

**Terebra (Strioterebrum) quadrispiralis**, new species Pl. 41, figs. 1-4  
(p. 431)

Shell small, slender, elongate, the angle of spire 13 degrees. Nucleus and tip of spire decollate, whorls remaining eight. Sculpture consisting of four broad low spiral ribs and (on the ultimate whorl) 19 moderately elevated axial cords, the intersections prominently beaded. Of the ribs, the one forming the subsutural collar at the summit is a trifle wider than the three below, and is separated from them by a furrow that is a little wider than the shallow interspaces of the others. The three lower ribs are about equal in size, and under the interspace of the lowest one there is a nodulous spiral thread immediately atop the finely incised suture. The axial cords extend from suture to suture. Their regular interspaces are about the same width as the cords themselves. Base short, constricted into a moderate waist above the fasciole, sculptured by about eight beaded or crenulated spiral riblets of varying size, the two of them just below the periphery of the whorl the strongest. Aperture arcuately sublenticular, constricted a little anteriorly to form the moderately deep, somewhat twisted canal which is recurved a little backward at the extremity where there is a small depression between the basal and outer lips. Outer lip broken back. Base of columella with two folds, the upper one feeble, the lower one strong, forming an emargination along the side of the canal. Columella and parietal wall enameled, the distal margin of the enamel sharply defined from, and raised slightly above the surface of the whorl. Siphonal fasciole moderately large, hardly convex, incrementally striated, separated from the waist above by a low but moderately sharp keel.

*Dimensions.*—Holotype (I190a,) length (8 whorls) 13.5 mm., max. width 4 mm.; paratype (G190b), length (5 whorls) 9 mm.; max. width 3.6 mm.

*Type locality.*—Lower Mare formation at W-13, on hillside, above west bank of Quebrada Mare Abajo. One specimen, the holotype.

*Other localities.*—Mare formation at W-14, on hillside above west bank of Quebrada Mare Abajo. One broken and worn specimen, the paratype.

*Comparisons.*—Although none is identical, there are three species, all from middle-upper Miocene deposits, that resemble *T. quadrispiralis*, n. sp. The nearest, perhaps, is *T. alaquænsis ulaqua* Mansfield (1935, p. 17, pl. 1, fig. 3) from Vaughan Creek, Walton County, Florida, but this has a wider subsutural rib than *T. quadrispiralis*, and the beads are not so large. The second is *T. spirifera*, Maury (1917, pp. 188-189, pl. 3, figs. 15, 16) from Cercado de Mao and the Río Cana in the Dominican Republic. Maury's species, which is not to be confused with *T. bipartita spirifera* Dall (1903, pl. 59, fig. 13), is at once distinguished from *T. quadrispiralis* by the two sharp folds on the columella. The third form, *T. eleutheria* Woodring (1928, p. 139, pl. 3, figs. 9-11) from Bowden, Jamaica, has narrower spiral ribs and smaller beads than *T. quadrispiralis*.

WIESBORD 1962 p. 431



1-4. **Terebra (Strioterebrum) quadrispiralis** Weisbord, n. sp. .... 431  
Figs. 1, 2, holotype (I190a.). 26326 PRI. Length (8 whorls) 13.5 mm.; width 4 mm. Lower Mare formation. Figs. 3, 4, paratype (G190b). 26327 PRI. Length (5 whorls) 9 mm.; width 3.6 mm. Mare formation.

36. *Strioterebrum quadrspiralis*  
(Weisbord, 1962)  
Figs. 103-104

*Terebra* (*Strioterebrum*) *quadrspiralis* Weisbord, 1962: 431-432, pl. 41, figs. 1-4.

**Material examined**—Three specimens, lengths 11-13 mm, on beach, Adicora, Peninsula de Paraguaná, Venezuela, April, 1975, USNM 784472; length 11 mm, on beach, Punta Mangle, Isla Margarita, Venezuela, 1977, UMML 8282 (from Gibson-Smith collection).

**Additions to original description**—Shell color pale rose-white with darker band along suture; base of shell dark reddish-brown; interior of aperture white, dark reddish-brown in siphonal region; protoconch white.

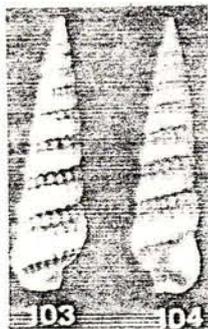
**Remarks**—Along with the following species, this small terebrid resembles no other living Atlantic species. *Strioterebrum quad-*

*rispiralis* and *S. trispiralis* represent the last of a long lineage of small, beaded terebrids centered around the Middle Miocene *S. eleutheria* (Woodring, 1928) and *S. midiensis* (Olsson, 1922).

This and the following species may be population variants of an undescribed Bowden species (Woodring, 1928: pl. 3, figs. 13, 14). As such, they would represent true relict species. If they are distinct species that have long been endemic to the Venezuelan coast, however, they may only represent old, unchanged species inhabiting their original range and would not be considered true relicts. In either case, the existence of these two terebrids reinforces the archaic nature of the relict pocket.

