

Notes on type material of the family Pectinidae (Mollusca: Bivalvia)

2. Notes on *Chlamys humilis* Sowerby, 1904,
and *Chlamys natalensis* Sowerby, 1906

H. P. WAGNER

P.O. Box 2224, 2301 CE Leiden, Netherlands

The name *Chlamys* (*Chlamys*) *humilis* Sowerby, 1904, was resurrected by Kilburn & Rippey (1982: 216) for a species that was relegated to the synonymy of *Chlamys* (*Chlamys*) *tincta* (Reeve, 1853) by Barnard (1964: 424-426). This conclusion was based on a series of newly collected material from Cape St. Blaize. The present author has studied the types of *C. humilis* and agrees with this conclusion. He has also checked the types of *C. tincta* and some of its synonyms.

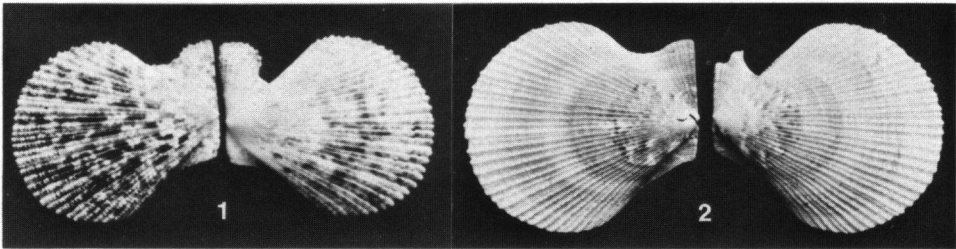
The type material of *C. humilis* consists of two valves from "Great Fish Point, N.W., 9 miles, depth 51 fathoms; bottom, sand and shells" (BMNH 1904.12.23.163)¹ and one complete pair from "Cape St. Blaize, N. by E., 1/4E., 65 miles, depth 90 fathoms" (SAM 14858). The type specimens are syntypes. The two valves from the BMNH, on which the description by Sowerby (1904: 3) is mainly based, without any doubt belong to *C. tincta*. The pair from the SAM, which is the specimen figured by Sowerby (1904: pl. IV fig. 3), represents a separate species. The specimen from the SAM is herewith designated lectotype of *Chlamys* (*Chlamys*) *humilis* Sowerby, 1904. The valves from the BMNH consequently become paralectotypes of the same species, but the paired shells belong to *C. tincta*.

Some authors might consider Barnard's (1974: 761) note 'Paratype of *humilis* in S.A.M.' the designation of a lectotype sensu IZN. If the Cape Town museum specimen is considered a paratype than indeed one of the London specimens automatically is the holotype. In that case *C. humilis* would become a synonym of *C. tincta* and also the Cape Town specimen would need a new name. For the sake of stability of nomenclature it is here suggested to follow the first mentioned procedure, so that *C. humilis* has as its lectotype the SAM specimen and the name may be used in that sense in the future. Prof. Dr. L. B. Holthuis of the Leiden museum has indeed advised to designate the SAM specimen as lectotype of *C. humilis*, because Barnard did not properly select a lectotype for Sowerby's species.

Because there is no proper description of *C. humilis* some comprehensive notes follow below. The differences between the closely related species from the same area will be discussed below. *Chlamys* (*Chlamys*) *natalensis* Smith, 1906, is very similar to *C. humilis*.

The present author was able to study the alcohol preserved holotype of *Chlamys* (*Chlamys*) *weberi* Bavay, 1904 (dimensions: 15.8 mm height, 14.1 mm width and 4.2 mm depth), from Durban, Natal, South Africa (ZMA). This shell is almost identical in colour

¹ Abbreviations: BMNH = British Museum (Natural History), London; SAM = South African Museum, Cape Town; RMNH = Rijksmuseum van Natuurlijke Historie, Leiden; ZMA = Zoölogisch Museum, Amsterdam.



