *ad hoc*. However, so far no analysis of the contents of such artefacts has been carried out, and when discussing their function, apart from their morphological characteristics, several factors need to be considered.

⁴ Plin. *Nat. Hist.* XXIII, 51. *Nuclei palmarum cremati in fictili novo cinere loto spodi vicem efficiunt miscenturque collyriis et calliblephara faciunt addito nardo*. Plinije navodi da koštice spaljene u novoj zemljanoj posudi stvaraju pepeo koji se zatim mora isprati. Diodor Sikulski (*Bibliotheka Historike*) za *caryotae* piše da nadmašuju ostale ne samo slatkoćom i veličinom nego i sočnošću (*Diod.* II, 53, 5).

⁵ Theophr. *De od.* XXVII: Antipanovo djelo dijelom je sačuvano kod Ateneja (*Athenaeus – Deipnosophistae* XV).

⁴ Plin. *Nat. Hist.* XXIII, 51. *Nuclei palmarum cremati in fictili novo cinere loto spodi vicem efficiunt miscenturque collyriis et calliblephara faciunt addito nardo*. Pliny states that date stones, burnt in a new earthen vessel, produce an ash which needs to be rinsed. Diodorus Siculus (*Bibliotheca historica*) wrote of caryota that it excels not only in sweetness and size but also in juiciness (*Diod.* II, 53, 5).

⁵ Theophr. *De od.* XXVII: The work of Antiphanes has been partly preserved in Athenaeus (*Deipnosophistae* XV).

TEHNIKA IZRADE STAKLENIH BOČICA OBLIKA DATULJE

Staklene bočice oblika datulje dio su veće skupine antropomorfnih, zoomorfnih i fitomorfnih staklenih predmeta.⁶ Riječ je o predmetima ispuhanima u dvodijelnim kalupima što potvrđuju, u većini slučajeva, vidljivi spojevi na tijelu. Ponegdje su oni vješto skriveni među valovitim naborima koji prikrivaju tijelo bočice, a koji imitiraju kožu zrele datulje. Tragovi kalupa nisu vidljivi na vratu i obodu što sugerira njihovu naknadnu doradu.

Ovakve su bočice najčešće rađene od stakla žućkaste, smeđe ili smeđe-crvene, odnosno jantarne boje, iako su poznati i primjerici od zelenog, ljubičastog, modrog ili pak „crnog“ stakla.⁷ Osim toga, zabilježeni su i primjerici kojima je unutrašnjost recipijenta obložena bijelim neprozirnim stakлом, a koje, u kombinaciji s vanjskim slojem najčešće smeđkaste, jantarne boje, dodatno pomaže realističnu imitaciju ploda. Takav, kod većine primjeraka iznimno realističan izgled pojedine je autore naveo na zaključak da je u izradi kalupa korišteno pravo voće koje bi prilikom pečenja jednostavno izgorjelo.⁸ Slijedom toga raspravlja se i o mogućnosti da različiti oblici bočica sugeriraju prezentaciju različitih vrsta datulja.⁹

U osnovi su takvi predmeti izrađivani u dvije varijante, pa nalazimo hiperrealistične i stilizirane primjerke koje pojedini autori nešto kasnije daturaju, iako kronološke razlike među njima za sada nisu jasno potvrđene.¹⁰

Razlike u izradi određenih primjeraka uočavaju se i u načinu izvedbe vrata i oboda. Jednu varijantu karakterizira nešto duži i uži vrat i jedva primjetno prošireni obod, dok je u drugom slučaju na kraćem vratu šire razvraćen obod.¹¹ Kronološke razlike među njima nisu uočene, iako se u pojedinim objavama primjećuje nešto šira datacija primjeraka dužeg vrata.¹² Međutim, postoje teze da je varijanta s dužim vratom italski proizvod,¹³ iako se takve teorije odbacuju uz objašnjenje da se ovakvi

PRODUCTION TECHNOLOGY OF SMALL DATE-SHAPED GLASS BOTTLES

Small date-shaped glass bottles are part of a larger group of anthropomorphic, zoomorphic and phytopomorphic glass artefacts.⁶ These are artefacts blown in two-part moulds, which in most cases is confirmed by visible joints on the body. Sometimes they are skilfully hidden among the wavy folds covering the bodies of the bottles, which imitate the skin of ripe dates. No traces of moulding are visible on the neck or rim, suggesting their subsequent finishing.

Such small bottles were most frequently made of glass that was yellowish, brown, brown-red, or amber in colour, although there are also green, purple, blue or “black” glass specimens.⁷ In addition, specimens have also been recorded whose interior was coated with white opaque glass that, combined with an outside layer most frequently of a brownish, amber colour, additionally increased the reality of the fruit imitation. This – in most specimens extraordinarily realistic – appearance has led certain authors to the conclusion that real fruit was used in the production of moulds, and was simply burnt during firing.⁸ Thus, the possibility has also been discussed of various bottle shapes suggesting different date species.⁹

Basically, such artefacts were manufactured in two variants, so that we find hyperrealistic and stylised specimens, which individual authors date somewhat later, although so far no chronological differences among them have been confirmed.¹⁰

Differences in the production of certain specimens are also identified in the workmanship of the neck and rim. One variant is characterised by a somewhat longer and narrower neck and a barely perceptibly expanded rim, while the other has a broader inverted rim on a shorter neck.¹¹ No chronological differences between them have been identified, although in certain publications a somewhat broader dating of the specimens with a longer neck has been observed.¹² However, there are theses that the variant with the longer neck is an Italic product,¹³ although such the-

6 C. ISINGS, 1957, 94, forma 78d; G. DE TOMASSO, 1990, 87, tip 77.

7 I. FADIĆ, 2001, 215.

8 E. M. STERN, 1995, 92.

9 E. M. STERN, 1995, 92.

10 I. FADIĆ, 2001, 215.

11 Općenito se duži vrat vezuje uz stilizirane primjerke, a kraći uz one realističnije.

12 G. L. RAVAGNAN, 1994, 50-51, kat. br. 60-63.

13 M. C. CALVI, 1968, 102; Z. BULJEVIĆ, 2002, 393.

6 C. ISINGS, 1957, 94, form 78d; G. DE TOMASSO 1990, 87, type 77.

7 I. FADIĆ, 2001, 215.

8 E. M. STERN, 1995, 92.

9 E. M. STERN, 1995, 92.

10 I. FADIĆ, 2001, 215.

11 Generally, the longer neck is associated with stylised specimens, and the shorter neck with more realistic ones.

12 G. L. RAVAGNAN, 1994, 50-51, Cat. Nos. 60-63.

13 M. C. CALVI, 1968, 102; Z. BULJEVIĆ, 2002, 393.

proizvodi importiraju isključivo poradi sadržaja i da ih kao takve nema smisla replicirati u nekoj od italskih radionica.¹⁴

