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A revision of the historical brachiopod collection from the Middle Jurassic of Monte Inici (Sicily, Italy), monographed by Ruiz in 1928, with description of a new species (Brachiopoda: Terebratulida)

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Abstract – The taxonomic and nomenclatural revision of the Middle Jurassic brachiopod material monographed by Ruiz in 1928 kept in the G. G. Gemmellaro Museum (Palermo) resulted in an updated list of 29 taxa including one new species. The allegedly Bathonian age of the brachiopod-bearing beds at Pizzo delle Niviere, the locality of Ruiz's fauna, was taken into consideration; the published data on the Jurassic stratigraphy of western Sicily suggest that the age may be partly older than Bathonian, i.e. late Bajocian. The taxonomic revision revealed that the fauna is markedly Mediterranean in character and the several Euroboreal taxa described by Ruiz (1928) were erroneously identified. On the basis of two moderately preserved specimens *Karadagithyris carmelae* sp. nov. has been described. The Middle Jurassic brachiopod assemblage of Monte Inici has strong similarity to the faunas of same age from the Subbetic Zone, the Bakony Mts. and the Hallstatt area. With 11 original figures and two appendices.

Key words – Brachiopoda, Mediterranean fauna, new species, taxonomic revision

INTRODUCTION

Sicily is famous for its diverse brachiopod faunas from all three series of the Jurassic system. Magnificent brachiopod monographs were published in the late nineteenth century portraying the faunas of the Lower Jurassic (Gemmellaro 1874, 1878), Di Stefano (1887, 1891); the Middle Jurassic (Gemmellaro 1877), Di Stefano (1884*a*, 1884*b*); and the Upper Jurassic (Gemmellaro 1871). Afterwards, for forty years, almost nothing appeared in this field until Ruiz (1928) described an allegedly Bathonian brachiopod fauna from a newly discovered locality at the Monte Inici (Western Sicily, Trapani district).

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The present author in 1980 investigated the brachiopod material of all the above-mentioned monographs in the museum of the Palermo University; the relevant results were summarized in several voluminous papers (Vörös 2009, 2022, 2024). One exception was that of the material by Ruiz (1928) what was not available at those times. In 2024 the author was successful to visit once again the same museum (now called "G. G. Gemmellaro Museum") and made a taxonomic and nomenclatural revision of the whole material formed the basis of the monograph by Ruiz (1928). In contrast to the mentioned early monographs by Gemmellaro and Di Stefano, which stand as milestones even today, the Ruiz monograph truly deserved a taxonomic revision. The present paper reports the results of this revision with some accompanying remarks.

MATERIAL

Locality

Monte Inici is one of the most spectacular mountains in western Sicily with an altitude of 1064 m (Fig. 1). Its northern wall is particularly impressive, emerging abruptly from the sea, above the nice harbour of Castellammare del Golfo.

From structural point of view Monte Inici belongs to the Trapanese Domain (further details see in Catalano et al. 1996). The bulk of the mountain is made of the vast carbonate platform of the "Calcare Massiccio", now called the Inici Formation. This, several hundred metres thick unit consists of Upper Triassic-Lower Jurassic platform carbonates: dolostones and limestones (Basilone 2012). The demise of this Bahamian-type carbonate platform was dated vaguely as "middle Liassic", Sinemurian or even Pliensbachian (e.g. Wendt 1963, p. 80; Di Stefano 2002, fig. 2 and p. 24), but in the recent evaluation by Jenkyns (2019, p. 64) it was constrained to the uppermost Sinemurian.

After a long gap a new sedimentary cycle started at Monte Inici with condensed carbonates in the Middle Jurassic and continued with thicker nodular and cherty limestones and marls in the Late Jurassic and Early Cretaceous (Cecca et al. 2001, Cecca & Savary 2007, Scopelliti & Russo 2021). These authors indicated Callovian ammonitic limestones as the basal member of the succession capping the discontinuity surface, and denoted the presence of Neptunian dykes penetrating the Inici Formation.

Wendt (1963) carried out a pioneering and comprehensive field work in the Jurassic of western Sicily and published a plenty of detailed descriptions. At Monte Inici he successfully re-discovered the site at Pizzo delle Niviere where the Middle Jurassic brachiopods of Ruiz (1928) came from. Wendt (1963, p. 80 and Plate 9: MI 2) measured a section here and portrayed a stratigraphic profile. It is redrawn here with a few additions and a slight modification at the base of the Middle Jurassic (Fig. 2).

