

Gloria Maris	43(4)	20-31	Antwerpen, september 2004
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RED SEA MOLLUSCA

Part 18

Class : *Gastropoda*

Family : *Haliotidae*

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Genus *Haliotis* Linné, 1758

1 *Haliotis pustulata* Reeve, 1846

Fig. 1-21

Proc.Zool.Soc.London.Part. XIV, pag.58.

Conch. iconica Vol. III, Mono. *Haliotis*, pl.XV, fig.52.

Throughout the searched areas locally very common. The main part of the populations inhabit the by various hard substrates characterized littoral fringing reefs and reef platforms. During diving trips the species was frequently collected at several depths which vary between 3 to 20 metres.

Remark: The true identity of this species was in doubt. In former listings and publications concerning Red Sea Malacology considerable confusion exists, which results into a list of taxa: *H. varia* Linné, 1758, *H. ovina* Gmelin, 1791, *H. unilateralis* Lamarck, 1822, *H. venusta* A. Adams & Reeve, 1845. *H. ancile*, *cruenta*, *dringii*, *multiperforata*, *pustulata* and *scutulium* all Reeve, 1846. Probably because the species is very polymorphic. Some authors consider *pustulata cruenta* and *pustulata scutulium* as varieties or as a subspecies of *H. pustulata*. We do not agree.

However; in his monograph Reeve (1846) mentions them all as species, not as varieties nor subspecies. Figures (27-28-28a-29) represent the types of *pustulata*, *cruenta* and *scutulium*.

In our opinion the species *H. varia* Linné, 1758, *H. ovina* Gmelin, 1791, *H. venusta* A. Adams & Reeve, 1845, *H. ancile*, *H. dringii* and *H. multiperforata* Reeve, 1846 do not occur in the Red Sea. We doubt whether all species mentioned are valid as they can scarcely be separated. *H. cruenta* and *scutulium* Reeve, 1846 are also of questionable specific value. All occur in the Red Sea, but the differences between the indivi-

duals are minor and insufficient; the variation is more ecological rather than geographical.

In the collected areas (Gulf of Aqaba, Gulf of Suez and proper Red Sea), *H. pustulata* ss. is dominant. A spectrum of intergrading stages as figured occurs (Fig. 1-21). Consequently and for reason of nomenclature and taxonomic stability, we propose *H. pustulata* Reeve, 1846 as the valid name for specimens occurring in the Red Sea. We consider *H. cruenta* and *scutulum* Reeve, 1846 as synonyms.

Opmerking: De identiteit van de soort was twijfelachtig. In voorafgaande lijsten en publicaties aangaande Rode Zee Malacologie bestond veelvuldige verwarring wat naamgeving betrof. Dit resulteerde in een aanzienlijke lijst van taxa: *H. varia* Linné, 1758, *H. ovina* Gmelin, 1791, *H. unilateralis* Lamarck, 1822, *H. ancile*, *cruenta*, *dringii*, *multiperforata*, *pustulata* en *scutulum* allen Reeve, 1846. Verschillende auteurs beschouwen *pustulata cruenta* en *pustulata scutulum* als een variëteit of ondersoort van *H. pustulata*, waarschijnlijk door de variabiliteit binnen de soort.

Reeve (1846) beschouwt in zijn monografie alle als aparte soort, niet als variëteit, noch als ondersoort. De figuren (27-28-28a-29) stellen de types voor van *pustulata*, *cruenta* en *scutulum*.

In onze opinie komen de soorten *H. varia* Linné, 1758, *H. ovina* Gmelin, 1791 en *H. dringii* Reeve, 1846 niet voor in de Rode Zee. Verder delen we niet dezelfde mening als sommige auteurs die *pustulata cruenta* of *pustulata scutulum* als ondersoort beschouwen. Door de variabiliteit binnen deze soort kunnen ze nauwelijks gescheiden worden. *H. cruenta*, en *scutulum* Reeve, 1846 beschouwen we tevens als zijnde van twijfelachtige status daar alle voorkomen in de Rode Zee. De verschillen tussen de individuen zijn zeer klein en onvoldoende. De variatie is meer ecologisch dan geografisch. In de Golf van Akaba, Golf van Suez en eigenlijke Rode Zee, is *H. pustulata* ss. duidelijk overheersend. Een reeks overgangsvormen is afgebeeld (fig. 1-21). Om reden van nomenclatorische en taxonomische stabiliteit beschouwen we *H. pustulata* Reeve, 1846 als de valide naam. *H. cruenta* en *scutulum* Reeve, 1846 beschouwen we als synoniem.

Haliotis unilateralis (Lamarck, 1822)

Fig. 22-26

Anim. sans Vert. VI, 2. p.217.

Rare at the searched areas. *H. unilateralis* was occasionally collected. We reported findings for the region of the Gulf of Aqaba. A single specimen was collected at Near Garden (Sharm el Sheikh), one at Na ama Bay and three at Dahab. We also have one specimen from Zafrana (Gulf of Suez). All specimens were collected while scuba-diving at a depth of nearly 30 metres. For the proper Red Sea we report two specimens collected in the Hurghada area. One dead specimen was collected while snorkelling on

the reefs at Abu Mingar Island, a second one while diving off Hurghada at a depth of nearly 10 metres.

Note: Before 1996 the name *unilateralis* was generally admitted to specimens belonging to the complex *H. pustulata* Reeve, 1846. *H. unilateralis* is considered endemic for the Red Sea. However, the first author also possesses specimens from Mauritius. Geiger in *Revue Suisse de Zoologie*, 103 (2): pp. 339-354, 1996 published the study concerning **Haliotidae** of the Red Sea. He designated and figured the neotype of *H. unilateralis* Lamarck, 1822 (MHNG n°.18020. Lamarck collection). Following Geiger we consider the collected specimens as *H. unilateralis* Lamarck, 1822.