DISTRIBUCIJA, PROVENIJENCIJA I DATACIJA

Distribuciju ovih predmeta moguće je pratiti diljem Rimskog Carstva, pa ih tako bilježimo na tlu današnje Sirije (Dura Europos, Palmyra, Homs, Amrit), Palestine (*Samaria*), Izraela (Lod), Cipra, Turske, Ukrajine (*Panticapeum*),¹⁵ Armenije (Garni, Sevan), Rodosa, Grčke (*Amphipolis*), Makedonije (Skopje), Italije (*Pompeii*, *Herculaneum*, Rim, Aosta, Voghenza, Bologna, Vetralla, Brescia, Akvileja, Trst), Slovenije (Ribnica),¹⁶ Austrije (*Carnuntum*), Njemačke (Trier, Remagen, Krefeld-Gellep), Švicarske (*Aventicum*), Španjolske (Bello, Ontur)¹⁷ te Hrvatske (Vid, Solin, Zadar, Nin).¹⁸ Zabilježeni su i primjeri van granica Carstva u Iraku (Babilon) i Ujedinjenim Arapskim Emiratima (ed-Dur).¹⁹

S obzirom na to da su u velikom broju nađene na istoku Mediterana, posebno na sirijskom prostoru, ondje im se i traži ishodište. Tomu u prilog svakako ide činjenica da je sirijsko-palestinsko područje bilo izrazito poznato po uzgoju datulja koje svoje mjesto nalaze i u pisanim izvorima. Tako Plinije piše da su *caryotae*, koje antički izvori ističu kao najbolje, a koje se rabe kao hrana, ali i kao sirovina za izradu vina s vrlo jakim utjecajem na čovjeka, najviše cijenjene u Judeji, posebno u Jerihonu, iako su i one koje rastu u dolinama Archelais, Phaselis i Livias veoma visoko cijenjene.²⁰ Poznate su i tzv. *Nicolaus* datulje nazvane po Nicolaju iz Damaska koji je samom caru Augustu nudio najfinije plodove.²¹ Osim toga zanimljivo je da je grčki naziv toga geografskog prostora *Phoenike* homonim imenu datuljine palme *Phoinix*.

ories have been rejected with the explanation that such products were imported only for their content, and that replicating the bottles in an Italic workshop made no sense.¹⁴

DISTRIBUTION, ORIGIN AND DATING

The distribution of these artefacts can be traced across the Roman empire, and they have been recorded on the territory of present-day Syria (Dura Europos, Palmyra, Homs, Amrit), Palestine (*Samaria*), Israel (Lod), Cyprus, Turkey, Ukraine (*Panticapeum*),¹⁵ Armenia (Garni, Sevan), Rhodes, Greece (*Amphipolis*), Macedonia (Skopje), Italy (*Pompeii*, *Herculaneum*, Rome, Aosta, Voghenza, Bologna, Vetralla, Brescia, *Aquileia*, Trieste), Slovenia (Ribnica),¹⁶ Austria (*Carnuntum*), Germany (Trier, Remagen, Krefeld-Gellep), Switzerland (*Aventicum*), Spain (Bello, Ontur),¹⁷ and Croatia (Vid, Solin, Zadar, Nin).¹⁸ Specimens have also been recorded outside the boundaries of the Empire, in Iraq (Babylon) and the United Arab Emirates (ed-Dur).¹⁹

Given that a large number of them have been found in the eastern Mediterranean, particularly in the area of Syria, this is where their origin is assumed. This is supported by the fact that the Syrian-Palestinian area was extraordinarily famous for the cultivation of dates, as is confirmed in written sources. Thus, Pliny writes that the caryota, deemed by antique sources to be the most esteemed, enjoyed the greatest repute in Judea, "particularly in *Hiericus* (Jericho), although those that grow at Archelais, Phaselis and Livias" valleys were highly esteemed, where they were used as food, but also in the production of strong wines "apt to affect the head".²⁰ So-called Nicolaän dates were also famous. These were named after Nicholas of Damascus, who provided the Emperor Augustus with a choice variety of dates from his estate.²¹

14 L. MANDRUZZATO, 1995, 73-74.

15 N. KUNINA, 1997, 126.

16 I. LAZAR, 2004, 22, 54-55, kat. br. 21-22.

17 Najpregledniji popis lokaliteta donose E. M. STERN, 1977, 44-45 i E. M. STERN, 1995, 93. Osim toga distribucijom ovakvih bočica značajnije se bave: M. C. CALVI, 1968, 102, kat. br. 251, T, 17, 3; J. W. HAYES, 1975, 49; L. MANDRUZZATO, 1995, 71-76; I. FADIĆ, 2001, 217; Z. BULJEVIĆ, 2002, 393.

18 Ž. RAKNIĆ, 1968, 212, tab. II. 2; G. L. RAVAGNAN, 1994, 50-51, kat. br. 60-63; I. FADIĆ, 1997, 82, 111, kat. br. 44; I. FADIĆ, 2001, 216; Z. BULJEVIĆ, 2002, 393, kat. br. 2, T. I.

19 D. WHITEHOUSE, 2001, 47.

20 Plin. *Nat. Hist.* XIII, 9.

21 Athen. *Deip.* 14.652.

14 L. MANDRUZZATO, 1995, 73-74.

15 N. KUNINA, 1997, 126.

16 I. LAZAR, 2004, 22, 54-55, Cat. Nos. 21-22.

17 For the clearest list of sites, see: E. M. STERN, 1977, 44-45; E. M. STERN, 1995, 93. In addition, the distribution of such small bottles has been investigated by: M. C. CALVI, 1968, 102, Cat. No. 251, T, 17, 3; J. W. HAYES, 1975, 49; L. MANDRUZZATO, 1995, 71-76; I. FADIĆ, 2001, 217; Z. BULJEVIĆ, 2002, 393.

18 Ž. RAKNIĆ, 1968, 212, Pl. II. 2; G. L. RAVAGNAN, 1994, 50-51, Cat. Nos. 60-63; I. FADIĆ, 1997, 82, 111, Cat. No. 44; I. FADIĆ, 2001, 216; Z. BULJEVIĆ, 2002, 393, Cat. No. 2, T. I.

