

"The shell is imperforate or nearly so, obliquely globose, yellow, typically with 1(23)45 bands of chestnut-brown to chocolate, the bands interrupted by yellow flecks or streaks . . . last whorl with rather coarse, unequal wrinkles. The last whorl descends in front. Lip reflected, white, dilated over and usually closing the umbilicus" (Pilsbry, 1939).

The average of measurements on nine local specimens are: diameter, 28.8; height, 20.5. *H. aspersa* is Utah's largest snail.

This snail has been known in the United States since 1839 when a specimen was received from Europe by a Dr. Gould of Portland, Maine. This one was probably from France or southern Europe. Distribution in the United States at present is reported by Pilsbry (1939) and Abbott (1950) as the New England coast, the coast region of the Carolinas, southern Louisiana near the mouth of Mississippi River, and the coast of California from San Diego north to the vicinity of San Francisco. Previous to the present report, there were no records from inland areas.

Searchers in the vicinity of Portland, Maine have been unable to find this snail in recent years, but many have been imported through the years for use as food, and probably some have escaped. Its most successful introduction was at San José, California, as reported by Pilsbry (1939). This introduction occurred in 1856. *H. aspersa* was imported to New Orleans from Spain, but how it came to Utah is not known at present.

Pilsbry (1939) lists this snail from South Carolina, Louisiana, and California, and calls attention to some variations in band formulae and colors among the specimens from these regions. The specimens from Utah are most like the California specimens he describes, which may be a clue to the origin of specimens found here.

Mr. Stanley Mulaik reports, ". . . some of these snails (dead) in a 30,000 volt power supply which came from the coast (California) by way of Ogden, or Hill Air Force Base." Several people living near the garden where our specimens were found report having purchased many garden plants and trees from California growers, which may explain the importation of these pests to Utah.

On March 21, 1951, three living snails and several empty shells were collected in the same garden plot and vicinity where the first specimens were taken in Ogden. The living snails were in

hibernation among the branches of myrtle, a prostrate plant growing on the north side of the house where no direct sun could ever strike. There were no living snails found in nearby sunny places, but several shells were found in sunlit spots.

This animal is reported by Rust, 1914 and Abbott, 1950 as being a serious garden pest in the United States, and several people in Ogden have reported it destroying considerable portions of their gardens, particularly the leafy plants such as lettuce. In our laboratory, specimens have thrived several months on lettuce, sliced carrots, and rolled oats.

On February 2, 1951 there were 80 juvenile snails in the terrarium. They are light tan in color and the shell is somewhat translucent.

Two adults were seen in copulation on March 6, 1951, and again on March 23, 1951.

In the literature the brown garden snail is referred to as the escargot, and is considered an epicure's delight, which suggests a possible control measure.

Nine specimens measure as follows.

Height 19 mm., diameter 28 mm.
 Height 22 mm., diameter 26.8 mm.
 Height 21.6 mm., diameter 31.8 mm.
 Height 21.2 mm., diameter 29 mm.
 Height 22 mm., diameter 28 mm.
 Height 19.5 mm., diameter 28.1 mm.
 Height 19.3 mm., diameter 29 mm.
 Height 20.7 mm., diameter 29.5 mm.
 Height 19.2 mm., diameter 29 mm.

A NEW *TEREBRA* (*HOFFMEYERI*) FROM THE PHILIPPINES¹

By R. TUCKER ABBOTT

Associate Curator, U. S. National Museum

A few years ago Mr. and Mrs. F. K. Hadley sent me a large set of a *Terebra* from the Republic of the Philippines for identification. A thorough search in the literature leads me to believe that they are undescribed. These specimens were collected by

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Major Harry Hoffmeyer (MC), USA, who was an enthusiastic lover of mollusks and an indefatigable collector. He gave his life in the service of his country during World War II while in the Philippines. We are honored in having the opportunity of naming this species after its discoverer.

Terebra (*Strioterebrum*) *hoffmeyeri*, n. sp. Plate 5, figs. 5-9.

Description.—Shell about 18 mm. in length, moderately slender, its width being about $\frac{1}{4}$ of its length; glossy, lead-gray with a light purplish-brown undertone; 2 nuclear whorls smooth and translucent-brown; the ribs and an ill-defined, narrow band below the suture lighter. Axial ribs fairly strong, angular, very slightly retractively slanting, and extending from suture to suture; from 15 to 17 ribs on the penultimate whorl, and the ribs in each whorl are usually lined up axially one below the other. On the last whorl the ribs extend $\frac{3}{4}$ the way down. The last few ribs are usually crowded together. Spiral sculpture of a row of indistinct punctations, one between each rib, defining a narrow subsutural band. In some specimens, numerous, microscopic, spiral scratches are found between the concave interstices of the ribs. Aperture slightly constricted. Interior of aperture chestnut-brown, with a narrow, whitish, spiral color band at each end. Outer lip sinuate, strongly flaring below and produced anteriorly well below the limit of the columella. This produces a rather well-defined but short siphonal canal which is pointed somewhat dorsally. Inner lip slightly callous. Columella inside the shell with a single, low, anteriorly-placed, spiral fold. Exteriorly, the siphonal fasciole bears two strong, equal-sized, spiral cords. At the base of the body whorl and above a spiral groove bordering the fasciole there is a very strong to moderately developed light-colored, spiral cord.