Figs. 1-2. South African *Chlamys* species. 1. Possible holotype of *C. natalensis* Smith, 1906 (BMNH), height 23.4 mm. 2. Lectotype of *C. humilis* Sowerby, 1904 (SAM 14858), height 18.8 mm.

pattern to the complete specimen (possibly the holotype, dimensions: 23.4 mm height, 20.4 mm width and 7.4 mm depth) that was sent on loan to the author by the BMNH (fig. 1). The microsculpture of both shells is identical and a comparison of the situation of the ribs failed to reveal differences between the two taxa. It should be noted that both taxa, according to present information, are restricted to the area around Durban, Natal. Therefore the name *C. natalensis* Smith, 1906, is relegated to the synonymy of *C. weberi* Bavay, 1904 (see also Bavay, 1933: 311, 321).

Chlamys (Chlamys) humilis Sowerby, 1904
figs. 2, 6, 7, 8

- 1904 *Chylams* (sic) *humilis* Sowerby: 3, pl. VI fig. 3.
- 1906 *Chlamys humilis* - Smith: 59.
- 1964 *Chlamys tinctus* p.p. - Barnard: 424, 425.
- 1974 *Chlamys tinctus* p.p. - Barnard: 761.
- 1982 *Chlamys humilis* - Kilburn & Rippey: 216.

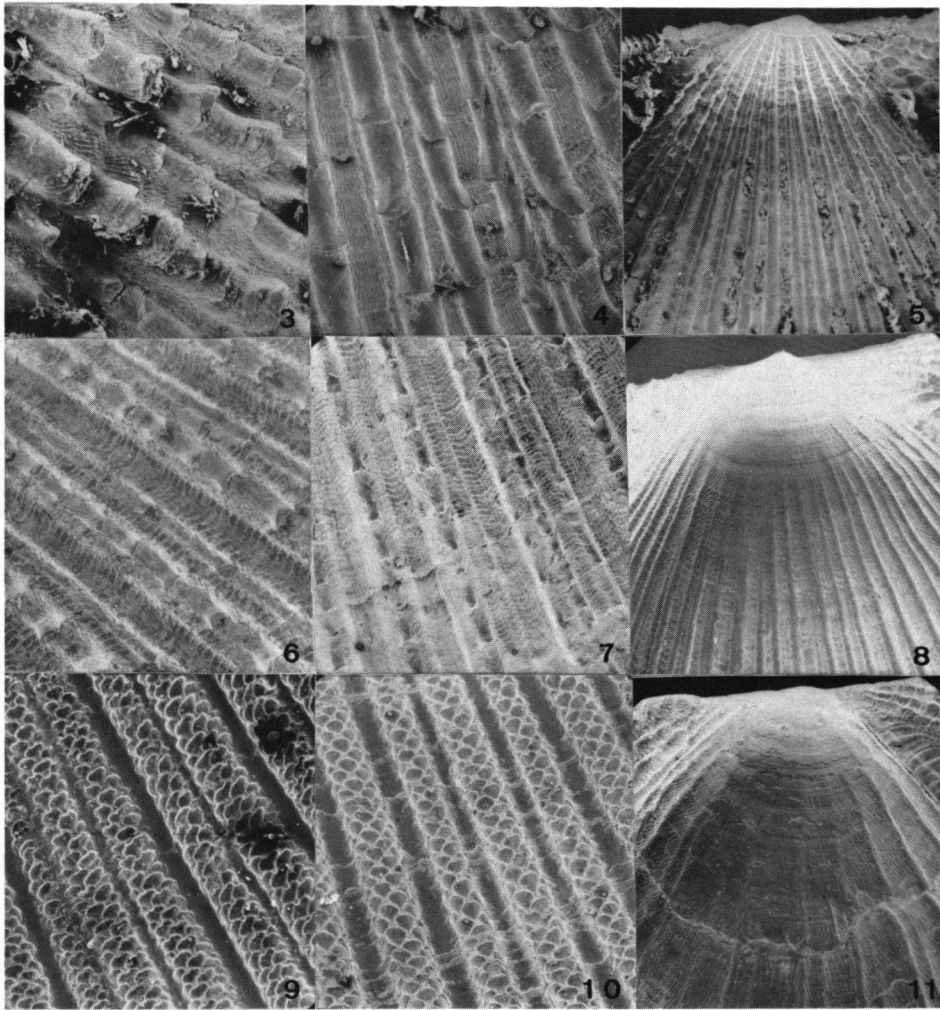
The lectotype shell is longer than wide. Dimensions: 18.8 mm height, 16.9 mm width and 5.0 mm depth. The valves are inequilateral; the right valve is more swollen than the left. There are 32 pronounced ribs on the left valve, and 15 less pronounced ribs between the major ribs and near the lateral edges of the shell. On the right valve there are 33 pronounced ribs and 14 less pronounced ribs between the major ribs and near the lateral edges of the shell. There are squamae on all ribs. The microsculpture of the valves consists of small grooves between the ribs and of concentric microlamellae on the edges of the ribs.