19 D. WHITEHOUSE, 2001, 47.

20 Plin. *Nat. Hist.* XIII, 9.

21 Athen. *Deip.* 14.652.

Usudili bismo se zaključiti da je slava regionalnih datulja po svemu sudeći inspirirala ondašnje staklare koji su konačno jednako slavni u izradi reljefnog stakla.²²

Najraniji potvrđeni primjerak ovakve boćice pronađen je u Trieru u grobu datiranom u Kladijev period (41.-54.).²³ Prije 79. godine datirani su i primjerici iz Pompeja i Herkulaneja. S obzirom na to da su ovakvi predmeti većinom pronalaženi u grobovima, dosta je njih poprilično precizno datirano u drugu polovicu 1. i početak 2. stoljeća: Sirija (Dura Europos), Izrael (Lod), Ukrajina (*Panticapeum*), Grčka (*Amphipolis*), Italija (Vetralla), Hrvatska (Zadar)²⁴ odnosno u drugu polovicu 2. stoljeća: Hrvatska (Zadar), Italija (Akvileja), Španjolska (Bello).²⁵ Nalazi ovakvih predmeta u grobnim kontekstima u Njemačkoj (Krefeld–Gellep) i Izraelu (Samaria) datiranim u 4. i 5. stoljeće većinom se objašnjavaju nasleđem.²⁶

STAKLENE BOČICE OBLIKA DATULJA SA ZADARSKOG PROSTORA

Do danas je na širem zadarskom prostoru pronađeno šest staklenih boćica oblika datulje koje se čuvaju u dvije institucije, Muzeju antičkog stakla u Zadru i Museo Nazionale di Murano u Veneciji.²⁷

Od sveukupno četiri primjerka koja se čuvaju u Veneciji, za tri se na temelju dostupne dokumentacije pretpostavlja da su pronađena početkom prošlog stoljeća na jednoj od antičkih nekropola Zadra, Nina ili Aserije, dok je četvrti činio inventar groba 1B djelomično istražene nekropole antičkog Nina (kat. br. 3-6).²⁸

It is also interesting that the Greek name of this geographical region, *Phoenike*, is homonymous with the name of the *Phoinix* date palm.

We dare to conclude that, to all appearances, the popularity of regional dates inspired the glassmakers of the period who were, eventually, to become equally famous for the production of relief glass.²²

The earliest confirmed specimen of such a small bottle was unearthed in Trier, in a grave dated to the period of the rule of Claudius (41-54).²³ Specimens from Pompeii and Herculaneum have also been dated to before AD 79. Given that such artefacts were mostly unearthed in graves, a rather large number of them have been quite precisely dated to the second half of the 1st and the beginning of the 2nd century (Syria (Dura Europos), Israel (Lod), Ukraine (*Panticapeum*), Greece (*Amphipolis*), Italy (Vetralla), Croatia (Zadar)),²⁴ and to the second half of the 2nd century (Croatia (Zadar), Italy (*Aquileia*), Spain (Bello)).²⁵ Finds of such artefacts in grave contexts in Germany (Krefeld–Gellep) and Israel (*Samaria*) dated to the 4th and 5th centuries are mostly explained by their having been passed down.²⁶

SMALL GLASS BOTTLES IN THE SHAPE OF DATE FRUIT FROM THE ZADAR AREA

So far, in the broader Zadar area six small date-shaped glass bottles have been unearthed, which are kept in two institutions: the Museum of Ancient Glass in Zadar and the Museo Nazionale di Murano in Venice.²⁷

Of the four specimens kept in Venice, based on the available documentation, three are assumed to have been found at the beginning of the last century at one of the Classical Antiquity necropolises of Zadar, Nin or Asseria, while the fourth was part of the inventory of grave 1B of the partly excavated necropolis of classical antique Nin (Cat. Nos. 3-6).²⁸

22 Plin. *Nat. Hist.* XXXVI, 193:

23 K. GOERTHER-POLASCHEK, 1977, 96, kat. br. 453; E. M. STERN, 1995, 93.

24 E. M. STERN, 1995, 93.

25 J. W. HAYES, 1975, 49; E. M. STERN, 1995, 93. Španjolski primjerak datiran je novčićem Faustine mlađe.

26 E. M. STERN, 1995, 93.

27 U Arheološkom muzeju u Zagrebu čuva se boćica oblika datulje za koju V. Damevski navodi da je iz Zadra ili Nina, međutim uvidom u dokumentaciju ispostavilo se da je riječ o solinskom primjerku (V. DAMEVSKI, 1976, 65, 72, T. IX. 5). Zahvaljujemo kolegi dr. sc. Zoranu Greglu na informaciji.

28 G. L. RAVAGNAN, 1994, 50, 51, kat. br. 60-63.

22 Plin. *Nat. Hist.* XXXVI, 193.

23 K. GOERTHER-POLASCHEK, 1977, 96, Cat. No. 453; E. M. STERN, 1995, 93.

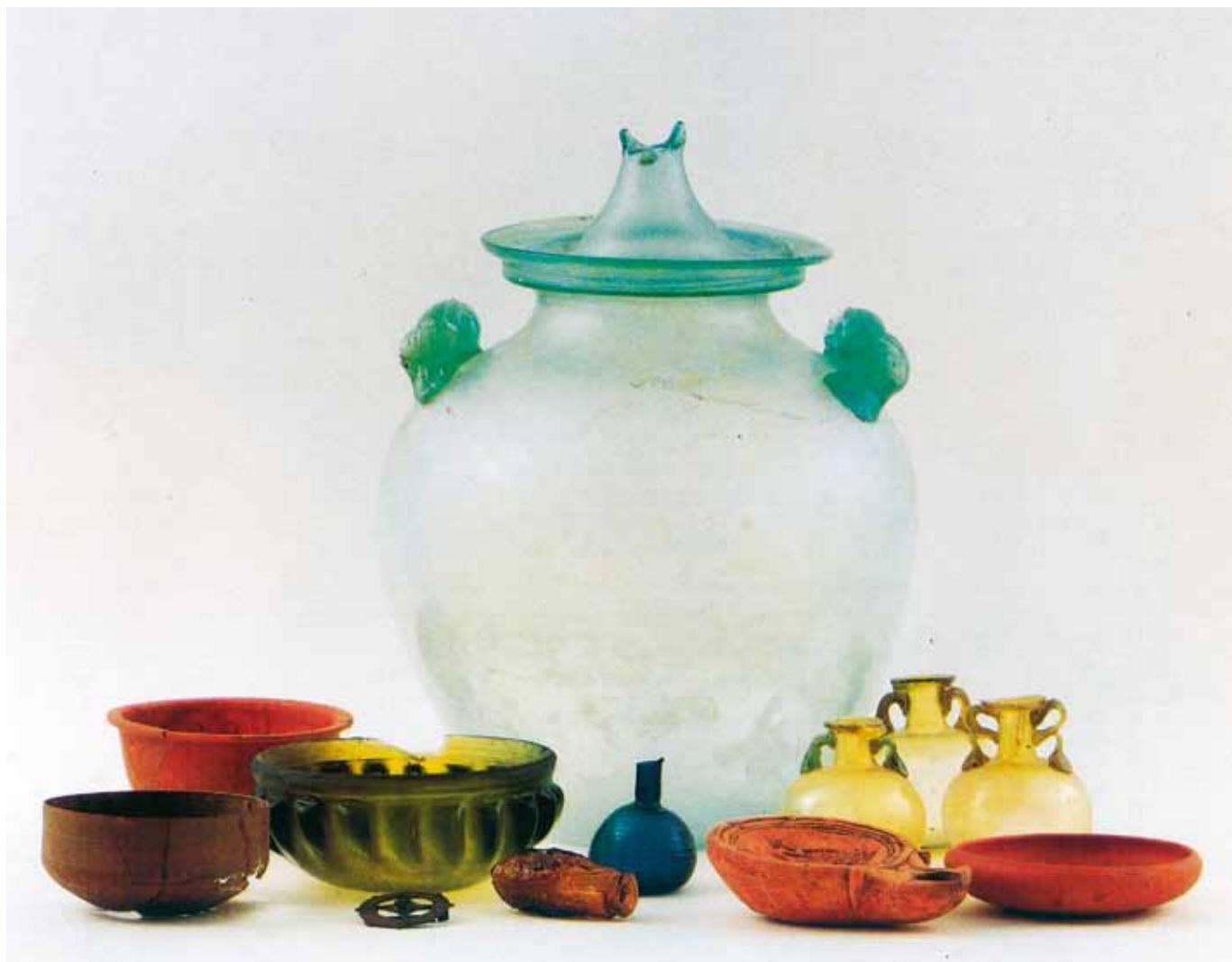
24 E. M. STERN, 1995, 93.

