

ACHATES (1)
WEAVER 1960

(3) (V)

3. *Terebra achates* Weaver, 1960

(Pl. 1, figs. 3a-c)
(Color pl. B, fig. 9)

1960 *Terebra achates* Weaver, Hawaiian Mar. Moll. 1(1):2, pl. 1, fig. center; 1979 Kay, Hawaiian Mar. Shells p. 391, fig. 127d; 1982 Abbott & Dance, Compendium of Seashells p. 273; 1984 Aubry, Terebridae pl. 1.

Description: Shell to 151 mm; color, white with 2 spiral rows of squarish brown spots, 3 on body whorl; outline of whorls flat with convex subsutural band; protoconch of 2 bulbous glassy whorls; subsutural band noded, followed by a second band, the two separated by a series of punctations which become interrupted lines on later whorls, the 2 bands occupying half the whorl in early whorls; axial sculpture absent; spiral sculpture of rows of punctations, the punctations coalescing into punctate spiral lines on extremely large individuals and the nodes becoming less prominent; body whorl smooth anterior to periphery except for axial striae; aperture semi-elongate; columella recurved, with moderate parietal callus on large specimens.

Type locality: "Punuluu, Oahu, Hawaiian Islands."

Distribution: This species is believed to be endemic to the Hawaiian Island chain in 3 to 116 m, the largest individuals having been found on Midway Island. However, three specimens, all dead collected from the Panama area, are in various United States museum collections.

Type: Holotype in the Bernice P. Bishop Museum, Honolulu, no. 212863; 104 × 18 mm.

Discussion: Most specimens under 40 mm have been collected in water from 20 m. or deeper, while most of the larger specimens have been found at a depth of about 6 m. or less, indicating that they probably breed in deep water. They are sometimes found living with *T. areolata*. Refer to *T. subulata* (2) for comparison.

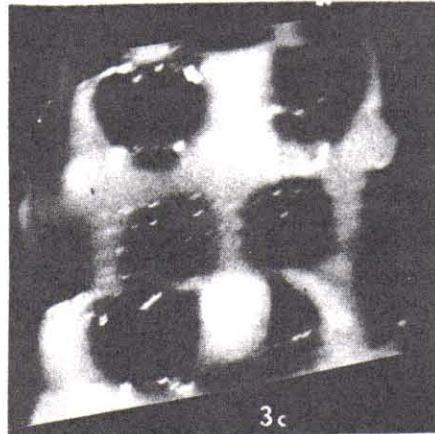
B-2 b34



3b



3a



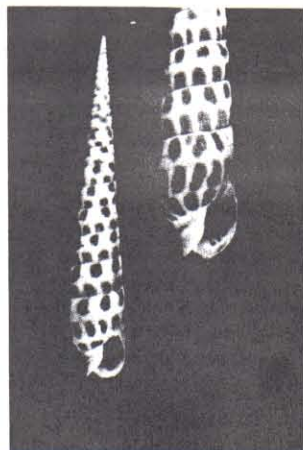
3c



9: *Terebra achates* Weaver; Hawaii; 91.9 mm. (sp. 3).