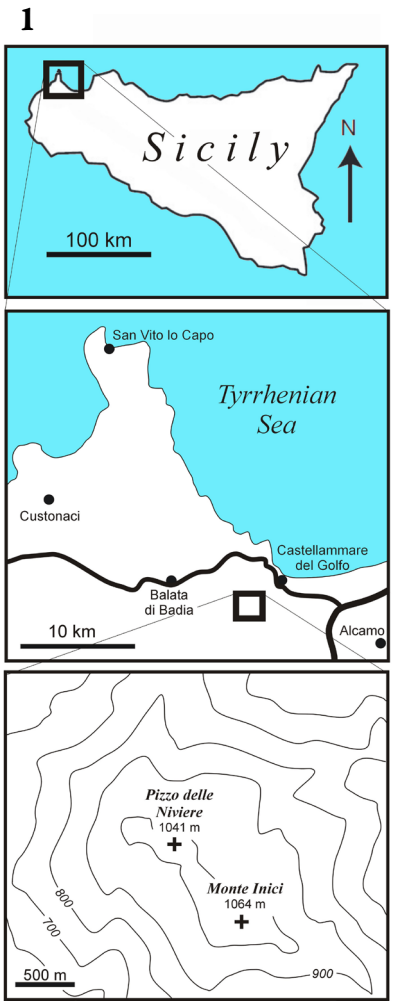


Figure 1. Locality map of Pizzo delle Niviere, the site of the Middle Jurassic brachiopods of Ruiz (1928).

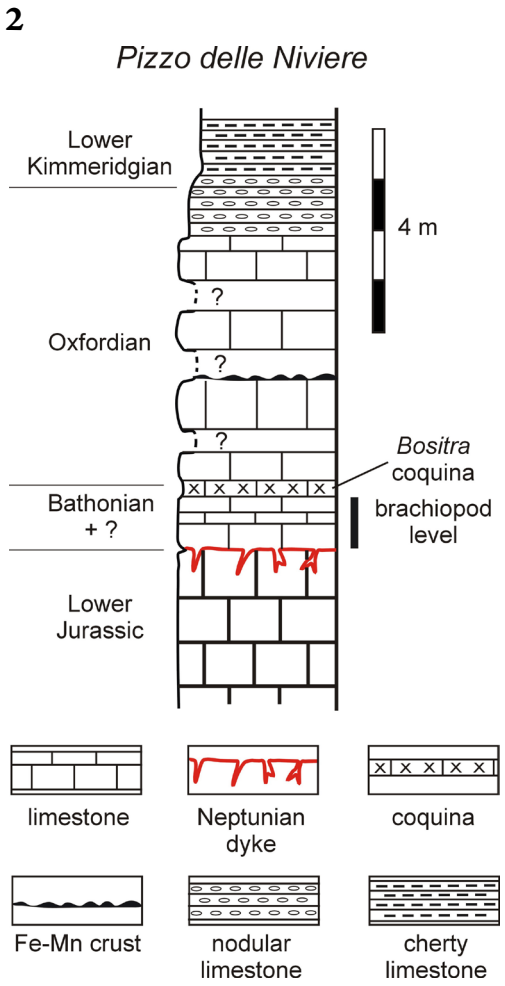


Figure 2. Stratigraphic column of the Jurassic section at Pizzo delle Niviere (redrawn after Wendt 1863, plate 9: MI 2).

Comparing the drawing and the description of the profile in Wendt (1963, l.c.) a minor contradiction emerges regarding the stratigraphic position (age) of the brachiopod-bearing layers. This light red limestone rests unconformably on the stained and fissured surface of underlying massive limestone [Inici F.] and fills the fissures. This unit is said to be "probably Bathonian" (Wendt 1963, p. 80). At the same place Wendt remarks, that the brachiopod-bearing beds are

covered by a layer of coarse-grained sparitic limestone with mass accumulation of bivalves ("*Posidonia, Astarte*") which is identical with the bed 2b at Rocca che Parla. Following the description of this "bed 2b" at Rocca che Parla by WENDT (1963, p. 71 and Plate 7) this unit, rich in *Posidonia* (now *Bositra*), was qualified as middle Bathonian.

Two conclusions can be drawn from the above discussions.

(1) At Pizzo delle Niviere, in contrast to other sections in Monte Inici, the Callovian is missing, since the Oxfordian rests directly on the middle Bathonian *Bositra* coquina.

(2) The brachiopod-bearing beds, yielding the fauna of RUIZ (1928) are probably lower Bathonian or even older, since they are overlain by the middle Bathonian *Bositra* coquina. The outcomes of these two conclusions are indicated on the redrawn profile of Pizzo delle Niviere (Fig. 2).