There is initially no microsculpture on the top and the ribs appear gradually at different distances from the apex. The microsculpture of the juvenile area consists of grooves and later on also of concentric microlamellae as described above.

Anterior ears twice as large as the posterior. There are 9 ribs on the anterior ear of the right valve and 3 on the left valve. There are 3 ribs on the posterior ears of both valves.

In the byssal notch 5 teeth are observed. The byssal notch is ca. 2.7 mm deep. Resilium dimensions are 0.5 mm height and 0.3 mm width. The top angle is 74° .

The top is yellowish and the part where the juvenile microsculpture is visible has some red and white dots, otherwise the valves are pink. Muscle scars on the inside of the valves are not visible.



Figs. 3-11. Microsculpture of South African *Chlamys* spp. 3. Left valve of *C. tincta* (Reeve, 1853) (15x). 4. Right valve of *C. tincta* (15x). 5. Top of right valve of *C. tincta* (22.5x) (3-5 colln. H.P. Wagner). 6. Left valve of *C. humilis* Sowerby, 1904 (15x). 7. Right valve of *C. humilis* (15x). 8. Top of right valve of *C. humilis* (22.5x) (6-8 colln. C.M. Connolly). 9. Left valve of *C. weberi* Bayay, 1904 (15x). 10. Right valve of *C. weberi* (15x). 11. Top of right valve of *C. weberi* (22.5x) (9-11 colln. H.P. Wagner). S.E.M. photographs J.H.W. Krom (RMNH).

Type locality. – “Cape St. Blaize, N. by E., 1/4E., 65 miles, depth 90 fathoms”.

Remarks. – The specimen from the collection of Mrs. Clarice Connolly (trawled in Mossel Bay, South Africa, 1978) measures 19.9 mm height, 18.3 mm width and 6.1 mm depth. This specimen has 36 pronounced ribs and 14 less pronounced ribs on the right

and 36 pronounced ribs and 13 less pronounced ribs on the left valve. On the anterior ear of the right valve there are 8 ribs; the byssal notch is 3 mm deep and the resilium is 0.7 mm height and 0.4 mm width. The other characters are the same as for the lectotype.

Discussion. — The two species most closely related to *C. humilis* are *C. tincta* and *C. weberi*. The best character to separate the three species, is the microsculpture. In *C. tincta* the microsculpture between the ribs only consists of small grooves (figs. 3-4), while *C. weberi* has a reticulate microsculpture (figs. 9-10). The microsculpture of *C. humilis*, as mentioned above, consists of grooves and concentric microlamellae on the edges of the ribs (figs. 6-7).

The top of both *C. humilis* (fig. 8) and *C. weberi* (fig. 11) is smooth and the ribs appear gradually at different distances from the top; *C. humilis*, however, has more ribs. The apical microsculpture of *C. tincta* (fig. 5) is quite different from that of the two other species. There is a very short and smooth top and all ribs appear at the same distance from the apex and all are strongly pronounced as compared to the other two species.

Material. — *Chlamys humilis* Sowerby, 1904. — Lectotype SAM 14858 (1 complete specimen), colln. C. M. Connolly (1 complete specimen); *Chlamys tincta* (Reeve, 1853). — Figured syntype BMNH 1981247/1 (1 complete specimen), other syntypes BMNH 1981247/1-3 (1 complete specimen and 1 right valve), paralectotypes *C. humilis* BMNH 1904.12.23.163 (1 left and 1 right valve), RMNH (46 valves), colln. H. P. Wagner (10 complete specimens of which 7 juvenile); *Chlamys weberi* Bavay, 1904. — Holotype ZMA (1 complete specimen in alcohol), BMNH (possible holotype of *C. natalensis*, 1 complete specimen), colln. R. Sturz (2 valves), colln. H. P. Wagner (1 left and 1 right valve).

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