**Fossil distribution**—Mare formation, Venezuela.

**Recent distribution**—From the Peninsula de Paraguaná to Isla Margarita, Venezuela, in shallow water. **PETUCH MALACOLOGIA 20(2) 337**



103-104. *Strioterebrum quadrspiralis* (Weisbord): USNM 784472. L = 13 mm.

**STRIOTEREBRUM QUADRISPIRALIS Weisbord**  
Plate 1, Figures 4, 5

*Terebra* (*Strioterebrum*) *quadrspiralis* WEISBORD, 1962, *Bulls. Amer. Paleontology* v. 42, no. 193, p. 431, pl. 41, figs. 1-4.

*Terebra* (*Strioterebrum*) *trispiralis* WEISBORD, 1962, *Bulls. Amer. Paleontology*, v. 42, no. 193, p. 430, pl. 40, figs. 14, 15.

*Strioterebrum bowdenensis* Woodring, 1928. PETUCH, 1981, *Malacologia*, v. 20, no. 2, p. 36, fig. 98 (non Woodring).

NOT *Strioterebrum quadrspiralis* Weisbord. PETUCH, 1981, *Malacologia*, v. 20, no. 2, p. 337, figs. 103, 104 (= *S. angelli* n.sp.).

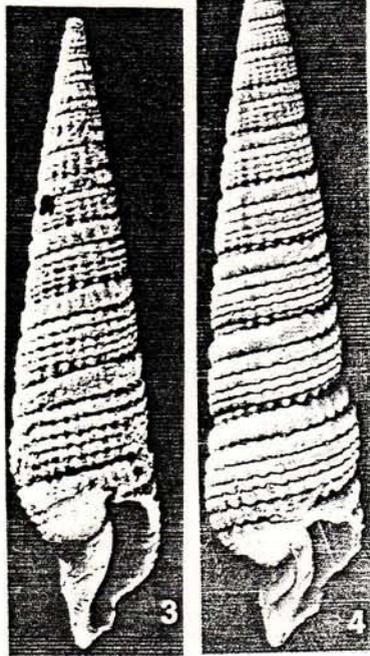
NOT *Strioterebrum trispiralis* Weisbord. PETUCH, 1981, *Malacologia*, v. 20, no. 2, p. 337, figs. 105, 106 (= *S. angelli* n.sp.).

**Addendum to description:** Shell reaching a height of 26.4 mm with a diameter of 6.6 mm. Protoconch of one and one-fourth whorls, teleoconch of 11 to 12 whorls. Number of spiral cords varying between three and eight. In Recent specimens the shell is orange-brown in colour with a lighter band at the middle of the whorl, many specimens having faded (?) to white.

**Remarks:** With a suite of 61 Mare specimens available it is clear that *S. trispiralis* and *S. quadrspiralis* are the same. Of 41 adult specimens, three have three spiral cords, 17 have four and 21 have five to eight spiral cords. They are referred to *S. quadrspiralis* as being more representative of this taxon, rather than to *S. trispiralis* which has page preference. A recent suite of 118 specimens comes from ten localities along the north coast of Venezuela between Adicora, Paraguaná

Peninsula, and Punta Mangle, Isla Margarita; most came from beach drift, but some are from a depth of 55 meters in a seafloor sample from a Maraven S.A. drilling location in the Ensenada de Barcelona (Well EBC-1-X; coordinates: N.10° 18' 28", W.65° 32' 00"). The Recent form is somewhat smaller than the fossil, maximum heights being 22.3 and 26.4 mm with maximum diameters of 4.8 and 6.6 mm, respectively; in both there is a variation in the degree of stoutness. Two Recent specimens from the Golfo Triste, Venezuela, were assigned by Petuch (1981, p. 336, fig. 98) to *S. bowdenensis* (Woodring, 1928) from the early Pleistocene Bowden Formation, Jamaica; they are specimens of *S. quadrspiralis*. The protoconch of *S. bowdenensis* is of two to two and one-half whorls and the diameter of a large shell quoted by Woodring (1928, p. 138) is 12.2 mm at a broken height of 28.1 mm, indicating a very much larger shell than is *S. quadrspiralis*. The homologue of *S. quadrspiralis* in Florida seems to be *S. protexta* (Conrad, 1845); we have found no description of its protoconch, but the spire whorls are said to be slightly concave (Abbott, 1974, p. 260) and its purplish-black, or ashy to dark purple, colour is also distinct. The ancestor of *S. quadrspiralis* is believed to be *S. meesmanni* (Rutsch, 1934) from the early Pliocene Punta Gavilan Formation, Falcón State, but that is more coarsely sculptured, with heavily beaded axial ribs, as seen in 15 topotypes.

GIBSON-SMITH & G-S 1974 p 64  
GIBSON-SMITH & G-S 1974 p 64



4, 5. *Strioterebrum quadrspiralis* (Weisbord).

4. PRI 8228; height 24.8 mm, diameter 5.5 mm.

(2) Locality: Mare Formation, Cabo Blanco, Venezuela.

5. NHMB H17101; height 16.2 mm, diameter 3.7 mm.

Locality: Recent, Punta Moron, Carabobo State, Venezuela.

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