Further speculations on the possible late Bajocian age of the brachiopod-bearing beds may be allowed, and perhaps supported by the fact that this unit fills the fissures of the Inici Formation, i.e. it is the first sediment after the drowning of the carbonate platform. In the sections of Rocca che parla (or Rocca chi Parra), showing a tectono-sedimentary history partly analogous with that of Monte Inici, the first post-drowning sediments were patchily preserved upper Bajocian limestones (MARTIRE & PAVIA 2004, p. 29 and fig. 7). Moreover, in the well-dated faunas from the Subbetic Zone (BAEZA-CARRATALÁ *et al.* 2011, 2014), and the Bakony Mts. (VÖRÖS 2024) most of the species shared with the fauna of RUIZ (1928) were restricted to the Bajocian.

Brachiopod fauna

The fossil site at around 100 m to the southeast of the peak Pizzo delle Niviere (altitude 1041 m) yielded 121 specimens of Middle Jurassic brachiopods, now kept in the G. G. Gemmellaro Museum, Palermo. The material was collected by private fossil hunters G. Scaturro and G. Bonafede. Particularly the latter person was famous for his very effective collecting work, in course of which (according to the urban legend: Leonardo Gatto pers. comm.) he frequently used blasting, obviously causing a mixing of fossils from different stratigraphic horizons. The locality was studied also by R. Fabiani (professor of the Palermo University at that time) who fixed the stratigraphic position of the respective beds in the "Dogger superiore, cioè Batoniano" [upper Dogger, namely Bathonian] (RUIZ 1928, p. 3).

The majority of the brachiopod specimens belongs to the order Rhynchonellida (77 specimens) while the number of the short-looped terebratulide specimens is 37 and the long- looped terebratulides are represented only by seven specimens. The state of preservation of the brachiopods is usually moderate; well-preserved specimens are rare. The size distribution is more or less bimodal; the average size of the rhynchonellides is somewhat smaller than that of the terebratulides.

RESULTS AND DISCUSSIONS

In the framework of the project of monographic description of Middle Jurassic brachiopods of Transdanubian Range, Hungary, the author visited the Ruiz (1928) collection in the G. G. Gemmellaro Museum in Palermo. It was seen that many of Ruiz's identification were erroneous and/or obsolete. Thus, a complete taxonomic and nomenclatural revision was reasonable. The names of taxa written on the original labels with original spelling by Ruiz are listed in the left-side column of Appendix 1.

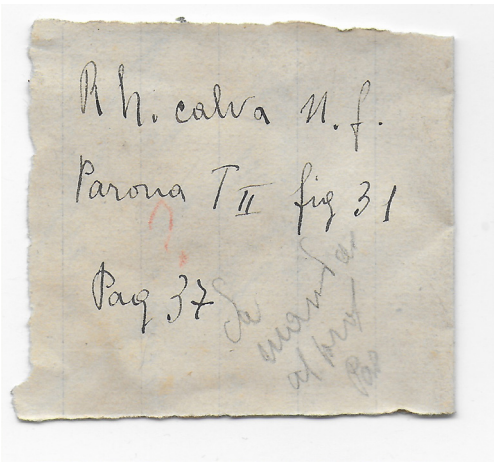


Figure 3. Museum's label of "*Rhynchonella calva* Parona" specimens probably borrowed from Parona's collection (Sette Comuni, north Italy), thus not belonging to the Monte Inici material.

Among the 47 items one was found to be odd out of the collection. This item (nine specimens in one box) was labelled as "*Rh. calva* n.f. Parona", but on the label a note written with pencil says that „Da mandar al prof Par[ona]" i.e. "Should be sent to prof. Parona" (Fig. 3). Thus, this item obviously was not derived from Monte Inici, but probably from Sette Comuni (north Italy), from where Parona (1896) described this species. The specimens were borrowed by C. Ruiz for comparison from C. F. Parona (Torino) who was still active at that time until his death in 1939. It was planned to send back the material but this action failed.

The remaining list of 46 items, with omitting the repetitions, contains 42 names of taxa. This is not fully identical with list in the unnumbered table of Ruiz (1928, p. 6) containing only 37 names. A further divergence is that five from these 37 names of taxa listed by Ruiz were not found in the presently available collection. The revised list brachiopods discovered in the Ruiz collection (in the right-side column of Appendix 1) contains 24 taxa, including one new species.

Eventually, Ruiz (1928) illustrated altogether 29 taxa from the brachiopod fauna of Monte Inici and two other Sicilian localities. Regrettably, the original specimens of six of these taxa were not encountered during the revision. The revised list of the taxa illustrated in the Ruiz (1928) monograph (21 items, including missing specimens) is shown in the right-side column of Appendix 2.

