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A NEW SPECIES OF *PRIOTROCHUS* (MOLLUSCA: GASTROPODA: TROCHIDAE) FROM OMAN*

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SUMMARY

An apparently endemic species, *Priotrochus aniesae* n.sp. is described here from Masirah Island (Oman), well known for a number of endemic marine molluscs. It is known only from mud flats at one place on the east coast of the island.

INTRODUCTION

During an expedition in November 1991 to the Sultanate of Oman, initiated by Dr. Donald T. Bosch, both authors collected marine molluscs on the tidal mud flats between the island of Masirah and the mainland. The waters around Masirah provide several endemic molluscan species (e.g. *Cypraea teuleri* Cazanavette, 1846; *Actaeon eloisae* Abbott, 1973). It is not known what causes this endemism but it may be related to the upwelling of cold water originating from the deep sea off the coast of the province Dhofar.

Priotrochus, with the South African *Trochus obscurus* Wood, 1828, as type species (Wenz, 1938) was introduced by Fischer (1879) as a subgenus of *Trochus*. Herbert (1988a, 1988b) recognized *Priotrochus* as a valid genus, discussed its systematic posi-

tion, and described *P. iris* from south-east Africa. In preparation is an article in which Herbert (in litt. 15.04.1992) will discuss the distribution and the differences between *P. obscurus* and *P. kotschyi* (Philippi, 1849) from the Arabian seas. Therefore, we do not discuss those species here.

Priotrochus aniesae n.sp.

Figs 1-6

Description of holotype (ZMA Moll.3.92.002).

Length 10.2 mm, width 11.0 mm. Shell globose-turbiniform (Figs 1-3). Protoconch and early teleoconch whorls eroded (revealing the nacreous under layer) and/or covered with calcareous algae. Body whorl: with two rows of widely spaced nodules, one at the periphery (comprising about 13 nodules) and one on the shoulder edge (comprising about 10 nodules,

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some scarcely visible); with 5 spiral grooves between suture and shoulder, and 4 spiral grooves from shoulder to periphery. Just below the periphery a more prominent spiral groove, succeeded below by 8 lesser spiral grooves; between all these grooves are minute, prosocline ribs. Umbilicus narrow but deep, almost completely covered by parietal callus. Parietal callus with about 16 spiral lirae, upper part (1/6) smooth. Columella with 3 lirae; inside of outer lip has about 17 lirae. Edge of aperture thin.

Operculum: Multispiral, with 7-8 whorls; nucleus central; corneous, horny-straw brown; diameter 4.5 mm.

Colour: Ground colour pale violet, mottled with cream to white axial (opisthocline) zones; Body whorl with white patches and irregular, minute, elongate, brown lines. Zone from shoulder to periphery has a mixture of violet and white, on the spiral ridges axial brown lines; lower part of bodywhorl has the same colour pattern as the zone above. Edge of aperture white, inside nacreous.

Radula (Figs 4-6): $\infty+6+1+6+\infty$; rachidian broad, narrowing towards the cutting edge (Fig. 5); each lateral has a basal alate process on the outer edge, overlapping its neighbour, cusps sublanceolate to spatulate, non-denticulate, progressively enlarging from first to sixth (Fig. 5). Marginals numerous, slender and becoming progressively smaller and more recurved towards the margin; inner laterals with smooth cusps, those near the margin serrated (Fig. 6).

External anatomy: no colour pattern on preserved animal. Cephalic tentacles well developed, 2.5 x length of eye stalk; eye stalks (length 1.0 mm) found postero-lateral to cephalic tentacles, not fused to tentacles; eye terminal, black; left eye stalk with minor swelling at base; small slightly digitated, cephalic lappets present above tentacles but absent from central part of head; snout broad, rounded with papillate margin, on each side a papillate lateral ridge, near the margin on both sides a small area with slender papillae. Neck lobes well developed, the left one arising from beneath cephalic tentacle, its margin is smooth, bearing some small curly processes; right lobe of similar size, fused to eye stalk. Three epipodial tentacles (size about twice that of eye stalk) on

each side of ventral surface; side of foot slightly papillate.

Variation in the paratypes

Six paratypes (ZMA Moll. 3.92.003) from the type locality, smallest 8.7 mm wide. The smaller, immature specimens have more prominent nodules. There is a variation of about 20% in the number of parietal and apertural lirae. The colour pattern is more variable. In one paratype the violet axial patch is reduced to an axial, dark violet opisthocline line.

One paratypes will be donated to the Oman Natural History Museum, one to the Natal Museum, South Africa, and one to the Los Angeles County Museum, U.S.A.

Type locality / distribution

Known only from the type locality: Sultanate of Oman, Masirah island, Umm Rasas [Rusays], half way along the east coast. Habitat: Sta. 91/99- a muddy tidal flat with stones and algae, leg. R.G. Moolenbeek and H. Dekker, 21 November 1991.

