

A new subgenus in the Mesodesmatidae (Mactracea)

by

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W.H. Turton (1932: 252) described *Donacilla africana* as a new species from Port Alfred, South Africa. However, judged by the characters of the hinge, the principal points of distinction between the genera in the Mesodesmatidae, this species belongs to the genus *Mesodesma* Deshayes, 1832. The pallial line, however, differs so much from that of the other species in this genus, that it is impossible to classify it with one of the known subgenera. I therefore want to erect a new subgenus for which I designate *Mesodesma africanum* the type-species.

I propose the name *Regterenia* in dedication to Dr. C.O. van Regteren Altena on the occasion of his 65th birthday.

Mesodesma Deshayes, 1832

Regterenia nov. subgen.

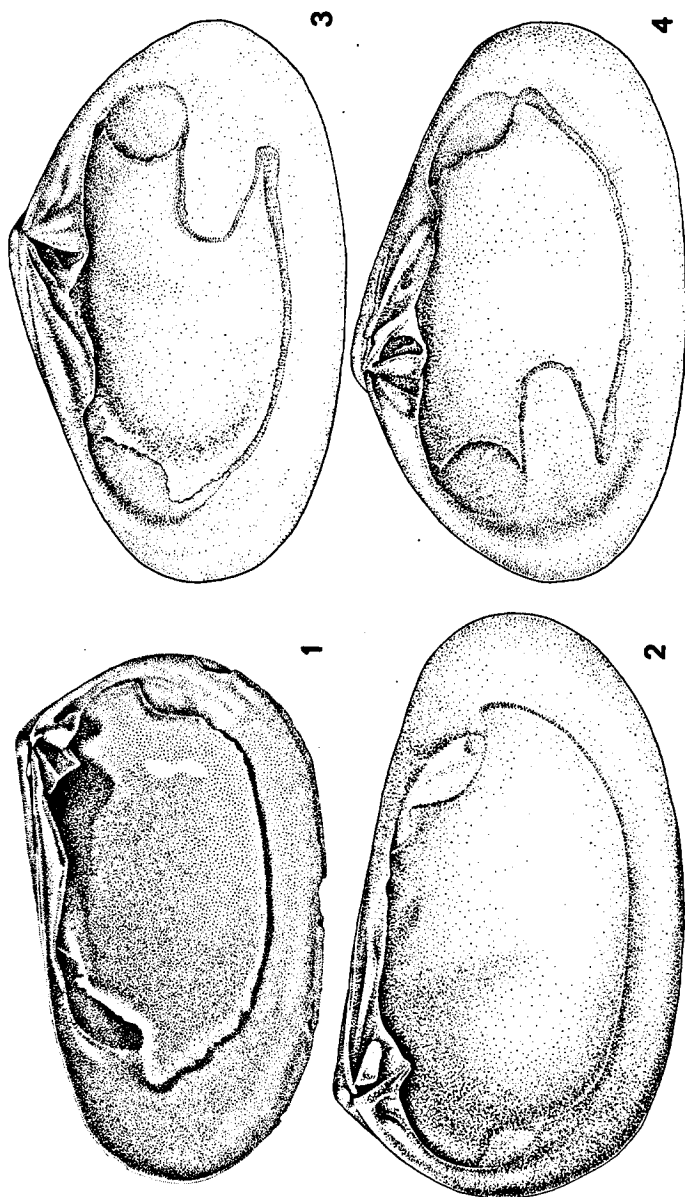
Diagnosis, see description of the type species *Donacilla africana* Turton, 1932.

Mesodesma (Regterenia) africanum (Turton, 1932)
figs. 1-2

Donacilla africana Turton, 1932: 252, pl. 68 fig. 1782; Rost & Soot-Ryen, 1955: 22; Barnard, 1964: 514, fig. 28a.

Shell small (maximum dimensions 7.5 x 4.0 mm), convex, elongate-ovate, inequilateral, anterior comparatively markedly produced, anterior : posterior = 4 : 1. The umbo is not prominent. The dorso-anterior side is almost straight, the anterior end rounded, the ventral side slightly convex, and the posterior side very short, rounded and truncate. The valves are white to ivory, thin, and often somewhat transparent. The surface, which is covered by a thin, pale yellow periostracum, is smooth and glossy, with concentric growth lines only.

The pallial line is clearly visible, it reaches beyond the anterior muscle scar, and there is no pallial sinus. The muscle scars are elliptical in shape.



Hinge. The oblique resilifer projects into the interior of the shell, pointing towards the ventro-anterior side. The lateral teeth reach to about halfway the muscle scars.

Hinge of the left valve. The stout cardinal tooth is rectangular in shape. The resilifer is separated from the pit for the ventral lateral tooth of the right valve by a thick lamella (see fig. 2).

Hinge of the right valve. The long and thin cardinal tooth reaches from the umbo to the ventro-anterior lateral tooth, and is laterally partly fused with the dorso-anterior lateral tooth. The ventro-anterior lateral tooth is thick and markedly bulging into the interior of the shell (see fig. 1). The dorso-anterior lateral tooth is fused with the margin of the shell. The ventro-posterior tooth has the shape of a thick knob and the dorsal one is much reduced and fused with the margin of the shell.

The most striking differences between *Donacilla cornea* (Poli, 1791), in my opinion the only species of the genus, and *Mesodesma africanum* are the following (see figs. 1-4):

<i>D. cornea</i>	<i>M. africanum</i>
hinge very heavy and solid	hinge not heavy
shell with a pigmented pattern or distinctly coloured	shell not pigmented

Neither in *Donacilla*, nor in one of the known subgenera of *Mesodesma* the pallial line reaches beyond the anterior muscle scar, nor is the pallial sinus completely absent.

Distribution: South Africa — Breëriviermond; Stilbaai; Groot-Brakrivier; Port Alfred; Durban. Mozambique — Inhambane. Madagascar. Fossil: Pleistocene, South Africa, Sedgefield near Knysna.

Material studied. Holotype: right valve, 7.0 x 3.8 mm (the two paratypes do not belong to the Mesodesmatidae), Port Alfred (Oxford University Museum); 2 specimens + 3 odd valves, Stilbaai (British Museum, Natural History); 11 odd valves, Durban Bay

Figs. 1-4. Shells of Mesodesmatidae. 1-2. *Mesodesma (Regterenia) africanum* (Turton), South Africa, Durban Bay. 1. Right valve, 5.3 x 3.2 mm. 2. Left valve, 6.0 x 3.2 mm. 3-4. *Donacilla cornea* (Poli), France, beach of Le Barcarès, 21.0 x 12.5 mm. 3. Right valve. 4. Left valve. Specimens in Rijksmuseum van Natuurlijke Historie, Leiden. J. Wessendorp del. (figs. 2-4) and W.C.G. Gertenaar del. (fig. 1).

(Rijksmuseum van Natuurlijke Historie, Leiden); 4 odd valves, Madagascar (Institut Royal des Sciences Naturelles de Belgique, Dautzenberg colln.).¹

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1. The author is indebted to the authorities of the various museums for the loan of the above material.