25 J. W. HAYES, 1975, 49; E. M. STERN, 1995, 93. A Spanish specimen was dated based on a coin with Faustina the Younger on it.

26 E. M. STERN, 1995, 93.

27 The Archaeological Museum in Zagreb holds a small date-shaped bottle which V. Damevski claimed was from Zadar or Nin. However, examination of the documentation proved that it was a Solin example (V. DAMEVSKI, 1976, 65, 72, T. IX. 5). We extend our thanks to our colleague Zoran Gregl PhD for the information.

28 G. L. RAVAGNAN, 1994, 50, 51, Cat. Nos. 60-63.



SL. I. / FIG. I.

Inventar groba 1B iz Nina (preuzeto iz: G. L. RAVAGNAN, 1994, 240, tav. XXVI).

Inventory of the grave 1B from Nin (after: G. L. RAVAGNAN, 1994, 240, tav. XXVI).

Sva četiri izrađena su puhanjem stakla (žuto-smeđe, smeđe ili jantarne neprozirne boje) u dvo-dijelni kalup. Dva primjerka s nekropole Zadra, Nina ili Aserije (kat. br. 4-5) odlikuje nešto duži vrat i stiliziraniji oblik datulje, dok je za treći realističnije izvedbe (kat. br. 3) teže odrediti pripada li varijanti s kraćim ili dužim vratom s obzirom na to da su upravo na tom dijelu vidljivi tragovi paljenja.²⁹ Hiperrealističnoj varijanti boćica koje općenito odlikuje kraći cilindrični vrat svakako pripada ninski primjerak (kat. br. 6) pronađen u grobu 1B.³⁰ Osim ove boćice inventar groba, koji

All four were made by blowing glass (of a yellow-brown, brown or amber opaque colour) in a two-part mould. Two specimens from the necropolis in Zadar, Nin or Asseria (Cat. No. 4-5) are characterised by a somewhat longer neck and a stylised date form, while it is harder to determine whether a third, of a more realistic style (Cat. No. 3), had a shorter or longer neck, as at precisely this point the traces of burning are visible.²⁹ The Nin specimen (Cat. No. 6), unearthed in grave 1B, certainly belongs to the hyperrealistic variant of small bottles that are generally characterised by a shorter cylindrical neck.³⁰ In addition to this small

29 Da je riječ o varijanti kraćeg vrata sugerira datacija G. L. Ravagnan, koja primjerke dužeg vrata u odnosu na ovaj (druga polovica 1. do prve polovice 2. stoljeća) nešto šire određuje (od druge polovice 1. do 2. stoljeća).

30 G. L. RAVAGNAN, 1994, 51, kat. br. 63.

29 That it is the variant with a shorter neck is suggested by the dating of G. L. Ravagnan, who determined that specimens with a longer neck (from the second half of the 1st to the 2nd century) were somewhat broader compared to this one (second half of the 1st to the first half of the 2nd century).
30 G. L. RAVAGNAN, 1994, 51, Cat. No. 63.

prepoznajemo zahvaljujući fotografiji koju donosi G. L. Ravagnan, čine staklena urna i poklopac, tri staklena aribala, staklena bočica, staklena narebrena zdjelica, dvije keramičke zdjelice, keramička plitica, keramička lucerna s prikazom na disku te metalna spona (Sl. 1). Na osnovu prikazanih predmeta grob je moguće datirati u sredinu i drugu polovicu 1. stoljeća.

Morfološki najsličniji ninskom jesu i primjeri koji potječu s istraživanja zadarske antičke nekropole, a koji se čuvaju u Muzeju antičkog stakla u Zadru.

Prvi od njih (kat. br. 1) pronađen je još 1962. godine kada se prilikom radova na izgradnje vojarne „Novi vojni logor“ našlo na rimske grobove.³¹ Tom je prilikom istraženo devet paljevinskih grobova datiranih u 1. i početak 2. stoljeća. Staklena bočica oblika datulje pronađena je u grobu 2 (paljevinski ukop) u kojem je osim nje pronađena keramička urna s poklopcom, stakleni tordirani štapić/miješalica, dva fragmenta koštanog vretena, stakleni vrčić četvrtastog tijela, dva staklena balzamarija, necjelovita koštana ukosnica, dva koštana pršljena te dvije zlatne naušnice u obliku lista.³² Grob je, pa tako i bočicu, posredstvom prvenstveno staklenog vrčića kvadratnog tijela moguće datirati u kraj 1. i početak 2. stoljeća.³³

Druga bočica (kat. br. 2) pronađena je također u grobu spaljenog pokojnika (grob 436) u keramičkoj urni prilikom istraživanja zadarske antičke nekropole 1989. godine.³⁴ U grobu su osim navedene boćice i keramičke urne pronađene i dvije staklene boce, kvadratični stakleni vrčić, staklena boca s tri udubljenja, ogledalo s polukružnom ručicom, brončana alkica te brončani novac Antonina Pija posredstvom kojega je grob datiran u sredinu drugoga stoljeća.³⁵

Obje boćice izrađene su puhanjem stakla smeđe-žute, jantarne boje u dvodijelni kalup, s tim da im je unutrašnjost presvučena slojem bijelog neprozirnog stakla. U oba slučaja iz reljefno naboranog tijela izlazi nešto kraći cilindrični vrat i lagano razvraćen obod.

bottle, the grave inventory which can be identified thanks to the photo published by G. L. Ravagnan, includes a glass urn and lid, three glass *aryballoi*, a small glass bottle, a ribbed glass bowl, two small ceramic bowls, a ceramic saucer, a ceramic *lucerna* with a representation on a disc, and a metal buckle (Fig. 1). Based on the represented artefacts, the grave can be dated to the mid-1st or second half of the 1st century.