Looking at the list of the old names in the collection, and the illustrated part of the monograph by Ruiz (1928) it is clear that she rightly recognized the Mediterranean character of the brachiopod fauna, with dominant components

indigenous to Sicily. Particularly strong similarity appeared to the east Sicilian faunas (Galati, Capo S. Andrea, see in Di Stefano 1884*b*). Nevertheless, the old list (Table 1, left-side column) contains seven Euroboreal (NW-European) taxa. The revision revealed that six of them were erroneously identified and in fact they represent Mediterranean taxa in wide sense. Without going into a detailed palaeobiogeographical analysis, it can be stated that the Bajocian(?)-Bathonian brachiopod fauna of Ruiz (1928) has strong affinity with the faunas of same age from the Subbetic Zone (Baeza-Carratalá et al. 2011, 2014), the Bakony Mts. (Vörös 2024) and the Hallstatt area (Oppel 1863, Siblík & Lobitzer 2008).

Systematic description of a new species found in the Ruiz (1928) collection

Order Terebratulida Waagen, 1883
Suborder Terebratulida Waagen, 1883
Superfamily Loboidothyridoidea Makridin, 1964
Family Muirwoodellidae Tchorszhevsky, 1974
Subfamily Karadagithyridinae Tchorszhevsky, 1974

Genus *Karadagithyris* Tchorszhevsky, 1974

Type species: *Karadagithyris babanovae* Tchorszhevsky, 1974

***Karadagithyris carmelae* sp. nov.**
(Figures 4–10)

Type material (n = 2) – Holotype: G. G. Gemmellaro Museum (Palermo) inventory number: MGUP-IR-12; Locus typicus: Monte Inici, grab sample. Stratum typicum: Light red brachiopod limestone (Rosso Ammonitico?), upper Bajocian and/or lower Bathonian. Paratype: G. G. Gemmellaro Museum (Palermo) inventory number: MGUP-IR-8. Both specimens are moderately well-preserved.

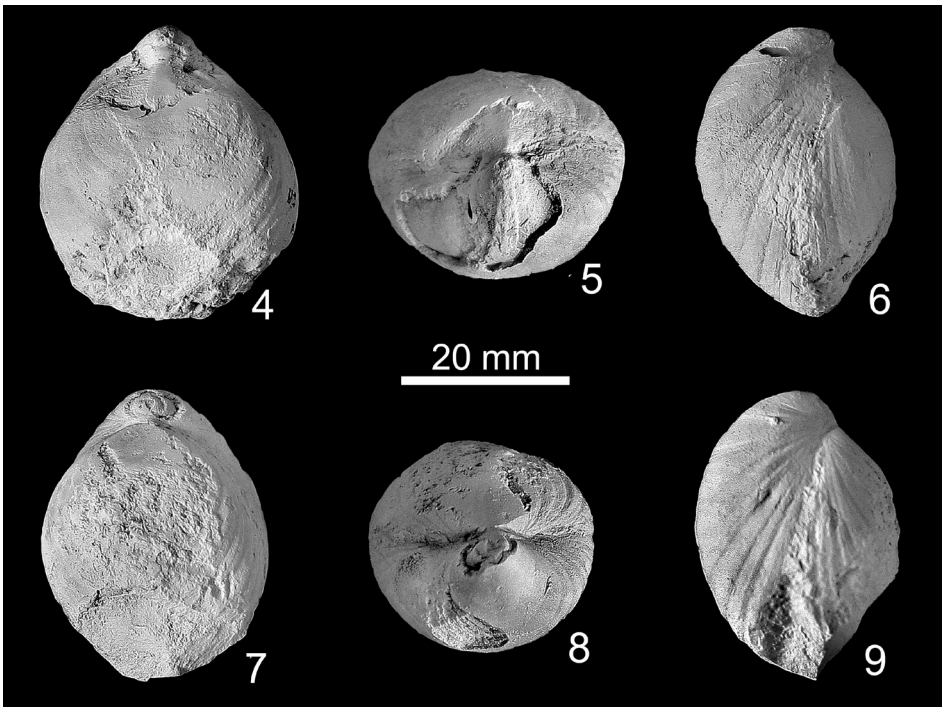
Diagnosis – Large, globose, biconvex shells. Beak massive slightly incurved. Weak planareas. Lateral and anterior commissures straight, Shell surface with growth rugae. Crural plates developed, divergent.

Measurements (Length / Width/ Thickness in mm) – Holotype: 34,5 / 30,5 / 23,8; Paratype: 34,4 / 26,7 / 24,1.

