Scacchia exserta spec. nov. from the Cape Verde Islands and Mauritania (Bivalvia, Heterodonta: Lasaeidae)

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Scacchia exserta spec. nov. is described from dredged samples from around the Cape Verde Islands and off Mauritania. The shell of the new species somewhat resembles that of Scacchia oblonga (Philippi, 1836).

Key words: Bivalvia, Heterodonta, Lasaeidae, Scacchia, taxonomy, Cape Verde Islands, Mauritania.

There are many gaps in the knowledge of the smaller bivalves. Therefore it is not surprising that I have found a new species in the samples dredged by the CANCAP expeditions around the Cape Verde Islands and off Mauritania (MAU-II expedition), an area so far sparsely explored malacologically. The new species resembles *Scacchia oblonga* (Philippi, 1836), but differs in shape, the bigger and more protruding umbo and the somewhat coarser cardinal teeth.

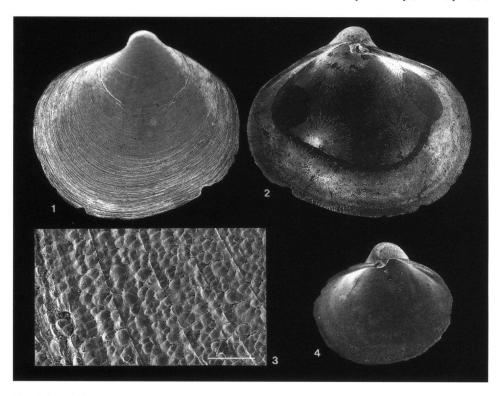
Abbreviations: LH = J. van der Linden collection, The Hague; NNM = Nationaal Natuurhistorisch Museum, Leiden.

Scacchia exserta spec. nov. (figs. 1-4)

Type material. — Holotype (NNM 57195): Cape Verde Islands, W. of Boa Vista, 16° 10'N, 22° 59'W, depth 46 m (CANCAP 1986, Sta. 7.066); left valve, length 5.1 mm, height 4.2 mm. Paratypes from the type locality: 1 right valve, 2 left valves (NNM 57196).

Other paratypes: Cape Verde Islands: W. of Boa Vista, 16° 10'N, 22° 58'W, depth 39 m, CANCAP 1986, Sta. 7.065 (NNM 57197/1); ibidem, 16° 11', 22° 59'W, depth 40 m, Sta. 7.068 (NNM 57198/1); ibidem, 16° 10'N, 23°01'W, depth 74 m, Sta. 7.080 (NNM 57199/1); SW. of Maio, 15° 07'N, 23° 14'W, depth 30 m, Sta. 7.043 (NNM 57200/1); S. of Sal, 16° 34'N, 22° 54'W, depth 75-90 m, Sta. 7.089 (NNM 57201/1). Mauritania: 19° 04'N, 16° 27'W, depth 25 m, MAU-II 046 (NNM 57202/3; LH/2); off Banc d'Arguin, 20° 00'N, 17° 11'W, depth 25 m, MAU-II 065 (NNM 57203/1).

Description (after 15 valves from 8 localities). — The shell is rather small (length 2.1-5.4 mm, height 1.8-4.6 mm), equivalve and inequilateral, beaks just behind the midline, turned inwards and slightly forwards; umbo protruding, convex and prominent. The valves are broadly oval, sometimes more or less triangular in outline (for the most part because of the protruding top) and rounded. The sculpture consists of some, often indistinct, growth-lines; the entire exterior surface, exept for the umbo, is very finely,



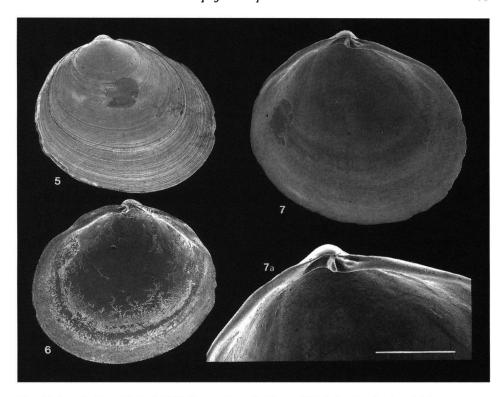
Figs. 1-4. Scacchia exserta spec. nov. 1-3, left valve, holotype (NNM 57195), exterior (1), with a detail showing the microsculpture (3) (scale 0.1 mm), and interior (2); Cape Verde Islands, W. of Boa Vista; length 5.1 mm. 4, right valve, interior, paratype (NNM 57196), from the type locality; length 3.2 mm.

granulated which is even visible on the interior of somewhat transparent valves. The hinge-line is a little sinuous. On the left valve there are two small, diverging cardinal teeth; behind the posterior tooth there is a narrow groove for the internal ligament, almost perpendicular to the shell-axis. The right valve has only one cardinal tooth, just under the beak; the lateral teeth are obsolete. Muscle scars about equal in size and indistinct, the pallial line, sometimes almost invisible, is wide, uninterrupted and rather far from the margin. The outer shell surface is somewhat dull, because of the granulation, semitransparent and white.

Distribution. — Around the Cape Verde Islands and off Mauritania, at depths of 30-90 m.

Derivatio nominis. — Exsertus (Latin), among other things: protruding (i.e. the umbo). Discussion. — S. exserta resembles S. oblonga in shape, nevertheless, the valves have a completely different profile because of the very prominent and convex umbo. The two species have about the same hinge, although the cardinal teeth of S. exserta are larger. They have the same granular surface too, but the granulation on S. exserta is coarser.

S. ovata Philippi, 1844 is a somewhat mysterious species; one right valve only, which



Figs. 5-7. Scacchia oblonga (Philippi, 1836); France, Corse, St. Florent (LH). 5, 6, right valve, length 3.8 mm, exterior and interior, respectively. 7, left valve, interior, length 4.6 mm; 7a, detail of the hinge area, at a slight tilt (scale 1 mm).

is probably lost, has been described by the author. Apart from this, that valve has two cardinal teeth and furthermore two laterals as well: "...cardine valvulae dextrae bidentato; dentibus lateralibus remotis plicaeformibus, distinctis". It is questionable whether this species is a *Scacchia* at all.

S. concava Brugnone, 1876 (known to me from the literature only, just like S. ovata) has, contrary to S. exserta, a small umbo and the shell is: "...transversim tenuissime striata...". Therefore, I think that this species has probably the same microsculpture of radiating, divaricate lines as S. zomi Van Aartsen & Fehr-de Wal, 1985. For that reason S. exserta can not be confused with S. concava or S. zomi.

Finally, S. tenera Jeffreys, 1881, a species discussed in detail by Van Aartsen & Fehrde Wal (1985), again a species of which only one right valve is known. The photograph of the lectotype and the figures of Jeffreys (pl. 61 fig. 2) bear no resemblance to the outline of that of S. exserta, although, in my opinion, it is probably a species which belongs to the genus Scacchia, because of its typical granular exterior surface (just visible on the photograph) and its dorsal margin folded over on both sides of the beaks (like in S. oblonga). The characters of the right hinge do not contradict this opinion.

Note. — Thanks to the NNM-CANCAP expeditions (1976-1988), the known range

of S. oblonga (Mediterranean) will be enlarged with: Mauritania (15 samples, numerous valves and some paired shells, dredged from 18 to 50 m deep) and the Cape Verde Islands (8 samples, several dozens of specimens, from 29 to 90 m deep).

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