



A new species of *Chama* (Bivalvia, Chamidae) from Mexico

PAUL VALENTICH-SCOTT & EUGENE V. COAN

Santa Barbara Museum of Natural History 2559 Puesta del Sol Road Santa Barbara, California 93105, USA

E-mail: pvscott@sbnature2.org, genecoan@gmail.com

While preparing a review of the bivalve mollusk fauna of the Panamic Province, we encountered a conspicuous, colorful species of the genus *Chama* Linnaeus, 1758, that could not be identified with any named species. After examining type specimens at The Natural History Museum, London (BMNH), the United States National Museum of Natural History (USNM), the Academy of Natural Sciences, Philadelphia (ANSP), the California Academy of Sciences (CAS), the Natural History Museum of Los Angeles County (LACM), and the Santa Barbara Museum of Natural History (SBMNH), we have concluded that this species is new to science.

Genus *Chama* Linnaeus, 1758

Chama Linnaeus, 1758. Type species (subsequent designation Children, 1823); Opinion 484 (ICZN, 1957): *Chama lazarus* Linnaeus, 1758. Recent, Indo-Pacific.

Diagnosis: Shell irregular, very inequivalve, with cupped left or right valve attached to substratum and opposite valve flattened; umbones recurved, prosogyrate, unequal; attached valve frequently with deep subumbonal chamber; sculpture frequently with foliaceous commarginal frills; top valve commarginal lamellae or spines, frequently eroded; adult hinge plate strong with ponderous teeth.

Chama hicksi Valentich-Scott & Coan, new species

Figures 1A–E.

Chama sordida Broderip, *auctt. non* Broderip, 1835.

Bernard (1976: 20–21, in part, figure 6b); Keen (1971: 149, in part, figure 350, right specimen).

Description: Shell shape: subovate; inequivalve, left valve larger; attached by left valve; attachment area moderate in size; right valve sculpture of large, long, irregular spines with commarginal striae, and with dense, short sharp spines over entire surface; left valve sculpture of large, long, irregular spines (with commarginal striae), and fine radial ribs.

Sculpture and color: exterior color variable with shades orange, red and pink; interior color cream, most with exterior color showing through; inner shell margin finely crenulate.

Hinge: hinge plate strong, thick; left valve with one thick, elongate cardinal tooth with roughened surface dorsally, one small elongate posterior lateral tooth with fine tubercles; right valve with one low, elongate cardinal tooth, lateral tooth absent; ligament deeply sunken on a nymph (Figures 1B, E).

Adductor muscle scars: large, subequal, ovate (Figure 1E).

Length: to 40 mm in maximum dimension [SBMNH].

Distribution: In the Gulf of California from Isla Danzante (25.8°N) [SBMNH] to Bahía de los Angeles (29.0°N) [SBMNH], Baja California, and Algodones, Sonora (26.5°N) [SBMNH], to Gulf of Tehuantepec, Oaxaca (16.0°N) [SBMNH], Mexico, 12–75 m [SBMNH]; attached to *Spondylus* and other shells [SBMNH].

Type specimens and type locality: **Holotype** SBMNH 358523, length – 28.8 mm, height – 29.5 mm. Type locality: Mexico, Baja California, NE end of Isla Danzante, 60–90 m, attached to *Spondylus crassisquama* Lamarck, 1819; 25°48'15"N, 111°14'57"W; collected by Hal and Charlotte Norrid, October 1980. **Paratype**, SBMNH 149294, length – 21.6 mm, height – 29.5 mm, attached to the posterodorsal side of holotype. **Paratype**, SBMNH 149295, in original type lot (but not attached to other types), length – 14.8 mm, height – 17.0 mm.

Additional paratypes. 8 paratype specimens SBMNH 149297, from Mexico, Baja California, off Punta la Gringa, 20–40 m, attached to mussels; 29°01'56"N, 113°31'11"W; collected by Paul and Carol Skoglund. 2 paratype specimens from same locality BMNH 20100182.