Description – External characters: Large *Karadagithyris* with globose subcircular outline. The lateral margins are gently convex and pass into the anterior margin along a continuous curve. The anterior margin is subcircular.

Both valves are very strongly and uniformly convex. The beak is massive, slightly incurved and is truncated by a rather large, subcircular to elongate oval pedicle opening. The beak ridges are blunt; a weak planarea-like shallow depression is developed on the pedicle valve. The lateral commissure is nearly straight. The anterior commissure is poorly preserved but seems to be straight. The surface of the shells is almost smooth, except the irregularly spaced growth rugae.

Internal characters: Due to the paucity of the material (two specimens), serial sectioning was not allowed. However, on the polished surface of the umbonal part of the holotype the diagnostic feature of *Karadagithyris*: the dorsal docking of the divergent crural plates is well visible (Figs 4–9).



Figures 4–9. *Karadagithyris carmelae* sp. nov., type material, Monte Inici, upper Bajocian and/or lower Bathonian: 4 = holotype dorsal view; 5 = ditto, posterior view; 6 = ditto, lateral view; 7 = paratype, dorsal view; 8 = ditto, posterior view; 9 = ditto, lateral view (scale bar as indicated).

Derivatio nominis – After the first name of Carmela Ruiz, palaeontologist.

Remarks – The polished surface of the umbonal part of the holotype (Fig. 10) demonstrates the crural plates resting on the dorsal valve floor, thus the attribution of the species *carmelae* to *Karadagithyris* is endorsed. This new species is rather unique within the genus *Karadagithyris*. Considering their nearly straight lateral and anterior commissures *K. erycina* (Gemmellaro, 1877) and

K. gerda (Oppel, 1863) may be compared to *K. carmelae*. However, *K. erycina* has a tiny beak, whereas the beak of *K. gerda* is markedly elevated. Perhaps the most important difference between these three species of *Karadagithyris* is manifested in their significantly different degree of convexity. Fig. 11 demonstrates the length/thickness ratios of the three species. The measurements were taken from the Sicilian specimens of *K. carmelae* whereas the data of *K. gerda* and *K. erycina* came from the published data by (VÖRÖS 2024).

In the RUIZ (1928) collection the presently introduced holotype of *K. carmelae* was labelled as "*T.* cfr. *emarginata* Sow." and the paratype as "*Terebr. sphaeroidalis* Sow.". The external similarities are appealing in both cases indeed, but Sowerby's species belong to a distant family Lobothyrididae of the order Terebratulida.

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Figure 10. Polished surface of the umbonal region of the holotype of *Karadagithyris carmelae* sp. nov., Monte Inici, upper Bajocian and/or lower Bathonian, showing the divergent crural plates resting on the floor of the dorsal valve; po: pedicle opening, cp: crural plates (scale bar as indicated).

11

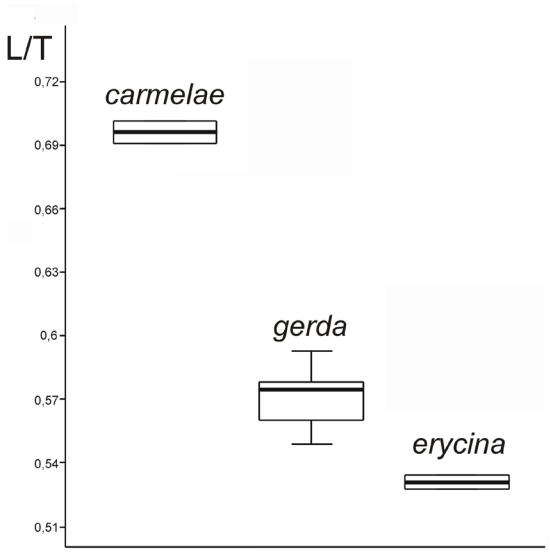


Figure 11. Box diagrams of length/thickness ratios of three species of *Karadagithyris* showing that the convexity of *K. carmelae* sp. nov. is significantly greater than that of *K. gerda* (Oppel, 1863) and *K. erycina* (Gemmellaro, 1877).

CONCLUSIONS

Considerations of the published data on the Jurassic stratigraphy of western Sicily led to the conclusion that the age of the brachiopod-bearing beds at Pizzo delle Niviere may be partly older than Bathonian, i.e. late Bajocian.

The taxonomic and nomenclatural revision of the Middle Jurassic brachiopod material monographed by RUIZ (1928) kept in the G. G. Gemmellaro Museum (Palermo) resulted in an updated list of 29 taxa including one new species.