The specimens originating from the excavation campaign conducted at the Zadar classical antique necropolis, and held in the Museum of Ancient Glass in Zadar are most similar to the specimen of Nin in terms of morphology.

The first of them (Cat. No. 1) was unearthed as early as 1962, when during excavations as part of the construction of military barracks (the “New Military Camp”), a Roman grave was unearthed.³¹ On this occasion, nine cremation graves dating to the 1st and the beginning of the 2nd century were excavated. A small date-shaped glass bottle was found in grave 2 (cremation burial) along with a ceramic urn with a lid, a spirally twisted glass stick/mixer, two fragments of a bone spindle, a glass beaker with a rectangular body, two glass balm vessels, an incomplete bone hair pin, two bone whorls, and two golden leaf-shaped earrings.³² The grave, and correspondingly also the bottle, can – primarily based on the glass beaker with a rectangular body – be dated to the end of the 1st or the beginning of the 2nd century.³³

The second small bottle (Cat. No. 2) was also found in a cremation grave (grave 436) in a ceramic urn during the campaign conducted at the Zadar classical antique necropolis in 1989.³⁴ Apart from the abovementioned small bottle and ceramic urn, two glass bottles were also found in the grave, together with a squared glass beaker, a glass bottle with three depressions, a mirror with a semi-circular handle, a bronze ringlet and bronze coins of Antoninus Pius, based on which the grave was dated to the mid-2nd century.³⁵

Both small bottles were made by blowing brown-yellow, amber coloured glass in a two-part mould, and their interiors were covered with a layer of white opaque glass. In both cases, the somewhat shorter cylindrical neck and slightly inverted rim emerge from the relief ribbed body.

31 Ž. RAKNIĆ, 1968, 211-214. Istraživanja je proveo Arheološki muzej Zadar.

32 Ž. RAKNIĆ, 1968, 214, tab. II. 2.

33 I. FADIĆ, B. ŠTEFANAC, 2012, 15, 179-181, kat. br. 146-170.

34 Istraživanja je proveo Arheološki muzej Zadar (pod vodstvom Smiljana Gluščevića).

35 S. GLUŠČEVIC, 2005, 667.

31 Ž. RAKNIĆ, 1968, 211-214. The campaign was conducted by the Archaeological Museum in Zadar.

32 Ž. RAKNIĆ, 1968, 214, Pl. II. 2.

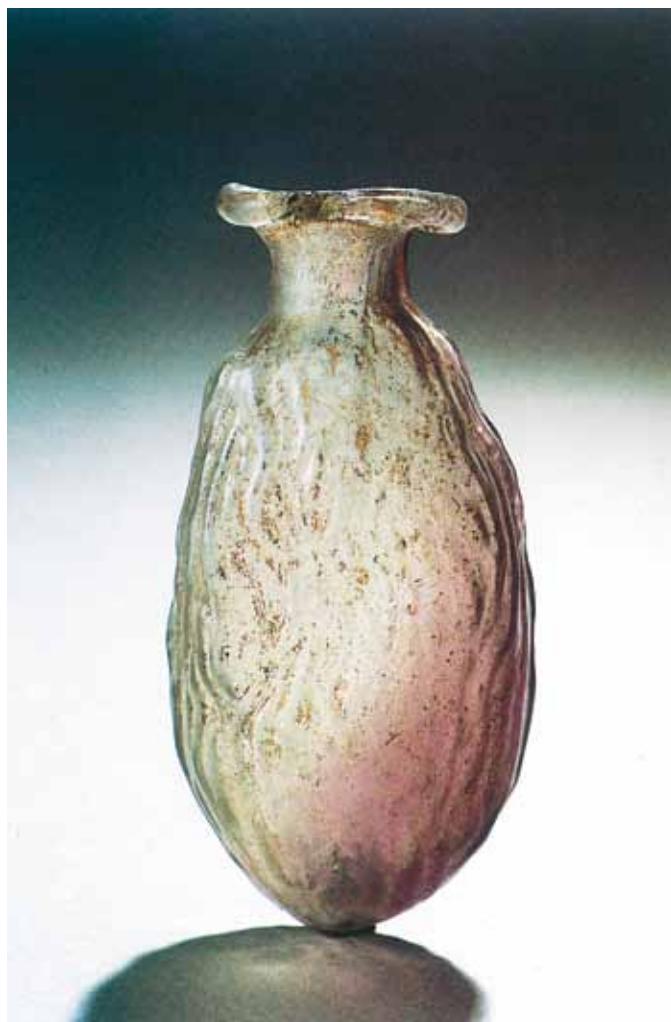
33 I. FADIĆ, B. ŠTEFANAC, 2012, 15, 179-181, Cat. Nos. 146-170.

34 The campaign was conducted by the Archaeological Museum in Zadar (led by S. Gluščević).

35 S. GLUŠČEVIC, 2005, 667.



SL. 2. i 3 / FIGS. 2 and 3
Boćice iz Narone (preuzeto iz: I. FADIĆ, 1997, 111, kat. br. 43, 44).
Bottles from Narona (after: I. FADIĆ, 1997, 111, kat. nos. 43, 44).



Analogije predstavljenim primjercima na istočnoj obali Jadrana nalazimo u Saloni, odakle potječu tri primjerka,³⁶ i Naroni, gdje su pronađene dvije takve boćice (Sl. 2 i 3).³⁷ Zanimljivo je da jedna od njih pronađena u grobu datiranome u Klaudijevo-Neronovo doba (od sredine 1. do početka 2. stoljeća), čiji prilozi upućuju na moguće zanimanje pokojnika – liječnika.³⁸

Analogies with the presented specimens are found on the Eastern Adriatic coast in Salona, from where three specimens originate,³⁶ and in Narona, where two such small bottles have been found (Figs. 2 and 3).³⁷ Interestingly, one of them was in a grave dated to the Claudius-Nero era (from the middle of the 1st until the beginning of the 2nd century), its enclosures suggesting the possible profession of the deceased: a physician.³⁸

36 I. FADIĆ, 1997, 82, 111, kat. br. 43; Z. BULJEVIĆ, 2002, 393, kat. br. 2, 3, T. I. 2a; Z. BULJEVIĆ, 2007, 169172, sl. 7. Ovima bi se mogao pribrojiti primjerak iz Arheološkog muzeja u Zagrebu (vidi fusnotu 27).

37 I. FADIĆ, 1997, 82, 111, kat. br. 44 (greškom objavljen kao salonitanski); Z. BULJEVIĆ, 2003, 101, kat. br. 55, T. V.

38 Z. BULJEVIĆ, 2003, 101-104.

36 I. FADIĆ, 1997, 82, 111, Cat. No. 43; Z. BULJEVIĆ, 2002, 393, Cat. Nos. 2, 3, T. I. 2a; Z. BULJEVIĆ, 2007, 169172, Fig. 7. The specimen from the Archaeological Museum in Zagreb (see footnote 27) might be classified in this group as well.

