A new species of Tucetona (Bivalvia: Glycymerididae) from Mexico

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While reviewing the Glycymerididae of the Panamic Province we encountered an unusual species of Tucetona Iredale, 1931, in the Gulf of California, Mexico. After examining type and related specimens at museums in the USA and UK, we have determined the species is new to science. It is herein named Tucetona isabellae. In our description we use morphological characteristics outlined in Tschudin (2001) and Squires (2010).

Abbreviations: ANSP—Academy of Natural Sciences, Philadelphia, USA; BMNH—The Natural History Museum, London, UK; CAS—California Academy of Sciences, San Francisco, USA; LACM—Natural History Museum of Los Angeles County, Los Angeles, USA; SBMNH—Santa Barbara Museum of Natural History, Santa Barbara, USA; USNM—United States National Museum of Natural History, Washington, D.C, USA.

Genus Tucetona Iredale, 1931


Description. Shell subcircular to subtrigonal; beaks orthogyrate, small to moderate in size, narrow to broad; sculpture of about 18–46 rounded to rectangular radial ribs, bifurcate in some species, comm marginal striae weak to strong; interspaces narrow to moderately wide, shallow to moderately deep; posterior and anterior adductor scars and pallial line well impressed; hinge plate moderately curved, narrow to moderately wide; teeth straight to moderately curved; hinge plate of about 18–20 taxodont teeth; ligament with 3–5 chevron grooves.

This genus differs from Axinactis Mörch, 1861, which has fewer, wider radial ribs with moderately wide interspaces, deep radial grooves on the ribs and interspaces, and a moderately broad beak. This genus differs from Glycymeris da Costa, 1778, which has low, rounded, smooth radial ribs that do not bifurcate, narrow interspaces, and a narrow beak. Species with a greater tendency for rib splitting, such as Tucetona bicolor Reeve, 1843, have been segregated as subgenus Bellaxinaea.

Tucetona isabellae Valentich-Scott & Garfinkle, new species
Figures 1A–G

Glycymeris (Glycymeris) cabazoni Bramkamp, 1935, unnumbered pages, plate 2, figures 2, 3; Tucetona (Bellaxinaea) new species, Powell, 1986: 79–81, plate 2, figures 5, 7.

Shell shape. Subovate to subtrigonal, moderately inflated, height and length about equal; beaks narrow, pointed, opisthogyrate.

Sculpture and color. About 29 (20–48, n=15) heavy, broad radial ribs, many bifurcate in larger specimens, overlain by strong, fine, well-spaced, comm marginal ribs forming crossbars over ribs and in interspaces; interspaces moderately wide, frequently with intercalary ribs; periostracum inconspicuous; exterior color tan, with few dark brown blotches; interior color white to cream, with brown motting in some specimens, some specimens mostly brown internally.