The revision revealed that the fauna is markedly Mediterranean in character and the several Euroboreal taxa described by RUIZ (1928) were erroneously identified.

The Middle Jurassic brachiopod assemblage of Monte Inici has strong similarity to the faunas of same age from the Subbetic Zone, the Bakony Mts. and the Hallstatt area.

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Acknowledgements – Many thanks are due to Dr. Carolina D'Arpa (G. G. Gemmellaro Museum, Palermo) for manyfold help and for accessibility of the Ruiz collection. The author carried out this research partly at the Department of Palaeontology and Geology of the Hungarian Natural History Museum (Budapest) where, after being retired, he worked as a voluntary research fellow. Thanks are due to the leadership of the institution for the possibility.

APPENDICES

Appendix 1. Revised list of the taxa enumerated in the RUIZ (1928) monograph.

Names written on the old labels	**List of the revised names of taxa**
Rh. Szajnochae Di Stef.	*Galatirhynchia galatensis* (Di Stefano, 1884)
Rh. ucinensis Di Stef.	*Galatirhynchia* ? *szajnochae* (Di Stefano, 1884)
Rh. ucinensis Di Stef.	*Striirhynchia ucinensis* (Di Stefano, 1884)
Rh. Subechinata Opp.	*Striirhynchia ucinensis* (Di Stefano, 1884)
Rh. Zisa Oppel	*Striirhynchia ucinensis* (Di Stefano, 1884)
Rh. Berchta Opp.	*Striirhynchia* cf. *berchta* (Oppel, 1863) juv.
T. salvatoris n. sp. Greco	*Striirhynchia* sp.indet.
Rh. defluxa Opp.	*Septocrurella defluxa* (Oppel, 1863)
Rh, retrosinuata Vac.	*Septocrurella retrosinuata* (Vacek, 1886)

Names written on the old labels	List of the revised names of taxa
T. mut. *Isga* (ex *nepos*) De Greg.	*Septocrurella retrosinuata* (Vacek, 1886)
Rh. hemicostata Par.	*Septocrurella hemicostata* (Parona, 1896)
Ter. roveredana Ben.	*Septocrurella roveredana* (Benecke, 1865)
Terebr. verbena De Greg.	*Septocrurella* sp. indet.
Rh. coarctata Opp	*Apringia* cf, *coarctata* (Oppel, 1863)
Rh. Atla Opp.	*Apringia atla* (Oppel, 1863) - incl. var. „*polymorpha*"
Rh. coarctata var.*miscella* Opp	*Apringia atla* (Oppel, 1863) - incl. var. „*polymorpha*"
Rh. Atla var. *polymorpha* Opp.,	*Apringia atla* (Oppel, 1863) - incl. var. „*polymorpha*"
Rh. Alontina Di Stef.	*Apringia alontina* (Di Stefano, 1884)
Fylgia	*Apringia* ? sp.
Terebr. fylgia Opp.	*Paronarhynchia* ? sp.
? unnamed	*Nannirhynchia* sp.
Terebr. Gerda Opp.,	*Karadagithyris erycina* (Gemmellaro, 1877)
Terebr. Phryne Gemm	*Karadagithyris erycina* (Gemmellaro, 1877)
coarctata var. *miscella*	*Karadagithyris erycina* (Gemmellaro, 1877)
Ter. pplicata Buckman	*Karadagithyris* cf. *erycina* (Gemmellaro, 1877)
Waldh. cadomensis Desl.	*Karadagithyris* cf. *gerda* (Oppel, 1863)
T. cfr. *emarginata* Sow.,	*Karadagithyris carmelae* n. sp. (holotype)
Terebr. sphaeroidalis Sow.	*Karadagithyris carmelae* n. sp. (paratype)
T. voluntas De Gr.	*Karadagithyris* sp. indet.
T. (*Pygope*) *Alamanni* Di Stef.	*Hajagithyris fylgia* (Oppel, 1863)
Rh. cfr. *coarctata* Opp.	*Hajagithyris fylgia* (Oppel, 1863)
T. simplex Buckm.	*Hajagithyris* cf. *fylgia* (Oppel, 1863)
Terebr. subcarpathica Szajn.	*Hajagithyris fylgia* (Oppel, 1863) juv.
Pygope Seguenzae Di Stef.	*Hajagithyris seguenzae* (Di Stefano, 1887)
Ter. laticoxa Opp.	*Hajagithyris seguenzae* (Di Stefano, 1887)
T. wrightii Dav.,	*Hajagithyris* cf. *seguenzae* (Di Stefano, 1887) juv.