Length	Width	No. whorls
17.0 mm.	4.2 mm.	13. Holotype, U.S.N.M. No. 598077
22.6 mm.	4.9 mm.	13. Paratypes, U.S.N.M. No. 596972
16.0 mm.	4.1 mm.	12. Paratypes, U.S.N.M. No. 596972

Of 300 paratypes measured for their length, the smallest was 12.5 mm., the largest 23.0 mm., and 52.6 percent of the lot fell between 17 and 19 mm. The mean was 17.6, the mode 18.0 mm.

Type locality.—Pasay Beach, Manila Bay, Luzon Id., Republic of the Philippines. Harry Hoffmeyer, collector. May to August, 1939.

Types. The holotype, fig. 8, is in U.S.N.M. No. 598077; 50

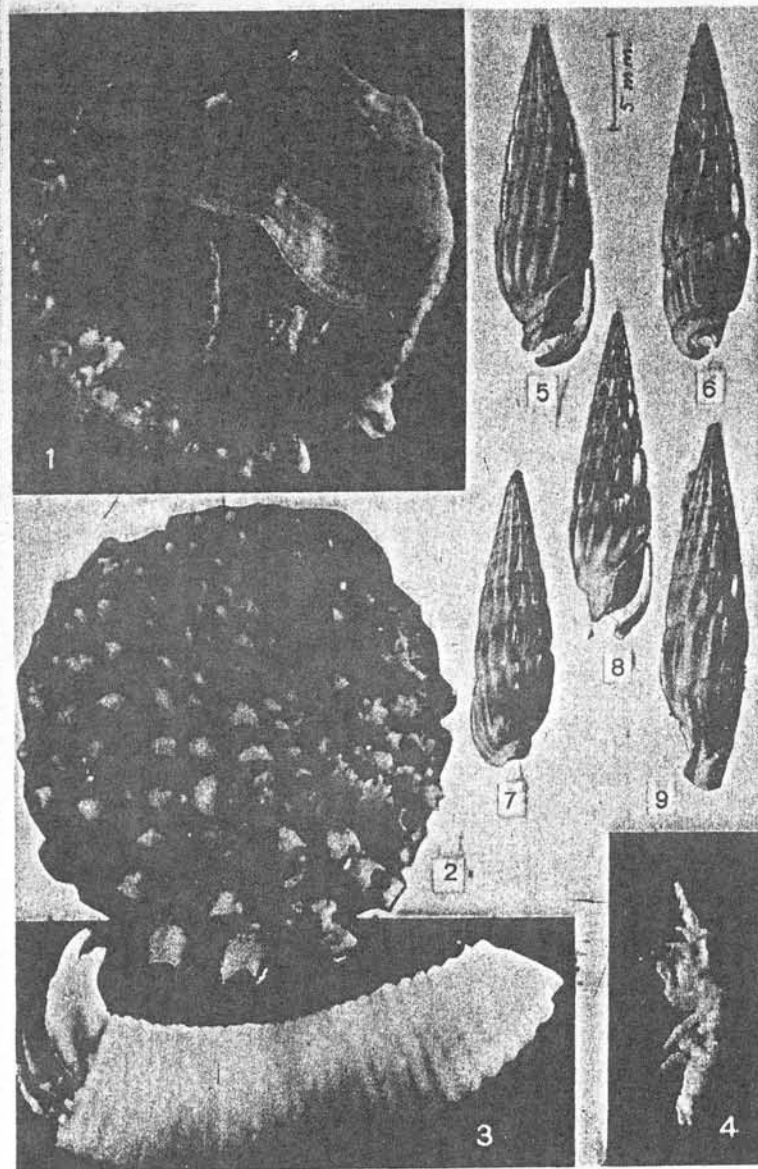


FIG. 1, 2, *Crepidula aculeata* (Gm.) with two *Synopseudes* lying beneath shelf. 3, a Tanaid, *Paguopseudes*, in Caecum shell. 4, *Synopseudes* free of shell. 5-9 *Terebra hoffmeyeri* Abbott.

