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## ***Apricardia pachiniana* Sirna from the lower part of Liburnian beds at Divača (Triest-Komen Plateau)**

### ***Apricardia pachiniana* Sirna iz spodnjega dela liburnijskih plasti pri Divači (Tržaško-komenska planota)**

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#### **Abstract**

Revision of pelecypod valves (fossil nuclei) from lower part of Liburnian beds (Vreme beds) from surroundings of Divača on Triest-Komen Plateau was performed. It was found that all pelecypod shells which were formerly attributed to genus *Gyropleura* do not belong to this genus, but also to genus *Apricardia*. Determined was species *A. pachiniana* Sirna which is characteristic for Maastrichtian in southeastern Sicily.

#### **Kratka vsebina**

Opravljen je bila revizija školjčnih lupin (kamenih jeder) spodnjega dela liburnijskih plasti (vremeske plasti) iz okolice Divače na Tržaško-komenski planoti. Ugotovljeno je bilo, da ne pripadajo vse lupine školjk, ki so bile prej uvrščene v rod *Gyropleura*, samo temu rodu, ampak tudi rodu *Apricardia*. Določena je bila vrsta *A. pachiniana* Sirna, ki je značilna za maastrichtij v jugovzhodni Siciliji.

#### **Introduction**

During mapping of the Gorica sheet of the Basic Geologic Map geologist Karel Grad found in 1958 in a section of Liburnian strata north of Divača, at the foot of the Gaberk hill, remnants of pelecypod valves which I determined in a work in 1960 as genus *Gyropleura* (Pleničar, 1960). The fossil material is preserved in the paleontological collection of the Chair for Geology and Paleontology of the University in Ljubljana. It consists of fossil nuclei of three left valves of hamidian pelecypods. In 1983 a paper by G. Sirna was published in Bolletino della Società Paleontologica Italiana (Sirna, 1983) in which the author described a new species of genus *Apricardia* from Maastrichtian beds at Pachino, Sicily. He named the new species *Apricardia pachiniana* after the locality in which the individuals of the species were found. Owing to the similarity of specimens from Sicily with the above mentioned individuals from surrounding of Divača, I decided for a revision of the original determination. Obviously also the individuals from Divača may belong to the species *A. pachiniana*.



Fig. 1. Location map of outcrop of Maastrichtian beds with *Apricardia pachiniana* Sirna

Sl. 1. Situacijska karta izdankov maastrichtijstih plasti z *Apricardia pachiniana* Sirna

### Systematic description

Class **Bivalvia**

Order Hippuritida

Family Requieriidae Douvillé 1914

Genus *Apricardia* Guéranger 1853

*Apricardia pachiniana* Sirna 1983

Pl. 1, Fig. 1, 2, 3

1960 *Gyropleura* sp. – Pleničar, 39–40, fig. 5a, b, c.

1983 *Apricardia pachiniana* n.sp. – Sirna, 301–303, text-fig. 2a–i.

**Fossil material:** Two fossil nuclei of lower valves, preserved in the paleontological collection of the Chair for Geology and Paleontology of the University in Ljubljana, Inv. No. 3984. Fossil nuclei were extracted from the matrix of grey-brown micritic limestone.

**Description:** Left valve of the first specimen is shown on Pl. 1, fig. 1, 2 from posterior and anterior sides. It is a fossil nucleus on which not even smaller traces of valve are preserved. Apex is partly broken off. An oblong deep groove that corresponds to posterior myophore *mp* is visible. The specimen is hornlike. Aperture is not preserved. According to shape, size and bend of the valve apex, and by comparison with figures 5a, 5b, 5d and 5e in work by G. Sirna (1983) the species *Apricardia pachiniana* Sirna can be determined. The poorer preserved other fossil nucleus,

shown on Pl. 1, fig. 3, is left valve of same species in anterior view. On this specimen some shell is still preserved which is ornamented with growth lines. Cardinal apparatus is not preserved.

Locality: North of Divača, at foot of Gaberk hill, Triest-Komen Plateau.

Stratigraphy: The species was first found in Maastrichtian beds at Pachino in southeastern part of Sicily. In Slovenia rests of this species were found in lower part of Liburnian strata (Vreme strata) which are attributed to Maastrichtian.

### *Apricardia* sp.

Beside the two fossil nuclei of species *Apricardia pachiniana* Sirna Karel Grad found an other fossil nucleus of left valve of pelecypod of genus *Apricardia*. Limestone material of the nucleus is intensely recrystallized. Umbo of the specimen is very long and narrow with a long narrow groove that corresponds to posterior myophore mp. Specimen is figured on Pl. 1, fig. 4, where posterior part of left valve is shown. Cardinal apparatus is not preserved. Specimen was found at the same site of same bed as individuals of species *A. pachiniana*. It possibly represents an other species of genus *Apricardia*, but its poor state of preservation does not allow closer determination.

### Conclusion

In the Vreme strata (lower part of Liburnian beds) in which fossil nuclei of pelecypods of *Apricardia* genus were found very numerous sections of valves of hamidiam shells occur, and they were attributed hitherto exclusively to genus *Gyropleura*. Now beside it also genus *Apricardia* was established. Species *A. pachiniana* was found which confirms the Maastrichtian age of the Vreme beds.

### Acknowledgements

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### References

- Pleničar, M., 1960, The stratigraphic development of Cretaceous beds in Southern Primorska (Slovene littoral) and Notranjska (Inner Carniola). *Geologija* 6, 22-145, Ljubljana.  
 Sirna, G., 1983, *Apricardia pachiniana*, a new species from the Maastrichtian near Pachino (Southeastern Sicily). *Bolletino della Soc. Paleontologica Italiana* 22, n. 3, 301-303, text-fig. 1, 2, Roma.



Plate 1 – Tabla 1

- 1 *Apricardia pachiniana* Sirna  
Divača (Triest-Komen Plateau), posterior view of left valve; visible is groove corresponding to posterior myophore *mp*  
Divača (Tržaško-komenska planota), posteriorna stran leve lupine; viden je jarek, ki ustreza posteriornemu mišičnemu odtisku *mp*
- 2 Anterior side of left valve of the specimen on fig. 1  
Anteriorna stran leve lupine istega primerka kot na sl. 1
- 3 *Apricardia pachiniana* Sirna  
Divača; anterior side of fragment of left valve  
Divača; anteriorna stran odlomka leve lupine
- 4 *Apricardia* sp.  
Divača; posterior view of left valve; visible is groove which corresponds to posterior myophore *mp*  
Divača; posteriorna stran leve lupine; viden je jarek, ki ustreza posteriornemu mišičnemu odtisku *mp*

All figures are natural size. Photographs taken by Marjan Grm at the Chair for Geology and Paleontology of the University in Ljubljana

Vse slike so v naravni velikosti. Fotografiral je Marjan Grm na katedri za geologijo in paleontologijo Univerze v Ljubljani