Nota: Vóór 1996 werd de naam *unilateralis* algemeen gebruikt voor soorten binnen het complex *H. pustulata* Reeve, 1846. Tevens werd *H. unilateralis* beschouwd als endemisch voor de Rode Zee. Echter, de eerste auteur bezit ook exemplaren van Mauritius. Geiger (*Revue Suisse de Zoologie*, 103 (2): pp. 339-354; 1996) bestudeerde de **Haliotidae** uit de Rode Zee, en selecteerde een neotype van *H. unilateralis* Lamarck, 1822 (MHNG n°.18020. Lamarck collectie). We volgen Geiger en beschouwen de gevonden exemplaren als *H. unilateralis* Lamarck, 1822.

Plate 1

Fig, 1-2-3-4-5-6:

H. pustulata Reeve, 1846.

Fig, 7-8-9:

forma *H. scutulium* Reeve, 1846

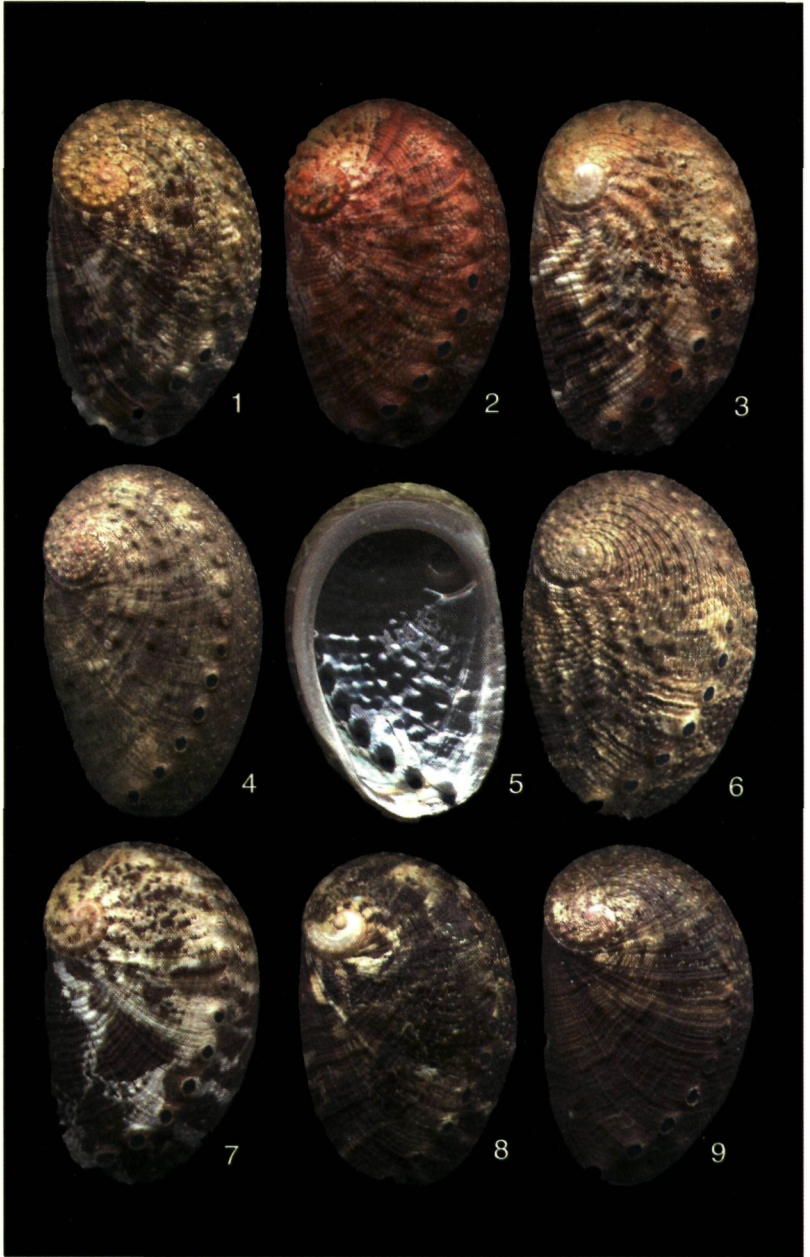


Plate 2

Fig, 10-11-12: forma *H. scutulum* Reeve, 1846

Fig, 13-14-15-16-17-18: forma *H. cruenta* Reeve, 1846

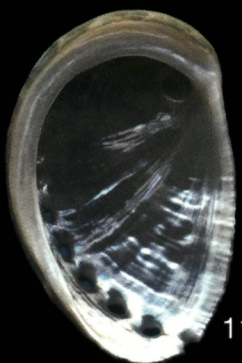


Plate 3

- Fig, 19: *H. pustulata* Reeve, 1846.
Fig, 20: forma *H. scutulum* Reeve, 1846.
Fig, 21: forma *H. cruenta* Reeve, 1846.
Fig, 22-23-24-25-26: *H. unilateralis* Lamarck, 1822



19



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Plate 4

- Fig, 27: Holotype of *H. pustulata* BMNH, London. n°. 1950.3.16.64.
- Fig, 28-28a: Holotype and paratypes of *H. cruenta* BMNH, London. n°. 1950.3.16.55-57.
- Fig, 29: *H. scutulum* (The type of *H. scutulum* is no longer existent in BMNH London. The specimen figured in the monograph of Reeve 1846 is here designated as the illustrated lectotype.)
- Fig, 30-30a: Neotype of *H. unilateralis* Lamarck, 1822 MHNG. 18020.



Plate 5

Fig. 31-32-33

Sem photographs of juvenile specimens.

Photos © Maria Vermeiren

