

A new species of *Galeodea* Link, 1807 (Mollusca: Gastropoda: Cassidae) from the Philippine Islands

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ABSTRACT. A new species of *Galeodea* Link, 1807 is described from the Philippine Islands and compared with the three other species of *Galeodea* occurring in the same area : *Galeodea leucodoma* Dall, 1907, *G. echinophorella* Habe, 1961 and *G. nipponica* Sakurai & Habe, 1961.

INTRODUCTION

In September 2001 the senior author got a *Galeodea* from a British shell dealer who had obtained this shell from the Philippine shell dealer Quirino Hora. At first glance it looked like an aberrant specimen of *Galeodea nipponica*, but it is clearly distinguishable from this species.

After having discussed this species with Dr Alan Beu, Lower Hutt, New Zealand we have decided to describe it as a new species.

List of Recent *Galeodea* Link, 1807 and their geographical distribution :

Galeodea echinophora (Linné, 1758); Mediterranean.

Galeodea echinophorella Habe, 1961; southern Japan to Western Australia.

Galeodea ferrarioi (Bozzetti, 1989); Somalia.

Galeodea hoarui Drivas & Jay, 1989; Reunion Island.

Galeodea keyteri (Kilburn, 1975); southern Mozambique to Natal, South Africa, and Madagascar.

Galeodea leucodoma Dall, 1907; Japan to Western Australia, and southern Madagascar.

Galeodea maccamleyi Ponder, 1983; Central Queensland, Australia.

Galeodea nipponica Sakurai & Habe, 1961; Japan to Western Australia.

Galeodea rugosa (Linné, 1771); British Isles to West Africa and western part of Mediterranean.

Galeodea triganceae (Dell, 1953); eastern coast of New Zealand.

SYSTEMATICS

Family CASSIDAE Swainson, 1832

Genus *Galeodea* Link, 1807

Type species: *Buccinum echinophora* Linnaeus, 1758, Mediterranean.

Galeodea beni, spec. nov.

Figs 1, 2

Type material. Holotype MNHN, Paris height : 81,1 mm; greatest width : 51,8 mm.

Type locality. Off north-western Panglao, Philippine Islands; by tangle nets in 450-550 m, live-taken.

Description. Shell medium-sized for the genus, elongate-ovate, thin but solid; taller than wide (h/w = 1,5).

Protoconch consisting of 2 ½ whorls. Teleoconch of five whorls sculptured by regularly spaced spiral cords (about 55 on body whorl), bearing fine nodules on the early whorls. Shoulder of body whorl slightly angulate with 28 not very prominent but distinct nodules; another three nodule-bearing cords at midbody of body whorl. These cords always consist of three crowded spiral striae. Suture not distinctly incised; one stronger spiral cord just below the suture.

Parietal shield smooth, very thin. Aperture wide, semilunate; outer lip reflected backward, almost smooth. Anterior canal short, rather straight. No posterior nodule on outer lip present.

Basic colour yellowish to orangish white with very thin dirty greenish-brown translucent periostracum. Protoconch whitish; inside of outer lip and interior of aperture porcelain white; parietal callus transparent. Operculum typical for *Galeodea*; corneous, ovate with a marginal nucleus; reddish-brown.

Discussion. Three other species of the genus *Galeodea* Link, 1807 are known in the Philippines: *leucodoma* (Figs 3, 4), *echinophorella* (Figs 5, 6) and *nipponica* (Figs 7, 8). These species differ from *Galeodea beni*, spec. nov. in the following features : (see Table 1)

	<i>G. beni</i> , spec. nov.	<i>G. echinophorella</i>	<i>G. nipponica</i>	<i>G. leucodoma</i>
Adult size	81,1 mm	up to 65 mm	up to 110 mm	up to 75 mm
Colour	yellowish to orangish-white	chalky white with a distinct orange patch on the back	chalky white	chalky white
Anterior canal	straight	curved backward	curved backward	rather straight
Posterior nodule on the outer lip	not present	present	not present	not present
Inside of outer lip	smooth	bearing obscure denticles	smooth	bearing distinct denticles
Shell	thin	thick	thick	thick
Spiral rows of nodules on the body whorl	4	3	3-5	6-7
Shape of nodules	not very prominent, low and rounded	prominent, sharply pointed	prominent, sharply pointed	prominent, rounded
Number of nodules on the shoulder spiral cord	28	13-16	19-23	27-31

Table 1. Comparison of *Galeodea* species.

Etymology. This new species is named after Dr Alan Beu, Institute of Geological and Nuclear Sciences, Lower Hutt, New Zealand.

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Remarks

All photographs by Uschi Damaschke, Möckmühl, Germany.

Figures 1-8

1-2. *Galeodea beni* spec. nov., 81, 1 mm x 51, 8 mm, Panglao, Bohol, Philippines. Dorsal and ventral view. Holotype MNHN. **3-4.** *Galeodea leucodoma* Dall, 1907, 61, 8 mm x 40, 9 mm, Honshu, Japan. Dorsal and ventral view, coll. K.Kreipl. **5-6.** *Galeodea echinophorella* Habe, 1961, 36, 9 mm x 25, 5 mm, Panglao, Bohol, Philippines. Dorsal and ventral view, coll. K.Kreipl. **7-8.** *Galeodea nipponica* Sakurai & Habe, 1961, 102, 7 mm x 69, 3 mm, Rowley Shoals, NW-Australia. Dorsal and ventral view, coll. K.Kreipl.