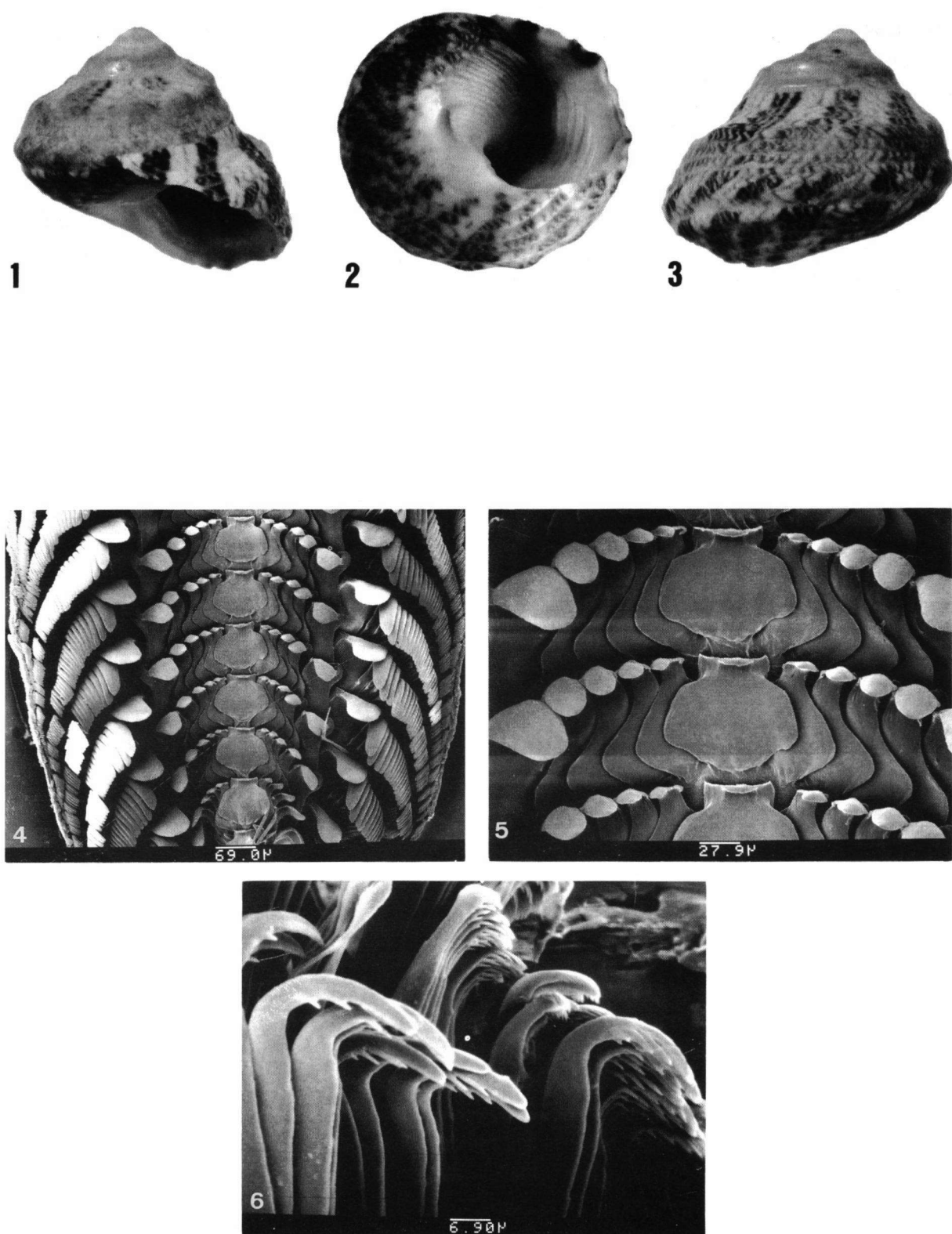
REMARKS

In sculpture and colour pattern this new species resembles *P. obscurus* (Wood, 1828). However, the latter lacks coronation at the periphery, it has more prominent columellar lirae and more pronounced spiral sculpture on the whorls. The aperture of *P. kotschyi* (Philippi, 1849) is entirely lacking lirae and lacks the peripheral coronations. The external anatomy of *P. kotschyi* differs also; it has short eye stalks, the right one being fully connected to the right neck lobe; also the snout and cephalic tentacles have a blackish pigmentation. *P. kotschyi* is sympatric with *P. aniesae* n.sp., occupying almost the same intertidal, muddy habitat at the type locality.

The new species is named after Miss Aniesa Bosch.

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Figs 1-6. *Priotrochus aniesae* n.sp., holotype, Masirah Island, length 10.2 mm. 1. ventral view. 2. basal view showing the umbilicus and parietal ridges. 3. dorsal view. 4. section of radula. 5. rachidian and lateral teeth. 6. outer marginal teeth.

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