

ACKNOWLEDGMENT

The authors are indebted to Prof. Charles Palache, Dr. M. A. Peacock, and Prof. L. C. Graton of Harvard University, Dr. J. D. H. Donnay of the Johns Hopkins University, and Dr. H. E. Merwin of the Geophysical Laboratory for reading the manuscript of this paper and making several valuable suggestions.

PALEONTOLOGY.—*A new crassatellid from the Waccamaw formation of North and South Carolina and the Caloosahatchee marl of Florida.*¹ F. STEARNS MACNEIL, U. S. Geological Survey. (Communicated by JOHN B. REESIDE, Jr.)

While attempting to identify a crassatellid from the Intracostal Waterway, 3 miles west-southwest of Little River, S. C., the writer found that specimens from the Pliocene of the Carolinas, previously identified as *Crassatellites gibbesii* (Tuomey and Holmes), include, in addition to that species, another well defined species which is described below as new.

As has been pointed out by Lamy, Iredale, and Stewart, the name "*Crassatellites*" Krueger is based on rather uncertain grounds. Its acceptance depends on whether *Crassatella* Lamarck is a synonym of *Mactra*, and, if so, whether Krueger's genera are valid or are to be interpreted as a special nomenclature, i.e. the addition of *ites* for a fossil form. At any rate, "*Crassatellites*," if valid, is an Eocene shell and not confusable with American Miocene to Recent crassatellids.

Stewart proposed the expansion of the Australian genus *Eucrassatella* Iredale to include Miocene to Recent American forms having smooth internal margins and large ligamental cavities, and described the subgenus *Hybolophus* for the opisthogyrate *Crassatella gibbosa* Sowerby from the west coast. *Eucrassatella* agrees more closely with the American forms in shape and hinge characters, but does not have the flat, often turned-over umbos characteristic of the American forms. *Hybolophus gibbosa* has flat, turned-over umbos, but is so extreme in other ways that it appears to be at least subgenerically removed from other American species. It may be that the American species are in need of a new generic name but that could be given conscientiously only after a systematic study of all Tertiary crassatellids had been made and then, probably, on phylogenetic grounds. For the present the American forms will be referred to the genus *Eucrassatella*.

¹ Published by permission of the Director of the U. S. Geological Survey. Received October 12, 1936.

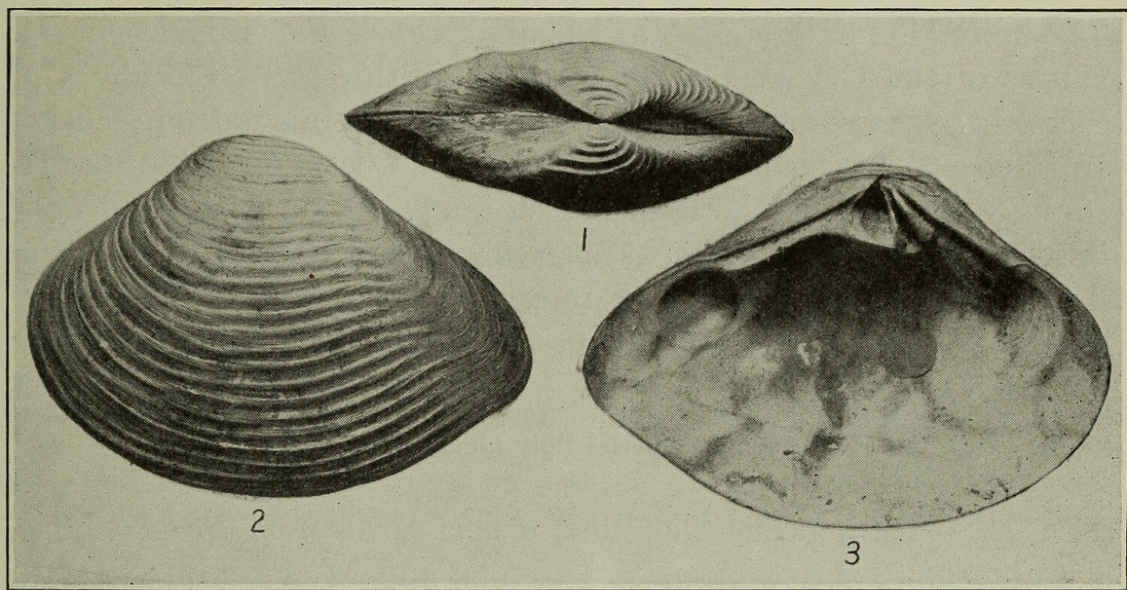
***Eucrassatella mansfieldi* MacNeil, n. sp.**