37 I. FADIĆ, 1997, 82, 111, Cat. No. 44 (by mistake published as Salonian); Z. BULJEVIĆ, 2003, 101, Cat. No. 55, T. V.

38 Z. BULJEVIĆ, 2003, 101-104.

FUNKCIJA I INTERPRETACIJA

O tome što se pohranjivalo u ovakvim bočicama možemo samo nagađati s obzirom na to da do danas, koliko nam je poznato, nisu rađene analize njihova sadržaja. Međutim, općenito se drži da je u njima po svoj prilici bilo pohranjeno kakvo esencijalno odnosno eterično ulje. Skloni smo se prikloniti takvim zaključcima uz napomenu da nije nužno (kako se to obično ističe u literaturi) esencijalna ulja vezivati isključivo uz mirise. Naime, ona se mogu višestruko koristiti u medicinske svrhe, za inhalaciju, kupke, masaže, u izradi parfema, ali i u kulinarstvu. Vrlo je prikladno da su i same datulje jednako višestruko primjenjive, na što smo se osvrnuli i u uvodnom dijelu članka. Oblik, odnosno zapremnina ovakvih recipijenata idu u prilog iznesenom.

ZAKLJUČAK

Na temelju svega izrečenog može se zaključiti da su staklene bočice oblika datulje iznimno popularan proizvod istočnomediterskih radionica aktivnih u 1. i 2. stoljeću, što potvrđuje njihova široka distribucija diljem Rimskog Carstva. Njihov nastanak usko je povezan uz svekoliku popularnost datulje kao ploda prisutnog u svim sferama života, o čemu se raspravljalo u uvodu.

Njihovu trgovачku atraktivnost svjedoči čitav niz navoda koji u prvi plan kao vlasnike plantaža, a time i ubirače zarade, guraju vladajuće elite, bilo judejskog kraljevstva, egipatskog kraljevstva ili pak Rimskog Carstva. Tako npr. Herod Veliki posjeduje plantaže datulja u okolini Jerihona koje mu oduzima Kleopatra, ali do kojih opet dolazi u posjed nakon bitke kod Akcija i posredstvom samog Oktavijana. Herodova sestra Saloma svoje plantaže u okolini Jerihona, Archelaisa i Phaselisa oporučno ostavlja carici Liviji, u čije se ime njima bavi carski prokurator. Iako je nije moguće ničim konkretnim potkrijepiti, sama ideja, koju su pojedini autori istakli, da je od flavijevskog vremena trgovina datulja isključivo u rukama države, dovoljno govori o njihovo važnosti.³⁹

FUNCTION AND INTERPRETATION

It can only be guessed as to what was stored in such bottles, given that, as far as we know, no analyses of their contents have ever been carried out. However, it is generally believed that most probably they were used for preserving some kind of essential, i.e. volatile, oils. We lean towards such a conclusion with the proviso that (contrary to the usual opinion in the literature) it is not necessary to associate essential oils exclusively with scents. Namely, they can have manifold medical purposes, and be used for inhalation, baths, massages, the production of fragrances, and also cookery. It is very convenient that dates can have equally manifold applications, as observed in the introduction to this article. The form and volume of these containers also speak in favour of what has been asserted.

CONCLUSION

Based on what has been said, it can be concluded that small date-shaped glass bottles were an extraordinarily popular product of Eastern Mediterranean workshops active in the 1st and 2nd centuries, as confirmed by their wide distribution across the Roman Empire. Their production is closely connected with the overall popularity of dates in all spheres of life, as discussed in the introduction.

Their attractiveness in terms of trade is witnessed by the prominent role played in their cultivation by the ruling elites of Judea, the Egyptian kingdom, and the Roman Empire as plantation owners and consequently profit makers. Thus, for example, Herod the Great possessed date plantations in the surroundings of Jericho, which were taken from him by Cleopatra, but into whose possession he came again after the Battle of Actium through the intervention of Octavian himself. Herod's sister Saloma bequeathed her plantations in the surroundings of Jericho, Archelais and Phaselis to the Empress Livia, on behalf of whom they were taken care of by the imperial procurator. Although it is not possible to document, it has been suggested by certain authors that from the Flavian period the date trade was exclusively under state control, which speaks of its importance.³⁹

³⁹ C. CARRERAS MONFORT, D. F. WILLIAMS, 2002, 142.

³⁹ C. CARRERAS MONFORT, D. F. WILLIAMS, 2002, 142.

Prethodno izneseni podatci datulje dakle određuju kao primarno istočnomediterranski proizvod koji, kako je pokazano, negdje od prijelaza era postupno osvaja zapadnomeditarsko tržište, naravno posredstvom dolaska ishodišnog područja u rimske ruke, ali i neograničenosti rimske trgovine. Eventualna uloga države u toj trgovini može se istaknuti i putem činjenice što se većina amfora u kojima su se prevozile suhe datulje kao prehrambena roba, a riječ je o tzv. *carrot shape* amforama⁴⁰ istočnomeditarskog podrijetla, pronalazi u vojnim logorima širom rimske države, pa tako i kod nas u Burnumu i Tiluriju.⁴¹

Iako smo se ovim malo udaljili od teme, spomen trgovine samim datuljama odlično odgovara raspravi o trgovini esencijalnim uljima transportiranim i prodavanim u za to posebno izvedenim staklenim recipijentima. Oni su također nesumnjivo morali biti tamošnji proizvod i rezultat jedne čitave „industrije“ bazirane na plantažnom uzgoju datulja, a rasprava o tome je li u nekom trenutku došlo do transfera produkcije recipijenata, a možda i prerade ploda i na italsko tlo, kako je to od nekih autora prepostavljeno, do sada nije pokazala zadovoljavajuće argumente. No prihvaćenost datulje među rimskim stanovništvom nedvojbena je, o čemu svjedoči i Ovidije koji navodi kako su one čest novogodišnji poklon u Rimu kojima se iskazuje želja da „cijela godina bude slatka kao njezin početak“.⁴²

Thus, the above indicates that dates were a primarily Eastern Mediterranean product which, from around the start of the Christian era, gradually conquered the Western Mediterranean, arriving from areas in Roman hands through the limitlessness of Roman trade. The possible role of the state in this trade can be highlighted based on the fact that the majority of amphorae in which dry dates were transported as food articles, the so-called *carrot-shaped* amphorae⁴⁰ of Eastern Mediterranean origin, are found in military camps throughout the area of the Roman state, and accordingly also in our territory, in *Burnum* and *Tilurium*.⁴¹