Names written on the old labels	List of the revised names of taxa
T. ghianga De Gr	*Hajagithyris* cf. *seguenzae* (Di Stefano, 1887) juv.
Terebr. (*Pyg.*) *mykonionensis* Di Stef.	*Hajagithyris mykonionensis* (Di Stefano, 1884)
Pyg. Gemmellaroi Di Stef.	*Hajagithyris gemmellaroi* (Di Stefano, 1884)
? unnamed	*Orthotoma* sp.
T. capitta(?) De Greg.	Terebratulidina indet.
Terebrat. Seccoi Par.	*Zeilleria* cf. *seccoi* (Parona, 1882)
Terebratula pectorosa Roth.	*Zeilleria pectorosa* (Rothpletz, 1886)
T. pectorosa Sow. [sic]	*Zeilleria pectorosa* (Rothpletz, 1886)
Terebr. Taramelli Gemm.	*Zeilleria* sp. indet.
Waldh. carinata Sow. var. *mandelslohi* Opp.	*Aulacothyris mandelslohi* (Oppel, 1857)

Appendix 2. Revised list of the taxa illustrated in the Ruiz (1928) monograph

Names written in the plate explanations	List of the revised names of taxa
Plate I.	
1. *Rhynchonella Szajnochae* Di Stef.	*Galatirhynchia galatensis* (Di Stefano, 1884)
2. *Rhynchonella Szajnochae* Di Stef.	*Galatirhynchia galatensis* (Di Stefano, 1884)
3. *Rhynchonella ucinensis* Di Stef.	*Striirhynchia ucinensis* (Di Stefano, 1884)
4. *Rhyncgonella.galatensis* Di Stef.	*Galatirhynchia galatensis* (Di Stefano, 1884)
5. *Rhyncgonella.galatensis* Di Stef.	*Galatirhynchia galatensis* (Di Stefano, 1884)
6. *Rhynchonella.defluxa* Opp.	*Septocrurella defluxa* (Oppel, 1863)
7. *Rhynchonella.defluxa* Opp.	*Septocrurella defluxa* (Oppel, 1863)
8. *Rhynchonella.subechinata* Opp.	*Striirhynchia ucinensis* (Di Stefano, 1884)
9. *Rhynchonella.Atla* Opp.	*Apringia atla* (Oppel, 1863)
10. *Rhynchonella.Atla* var. *polymorpha* Opp.	*Apringia atla* var. *polymorpha* (Oppel, 1863)
11.*Rhynchonella Berchta* Opp.	*Striirhynchia* cf. *berchta* (Oppel, 1863)
12. *Rhynchonella Berchta* Opp.	*Striirhynchia* cf. *berchta* (Oppel, 1863)
13. *Rhynchonella retrosinuata* Vac.	*Septocrurella retrosinuata* (Vacek, 1886)
14. *Rhynchonella* cfr. *saccharoidea* De Greg.	specimen missing

Names written in the plate explanations	List of the revised names of taxa
15, 16, 17. *Rhynchonella micula* Opp.	specimens missing
18. *Rhynchonella hemicostata* Par.	*Septocrurella hemicostata* (Parona, 1896)
Plate II.	
1. *Terebratula laticoxa* Opp.	*Hajagithyris seguenzae* (Di Stefano, 1887)
2. *Terebratula Fylgia* Opp.	*Striirhynchia* ? sp.
3. *Terebratula Gerda* Opp.	*Karadagithyris erycina* (Gemmellaro, 1877)
4. *Terebratula Gerda* Opp.	*Karadagithyris erycina* (Gemmellaro, 1877)
5. *Terebratula Phryne* Gemm.	*Karadagithyris erycina* (Gemmellaro, 1877)
6. *Terebratula Seccoi* Par.	*Zeilleria* cf. *seccoi* (Parona, 1882)
7. *Terebratula roveredana* Ben.	*Septocrurella roveredana* (Benecke, 1868)
8. *Terebratula Mandelslohi* Opp.	*Aulacothyris mandelslohi* (Oppel, 1857)
9. *Terebratula verbena* De Greg.	*Septocrurella* ? sp.
10. *Terebratula subcarpathica* Szajn.	*Hajagithyris* cf. *fylgia* (Oppel, 1863)
11. *Ter.* (*Pygope*) *mykonionensis* Di Stef.	*Hajagithyris mykonionensis* (Di Stefano, 1884)
12. *Ter.* (*Pygope*) *Gemmellaroi* Di Stef.	*Hajagithyris gemmellaroi* (Di Stefano, 1884)
13. *Ter.* (*Pygope*) *Alamanni* Di Stef.	specimen missing
14. *Ter.* (*Pygope*) *Seguenzae* Di Stef.	specimen missing
15. *Ter.* (*Pygope*) *Seguenzae* Di Stef. *	specimen missing
16. *Ter.* (*Pygope*) *Seguenzae* Di Stef. *	specimen missing
Fig. 1. (p. 46)	
Terebratula hungarica Suess.	*Karadagithyris gerda* (Oppel, 1863)
Fig. 2. (p. 58)	
Terebratula pectorosa Roth.	*Zeilleria pectorosa* (Rothpletz, 1886)

