



A new species of *Depressizona* and the family rank of Depressizonidae

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The microscopic scissurellids are being currently revised; scissurellids is used here for the small Vetigastropoda formerly classified in Scissurelloidea, but which has been shown to be a polyphyletic assemblage (e.g., Geiger 2008, Geiger & Thacker 2005). Geiger (2003) presented an overview, where the new monotypic subfamily, genus, and species were introduced: Depressizoninae with *Depressizona exorum* Geiger, 2003. Here a second species in the genus is described, which also helps to justify the family-level rank of the group.

Standard techniques for scanning electron microscopy were used (see Geiger *et al.* 2007). Abbreviations: AMS: Australian Museum Sydney, Australia. BMNH: The Natural History Museum, London, Great Britain. MNHN: Muséum national d'Histoire naturelle, Paris, France. NMNZ: Museum of New Zealand Te Papa Tongarewa, Wellington, New Zealand. USNM: United States National Museum, Smithsonian Institution, Washington (DC), USA.

Depressizonidae Geiger, 2003

Diagnosis. Shell calyptraeiform. Teleoconch with beaded sculpture, selenizone above periphery, slit closed to foramen. Umbilicate, brood pouch absent.

Depressizona Geiger, 2003

Type species. *Depressizona exorum* Geiger, 2003 (OD).

Diagnosis. As for family.

Depressizona axiosculpta n. sp.

(Fig. 1)

Type material. Holotype (AMS C.461464: Fig. 1), 1.08 × 0.80 × 0.55 mm (L × W × H).

Type locality. SE of Tongatapu, Tonga, 21.345°S, 175.042°W, 260 m.

Etymology. Named because of the pronounced axial sculpture on the shell.

Description. Shell calyptraeiform, moderately thick. Protoconch unknown (eroded). Teleoconch I whorls unknown. Teleoconch II of approximately 1.1 whorls. Shoulder flat, without recognizable sculpture. Base with weak constriction below selenizone, strong angulation at mid base forming periphery; approximately 13 axial lamellae visible near periphery only; weak spiral lines between selenizone and periphery; on underside from adjacent to periphery to umbilicus series of strongly beaded spiral cord, weakly beaded spiral line, approximately three spiral lines. Umbilicus wide, open. Selenizone above periphery; keels strong, low; slit closed to foramen (larger due to shell damage in holotype), anteriorly closed by raphe. Aperture D-shaped, roof overhanging; peristome thickened, recurved, with fine spiral lines over thickened portion. Soft parts unknown.

Differential diagnosis. *Depressizona exorum* from Easter Island has a much thinner shell, lacks the strong axial lamellae at the periphery and none of the three known specimens have a thickened apertural margin.

Distribution. Only known from type locality.

Remarks. The only known specimen is in poor condition, but sufficiently distinct to be assigned to the genus *Depressizona* due to the depressed shell with sharp basal margin, and the foramen in the shell. The specimen can be recognized as a new species. The strong axial sculpture with lamellar projections at the basal periphery is not present in