Although it is a slight deviation from our topic, the mention of the date trade lends itself to a discussion on the trade in essential oils transported and sold in glass containers particularly made for this purpose. They also undoubtedly must have been locally produced and a result of an entire industry based on the cultivation of dates on plantations. Whether at a certain point container production, and possibly also fruit processing, was transferred to Italic territory, as argued by certain authors, has to date not been conclusively demonstrated. However, the acceptance of dates among the Roman population is undoubtedly, as shown by Ovid, who mentions that they were a frequent New Year's present in Rome, symbolising the wish that the “whole year be as sweet as its beginning”.⁴²

40 Camulodunum 189, Augst 44, Pompei XV, Oberaden 85, Peacock-Williams Class 12.

41 I. BORZIĆ, 2010, 516-521.

42 Ovid. *Fasti*, I, 185-188.

40 Camulodunum 189, Augst 44, Pompei XV, Oberaden 85, Peacock-Williams Class 12.

41 I. BORZIĆ, 2010, 516-521.

42 Ovid. *Fasti*, I, 185-188.

Kat. br. 1

Mjesto nalaza: Zadar (*Iader*), antička nekropola („Novi vojni logor“), arheološka istraživanja 1962., grob 2

Mjesto pohrane: Muzej antičkog stakla u Zadru, inv. br. A12669

Tehnika izrade: tijelo puhanu u dvodijelni kalup

Opis predmeta: staklena bočica oblika datulje, kraćeg cilindričnog vrata i blago razvraćenog, zaravnjenog oboda. Boja smeđa, jantarna iznutra neprozirna bijela.

Mjere: v = 6.4 cm; š = 3 cm; pr. oboda = 1.3 cm

Datacija: kraj 1. i početak 2. stoljeća

Foto: fototeka Muzeja antičkog stakla u Zadru

Bibliografija: Ž. RAKNIĆ, 1968, 214, tab. II. 2.

Cat. No. 1

Find spot: Zadar (*Iader*), classical antique necropolis (“New Military Camp”), archaeological campaign 1962, grave 2

Storage site: Museum of Ancient Glass in Zadar, Inv. No. A12669

Production technology: body blown in two-part mould

Artifact description: small date-shaped glass bottle with a shorter cylindrical neck and a mildly inverted, flattened rim. Brown, amber, inside opaque white.

Measurements: h = 6.4 cm; w = 3 cm; rim diameter = 1.3 cm

Dating: end of 1st and beginning of 2nd century

Photo: photograph library of Museum of Ancient Glass

Bibliography: Ž. RAKNIĆ, 1968, 214, Pl. II. 2.



Kat. br. 2

Mjesto nalaza: Zadar (*Iader*), antička nekropola (T. C. Relja) arheološka istraživanja 1989., grob 436

Mjesto pohrane: Muzej antičkog stakla u Zadru, inv. br. A8224

Tehnika izrade: tijelo puhanu u dvodijelni kalup

Opis predmeta: staklena boćica oblika datulje, kraćeg cilindričnog vrata i blago razvraćenog, uvijenog oboda. Boja smeda, jantarna iznutra neprozirna bijela.

Mjere: v = 7.1 cm; š = 2.8 cm; pr. oboda = 1.5 cm

Datacija: sredina 2. stoljeća

Foto: fototeka Muzeja antičkog stakla u Zadru

Bibliografija: S. GLUŠČEVIĆ, 2005, 667.

Cat. No. 2

Find spot: Zadar (*Iader*), classical antique necropolis (T. C. Relja), archaeological campaign of 1989, grave 436

Storage site: Museum of Ancient Glass in Zadar, Inv. No. A8224

Production technology: body blown in two-part mould

Artifact description: glass date-shaped small bottle, shorter cylindrical neck and mildly curved, inverted rim. Brown, amber, inside opaque white.

Measurements: h = 7.1 cm; w = 2.8 cm; rim diameter = 1.5 cm

Dating: middle of 2nd century

Photo: photograph library of Museum of Ancient Glass

Bibliography: S. GLUŠČEVIĆ, 2005, 667.



Kat. br. 3

Mjesto nalaza: Zadar (*Iader*), Nin (*Aenona*), Aserija (*Asseria*?), antička nekropola

Mjesto pohrane: Museo Nazionale di Murano u Veneciji, inv. br. IGVE 358 (ex Zara, 5054); 05/00048439

Tehnika izrade: tijelo puhano u dvodijelni kalup

Opis predmeta: staklena bočica oblika datulje, kraćeg cilindričnog vrata i blago razvraćenog, presavijenog oboda. Boja smeđa.

Mjere: v = 6.2 cm; š = 2.8 cm

Datacija: druga polovica 1. i prva polovica 2. stoljeća

Foto: preuzeto iz G. L. RAVAGNAN, 1994, 50, kat. br. 60.

Bibliografija: J. BERSA, 1913, 86-87, br. 218; G. L. RAVAGNAN, 1994, 50, kat. br. 60, s literaturom.

Cat. No. 3

Find spot: Zadar (*Iader*), Nin (*Aenona*), *Asseria*?, classical antique necropolis

Storage site: Museo Nazionale di Murano in Venice, Inv. No. IGVE 358 (ex Zara, 5054); 05/00048439

Production technology: body blown in two-part mould

Artifact description: small date-shaped glass bottle with a shorter cylindrical neck and a mildly everted curved rim. Brown.

Measurements: h = 6.2 cm; w = 2.8 cm

Dating: second half of 1st and 2nd century

Photo: after G. L. RAVAGNAN, 1994, 50, cat. no. 60.

Bibliography: J. BERSA, 1913, 86-87, No. 218; G. L. RAVAGNAN, 1994, 50, Cat. No. 60, with bibliography.



Kat. br. 4

Mjesto nalaza: Zadar (*Iader*), Nin (*Aenona*), Aserija (*Asseria*?), antička nekropola

Mjesto pohrane: Museo Nazionale di Murano u Veneciji, inv. br. IGVE 359 (ex Zara, 5096); 05/00048440

Tehnika izrade: tijelo puhano u dvodijelni kalup

Opis predmeta: staklena bočica oblika datulje, malo dužega cilindričnog vrata i blago razvraćenog, uvijenog oboda. Boja žuto-smeđa, jantarna.

Mjere: v = 9 cm; š = 4 cm; pr. oboda = 1.8 cm

Datacija: druga polovica 1. i 2. stoljeće

Foto: preuzeto iz G. L. RAVAGNAN, 1994, 50, kat. br. 61.

Bibliografija: J. BERSA, 1913, 86, br. 218; G. L. RAVAGNAN, 1994, 50, kat. br. 61, s literaturom; I. FADIĆ, 2001, 146, kat. br. 144.

Cat. No. 4

Find spot: Zadar (*Iader*), Nin (*Aenona*), *Asseria*?, classical antique necropolis

Storage site: Museo Nazionale di Murano in Venice, Inv. No. IGVE 359 (ex Zara, 5096); 05/00048440

Production technology: body blown in two-part mould

Artefact description: small date-shaped glass bottle with a somewhat longer cylindrical neck and a mildly curved, inverted rim. Yellow-brown, amber.