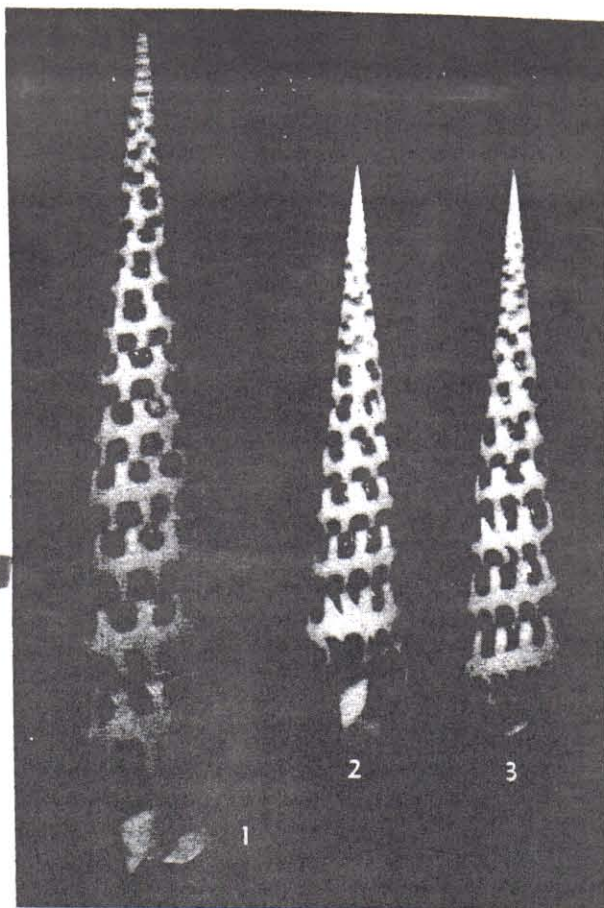
3a-c, *T. achates*

Weaver. 3a, Holotype Bishop Museum, Honolulu, No. 212863; 104.0 mm. 3b, Last two whorls. 3c, Middle whorl.



Agate Auger (2.5") 6 cm
Terebra achates Weaver, 1960.
Hawaii. 3 to 100 m; uncommon.
Punctate spiral striae.

COMPENDIUM, p 273



photos - Weaver

fig. 1: Apertural view of *T. achates* Weaver, 1960 collected by C. Weaver (Punaluu (Type Locality), Island of Oahu, depth 8 ft., sand bottom, June 1941. Length 114 mm. Figs. 2 & 3: Two views of *T. achates* collected by Marsha Howard in Keauhou Bay, Kona Coast, Island of Hawaii, depth 10 ft., sand bottom, Nov., 1964. Length 77 mm.

*Terebra achates** Weaver, 1960
Terebra achates (See figs. 1-3) is the rarest of our large auger shells and as such is represented in Hawaiian collections, including the Bishop Museum, by less than 2 adult specimens. Juvenile *achates* have been dredged from depths up to 30 fathoms (180 ft.), but the few large shells that I have seen or collected came from shallow sandy areas inside the fringing reef.

Its closest relative in Hawaii is *T. subulata* Linnaeus, 1767 (fig. 4 above) which has been collected side by side with *achates* at Keauhou Bay on the Kona Coast of Hawaii. I have collected large numbers of *subulata* in Tahiti but know of only three specimens taken from Hawaiian waters. It differs from *achates* by having a smooth unsculptured surface with fewer revolving spots. *T. achates* on the other hand has a sculptured surface: on each whorl the crenulated presutural band is bisected by a revolving row of pin-prick like punctures which divides this band into two crenulated cords, the posterior cord being wider. Below these cords and covering the rest of the whorl are four revolving striae (grooves) transversed by even finer longi-

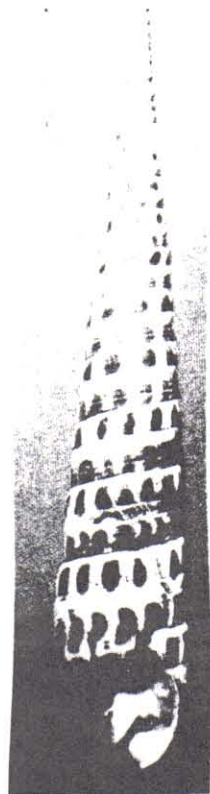
tudinal striae. In my opinion *T. achates* is a valid species. It is probably endemic to the Hawaiian Archipelago and from the scarcity of known specimens appears to be one of the world's rarest auger shells.

The holotype of *T. achates* bears the Bernice P. Bishop Museum catalogue number B.B.M. 212863.

*Original description: Hawaiian Marine Mollusks, The Genera *Terebra* and *Hastula*. Weaver, Clifton S., January, 1960, Vol. 1, No. 1, pl. 1, Center three figures.