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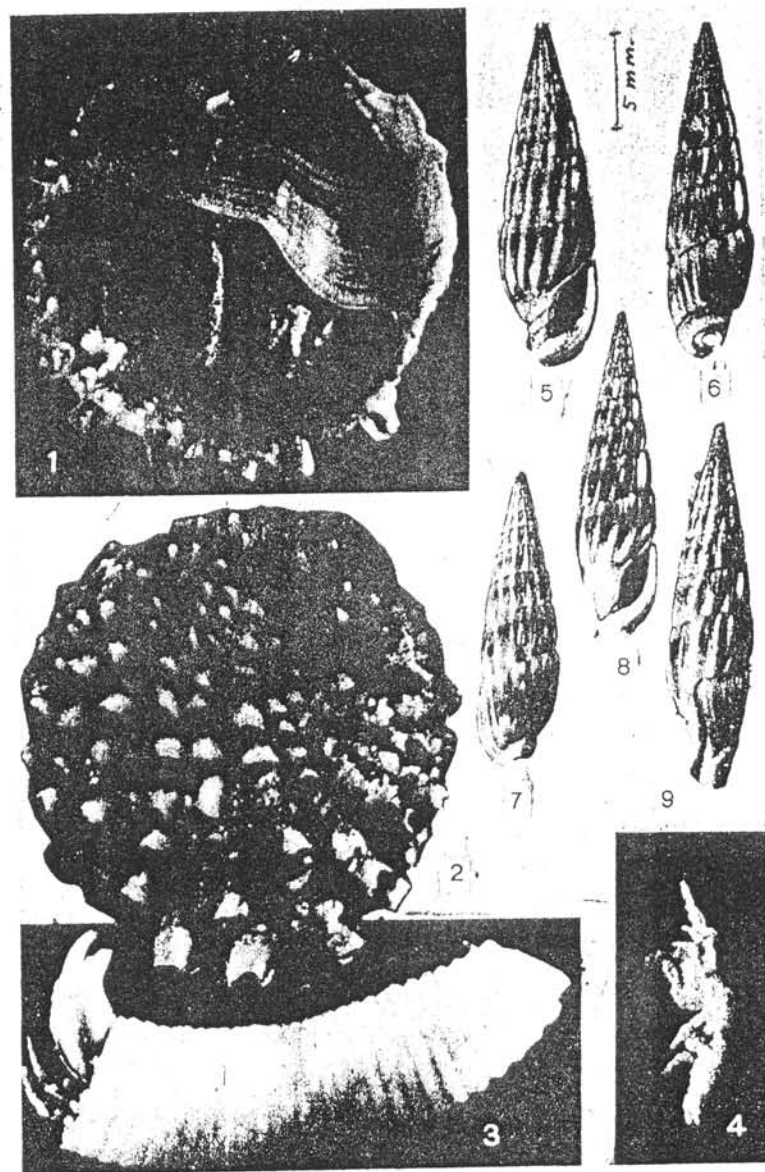


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paratypes in U.S.N.M. No. 596972; paratypes also deposited in the Museum of Comparative Zoölogy at Harvard, the Academy of Natural Sciences of Philadelphia, B. P. Bishop Museum in Honolulu, and the Philippine Bureau of Science in Manila. 200 paratypes were returned to Mr. and Mrs. F. K. Hadley of West Newton, Mass.

Other records.—Malate, Manila Harbor, P. I. P. Bartsch, coll.; Keledjitan, Bantam, Java. Bryant and Palmer, coll. 1909.

Remarks.—This species is closest in morphological characters to *Terebra clappi* Pilsbry, 1921, but differs from that Hawaiian species in having the following characters: base with a greatly to moderately swollen spiral cord; siphonal fasciole with two distinct spiral cords (although the internal columella bears only one); the base of the outer lip is strongly produced anteriorly and frequently twisted to the left to form a distinct siphonal canal. The Hawaiian specimens of *T. plicatella* Deshayes, 1857, are larger, more slender, uniformly colored a light yellow-brown and with the inner lip callous and considerably raised. U.S.N.M. No. 18268 contains four specimens of *T. plicatella* labeled as coming from the type locality, Van-Diemen [Tasmania] which agree with Deshayes' description and the Hawaiian specimens. This is what Pilsbry (1921) called *nitida* Hinds. On inspection of Hinds' figure of *nitida* (in Sowerby's Thesaurus, *Terebra*, pl. 45, fig. 103) and the original description (Proc. Zool. Soc. London, June 1844 (1843), p. 152. Marquesas.), I am impressed by its similarity with *T. clappi*, but hesitate to put the latter in synonymy until Hinds' type is seen.

T. hoffmeyer is placed in the subgenus *Strioterebrum* Sacco, and in the section *Punctoterebra* Bartsch, 1923 (Type: *nitida* Hinds).

Some specimens of *T. hoffmeyer* exhibit a remarkable development of the basal cord and the hooked and produced base of the outer lip, characters which, at first, would appear to be of generic significance. However, among the 300 specimens examined, there are many which almost entirely lack the basal cord and whose outer lip is not too greatly produced. The species shows an amount of morphological variation not often seen in this family.