* These figured but missing specimens came from Capo S. Andrea (Taormina) and Mt. Chi Parra (Calatafimi), respectively, but not from Monte Inici.

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A Ruiz által 1928-ban feldolgozott, a Monte Inici (Szicília, Olaszország) középső jura rétegeiből származó történelmi brachiopoda (pörgekarú) gyűjtemény revíziója, egy új faj leírásával (Terebratulida: Brachiopoda)

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Összefoglalás – A G. G. Gemmellaro Múzeumban (Palermo) őrzött, Ruiz által az 1928-as esztendőben monografikusan feldogozott középső jura brachiopoda anyag rendszertani és nevezéktani revíziója 29 taxont tartalmazó, aktualizált listát eredményezett, beleértve egy új fajt is. Megvizsgáltuk a Pizzo delle Niviere-nél – Ruiz faunájának lelőhelyén – található pörgekarú-tartalmú rétegek feltételezetten bath korát; Nyugat-Szicília jura rétegtanára vonatkozó publikált adatok arra utalnak, hogy a kor részben idősebb lehet a bathnál, azaz a késő bajoci korszakba tartozhat. A rendszertani revízió feltárta, hogy a fauna határozottan mediterrán jellegű, és a Ruiz által leírt számos euroboreális taxont tévesen határozták meg. Két közepes megtartású példány alapján leírásra került a *Karadagithyris carmelae* sp. nov. A Monte Inici középső jura brachiopoda együttese erős hasonlóságot mutat a szubbétikai zóna, a Bakony és a Hallstatti-terület azonos korú faunáival. 11 eredeti ábrával, két függelékkel.

Kulcsszavak – Brachiopoda (Pörgekarúak), mediterrán fauna, új faj, rendszertani revízió

ÁBRAALÍRÁSOK

1. ábra. Pizzo delle Niviere helyszínrajza (lelőhelytérképe), Ruiz (1928) középső jura kori pörgekarúinak (brachiopodáinak) lelőhelye.

2. ábra. A Pizzo delle Niviere-i jura szelvény rétegtani oszlopa (Wendt 1863, 9. tábla: MI 2 alapján újrarajzolva és kissé módosítva).

3. ábra. A valószínűleg Parona gyűjteményéből kölcsönzött (Sette Comuni, Észak-Olaszország), így nem a Monte Inici-i anyaghoz tartozó „Rhynchonella calva Parona" példányok múzeumi címkéje.

4–9. ábrák. *Karadagithyris carmelae* sp. nov., típusanyag, Monte Inici, felső bajoci és/vagy alsó bath rétegéből: 4 = holotípus hátoldali nézet; 5 = u. az., hátulsó nézet; 6 = u. az., oldalnézet; 7 = paratípus hátoldali nézet; 8 = u. az., hátulsó nézet; 9 = u. az., oldalnézet (méret jelezve).

10. ábra. A *Karadagithyris carmelae* sp. nov. holotípus búb régiójának csiszolt felülete (Monte Inici, felső bajoci és/vagy alsó bath), amely a hátoldali teknő aljzatán nyugvó, széttartó krurális lemezeket mutatja; po = nyélnyílás, cp = krurális lemezek (méret jelezve).

11. ábra. Három *Karadagithyris* faj hosszúság/vastagság arányának dobozdiagramja (box plot), amely azt mutatja, hogy a *K. carmelae* sp. nov. domborúsága szignifikánsan nagyobb, mint a *K. gerda* (Oppel, 1863) és a *K. erycina* (Gemmellaro, 1877) fajoké.

FÜGGELÉKEK

1. függelék. A Ruiz (1928) monográfiában felsorolt taxonok revideált jegyzéke. Bal oszlop: A régi cédulákon szereplő nevek. Jobb oszlop: A taxonok revideált neveinek jegyzéke.

2. függelék. A Ruiz (1928) féle monográfiában ábrázolt taxonok revideált jegyzéke. Bal oszlop: Az ábramagyarázatokban szereplő nevek. Jobb oszlop: A taxonok revideált neveinek jegyzéke.