HSN APR 65

DISTRIBUTION: HAW + MIDWAY.



HSN OCT 71



ACHATES
HSN MAY 72



Unusual *Terebra achates*

Two odd specimens of *Terebra achates* Weaver 1960 were collected by HMS member Roger Schmeltz from three meters of water at Midway Island. Above left is a normal specimen. The middle one is striped; Schmeltz thinks this was due to an injured mantle. The third is a blonde. All three were live collected at the same spot.

Incidentally, is anyone collecting shells at Midway since Schmeltz left? E.G.L.

HSN SEP 79

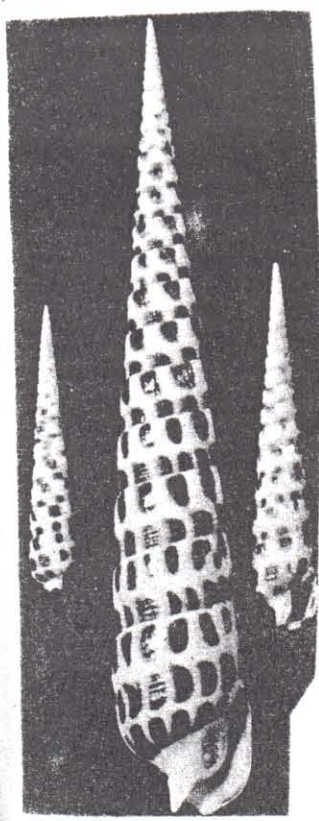


TEREBRA ACHATES
(Weaver, 1960) 65
mm. - Hawaii (Type Locality)

AUG 1984
p 1

Terebra achates Weaver, 1960.

HSN AUG 78



Terebra achates⁶, *new species*, Plate 1, center
Length: 104 mm.
Distribution: Hawaiian Islands
Habitat: Shallow and deep water (rare)

6. *T. achates*, n. sp., was described and named by the late W. H. Dall in an unpublished manuscript. It is similar to *T. subulata* Linnaeus 1767; white with two revolving rows of brown spots, three rows on body whorl. Sculpturally it differs: strong, crenulated, presutural fasciole followed by narrower, crenulated cord; three or four spirals on each whorl transversed by fine, longitudinal striae forming puncture-like depressions. This bold sculpturing diminishes anteriorly on larger specimens. The type specimen is in the U. S. National Museum, Washington, D. C.; remaining specimens from original lot in collection of Mr. D. Thaanum of Honolulu.

WEAVER 1960 - HSN JAN 1 1960 - Vol 2, p 2 pl 1

p. 2, add to footnote #6: The large **T. achates** figured on plate I, center, has been deposited in the Bishop Museum, Honolulu, holotype B.B.M. 212863. The type locality is Punaluu, Oahu; one fathom of water in sand; Leg. Arch Harrison.

Terebra achates Weaver, 1960. Fig. 127 D. Length, 56 mm; diameter, 10 mm. *Shell*: elongate, slender; subsutural band defined by a deep spiral groove; remaining part of whorls with fine axial and spiral striae; white with two spiral rows of brown spots. *Spire*: protoconch of three conical whorls; whorls of teleoconch convex, indented at the channelled suture. *Sculpture*: subsutural band of two spirals, the apical larger and with axial nodules, the abapical smaller; remainder of whorls with fine axial and punctate spiral striae. *Aperture*: ovate; columella twisted. *Color*: white with two spiral rows of brown spots, three on the last whorl.

These terebrids are found at depths of from 3 to 100 m, usually in fine sand.

T. achates was described from the Hawaiian Islands. The shells are distinguished from those of *T. consobrina* Deshayes, 1857 from the Indian Ocean by their proportionately smaller whorls and fewer spots, and from those of *T. subulata* which also occurs in Hawaii by the punctate spiral striae.

AKAY 1979 p 371



D. *T. achates*, length 56 mm.