Measurements: h = 9 cm; w = 4 cm; rim diameter = 1.8 cm

Dating: second half of 1st and 2nd century

Photo: after G. L. RAVAGNAN, 1994, 50, cat. no. 61.

Bibliography: J. BERSA, 1913, 86, No. 218; G. L. RAVAGNAN, 1994, 50, Cat. No. 61, with bibliography; I. FADIĆ, 2001, 146, Cat. No. 144.



Kat. br. 5

Mjesto nalaza: Zadar (Iader), Nin (Aenona), Aserija (Asseria)?, antička nekropola

Mjesto pohrane: Museo Nazionale di Murano u Veneciji, inv. br. IGVE 386 (ex Zara, 5049); 05/00048467

Tehnika izrade: tijelo puhanu u dvodijelni kalup

Opis predmeta: staklena bočica oblika datulje, malo dužega cilindričnog vrata i blago razvraćenog, presavijenog oboda. Boja žuto-smeđa, jantarna.

Mjere: v = 6 cm; š = 3.2 cm; pr. oboda = 1.1 cm

Datacija: druga polovica 1. i 2. stoljeće

Foto: preuzeto iz G. L. RAVAGNAN, 1994, 50, kat. br. 62.

Bibliografija: G. L. RAVAGNAN, 1994, 50, kat. br. 62.

Cat. No. 5

Find spot: Zadar (*Iader*), Nin (*Aenona*), Asseria?, classical antique necropolis

Storage site: Museo Nazionale di Murano in Venice, Inv. No. IGVE 386 (ex Zara, 5049); 05/00048467

Production technology: body blown in two-part mould

Artefact description: small date-shaped glass bottle with a somewhat longer cylindrical neck and a mildly inverted, curved rim. Yellow-brown, amber.

Measurements: h = 6 cm; w = 3.2 cm; rim diameter = 1.1 cm

Dating: second half 1st and 2nd century

Photo: after G. L. RAVAGNAN, 1994, 50, cat. no. 62.

Bibliography: G. L. RAVAGNAN, 1994, 50, Cat. No. 62.



Kat. br. 6

Mjesto nalaza: Nin (*Aenona*), antička nekropolja, grob 1B

Mjesto pohrane: Museo Nazionale di Murano u Veneciji, inv. br. IGVE 435 (ex Zara, 5997); 05/00048516

Tehnika izrade: tijelo puhanu u dvodijelni kalup

Opis predmeta: staklena bočica oblika datulje, kraćeg cilindričnog vrata i blago razvraćenog, uvijenog oboda. Boja smeđa, jantarna.

Mjere: v = 6 cm; š = 3.6 cm; pr. oboda = 1.7 cm

Datacija: kraj 1. i početak 2. stoljeća

Foto: preuzeto iz: G. L. RAVAGNAN, 1994, 51, kat. br. 63.

Bibliografija: J. BERSA, 1913, 86, br. 218; G. L. RAVAGNAN, 1994, 51, kat. br. 63, s literaturom; I. FADIĆ, 2001, 147, kat. br. 145.

Cat. No. 6

Find spot: Nin (*Aenona*), classical antique necropolis, grave 1B

Storage site: Museo Nazionale di Murano in Venice, Inv. No. IGVE 435 (ex Zara, 5997); 05/00048516

Production technology: body blown in two-part mould

Artefact description: glass small date-shaped bottle, shorter cylindrical neck and mildly curved, inverted rim. Brown, amber.

Measurements: h = 6 cm; w = 3.6 cm; rim diameter = 1.7 cm

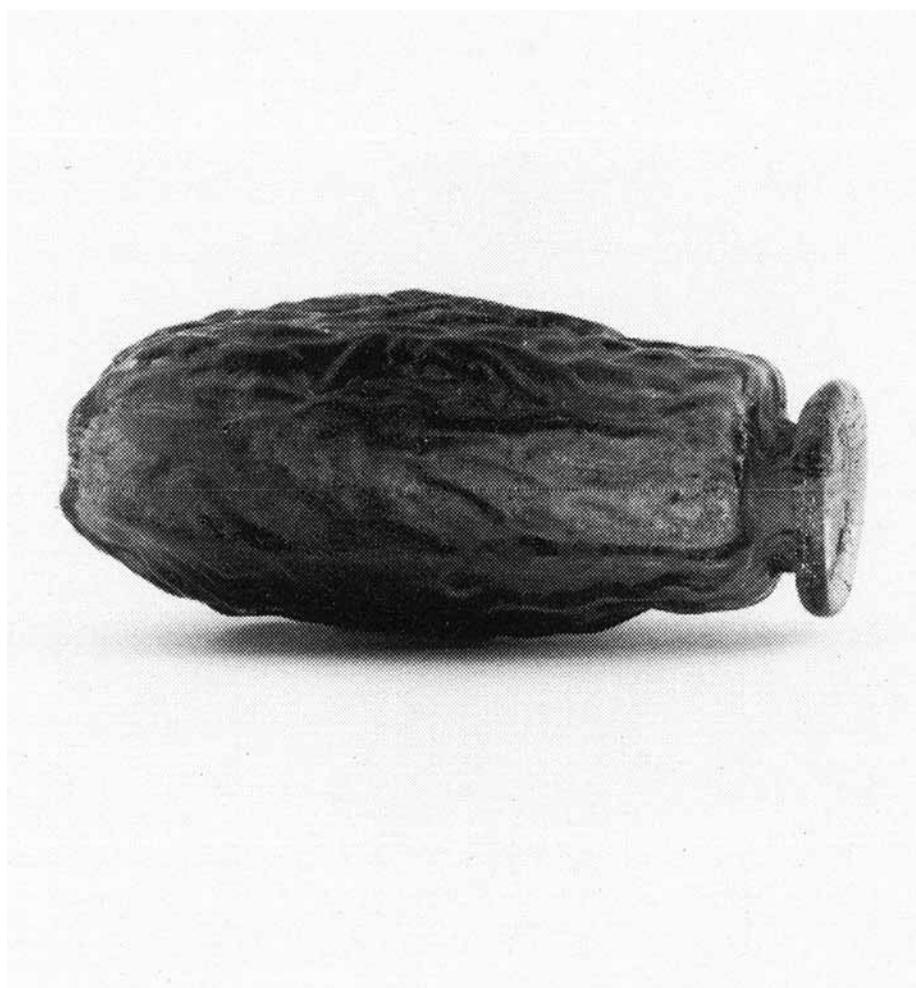
Dating: end of 1st and beginning of 2nd century

Photo: after G. L. RAVAGNAN, 1994, 50, cat. no. 63.

Bibliography: J. BERSA, 1913, 86, No. 218; G. L. RAVAGNAN, 1994, 51, Cat. No. 63, with bibliography; I. FADIĆ, 2001, 147, Cat. No. 145.

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