Shell subtrigonal, moderately inflated, anterior rounded, posterior more produced and sub-angulate; umbonal ridge bounded anteriorly by a well-developed sulcus; beaks just anterior of center and slightly opisthogyrate, flattened and horizontal or slightly turned over; sculpture consisting of coarse, concentric undulations, about 35–40 in number in full grown adults, which, until the shell is half grown, terminate at the umbonal ridge, but in adults terminate in the sulcus.

Dimensions of holotype: Length 61 mm, height 42.5 mm, convexity 10 mm. Largest paratype: Length 77 mm, height 56.5 mm, convexity 14 mm.

Holotype: U. S. Nat. Mus. Cat. no. 495195. *Paratypes*: 495196.

Type locality: Highest bed at Neill's Eddy Landing, right bank of Cape Fear River, 5 miles northeast of Acme, Columbus County, N. C., U. S. G. S. Sta. 4276.



Figs. 1–3.—*Eucrassatella mansfieldi* MacNeil, n. sp., highest bed at Neill's Eddy Landing, right bank of Cape Fear River, 5 mi. northeast of Acme, Columbus Co., N. C., U. S. G. S. Sta. no. 4276. 1.—Paratype, U. S. Nat. Mus. Cat. no. 495196. 2–3.—Holotype, U. S. Nat. Mus. Cat. no. 495195.

Other occurrences in the Carolinas: Upper bed on the north shore of Lake Waccamaw, N. C.; Acme, N. C.; Cronly, N. C.; Intracostal Waterway, 3 miles west-southwest of Little River, S. C.

E. mansfieldi differs from *E. gibbesii* (Tuomey and Holmes) in being relatively more elongate and less high, and in having coarser and fewer ribs. Specimens of *E. mansfieldi* and *E. gibbesii* of about equal size have about 31 and 55 ribs respectively. The flattened area of the beaks is larger in *E. mansfieldi*.

This species and *E. gibbesii* were both collected along the spoil bank of the Intracostal Waterway but with a matrix of different texture adhering and may be from different beds. *E. mansfieldi* is the only species collected at the localities in North Carolina listed above.

E. gibbesii is also present in the collections in the U. S. National Museum from the following localities: Tilly's Lake, Waccamaw River, S. C.; Wilmington, N. C.; 2 miles north of Padgett, Onslow County, N. C.

Neither species has been collected from the Walker's Bluff locality on the Cape Fear River, 18 miles east-southeast of Elizabethtown, N. C., but two eroded valves of *E. undulatus* (Say) which may be reworked from the Miocene are in the collection from there.

One small valve probably referable to *E. mansfieldi* is in the collection from the Caloosahatchee marl of south western Florida, from near the head of Prairie Creek, a tributary of Shell Creek which flows into Charlotte Harbor, U. S. G. S. Sta. no. 3300.

The more abundant species at the Shell Creek and Alligator Creek localities of the Caloosahatchee marl of southwestern Florida is of the *E. gibbesii* type but is more like Recent specimens from Florida than Pliocene specimens from North Carolina. It is probable that *E. floridanus* (Dall) which he later placed in synonymy with *E. gibbesii* is the valid name for the Recent species and that the Shell Creek and Alligator Creek forms should be referred to it.

LITERATURE CITED

LAMY, Jour. de Conch. 62: 197. 1917.

IREDALE, Proc. Mal. Soc. London 14: 206. 1921.

STEWART, Philadelphia Acad. Sci., Special Pub. no. 3: 136. 1930.

BOTANY.—*Tetracoccus ilicifolius*, a new shrub from Death Valley, California.¹ FREDERICK V. COVILLE and M. FRENCH GILMAN.

In exploring new canyons in Death Valley, California, during the last three seasons, in connection with his work for the National Park Service, Mr. Gilman has found nearly 50 species of plants hitherto unknown in that desert area. In May, 1936, in the large canyon on the west side of the Grapevine Mountains, next north of Titus Canyon, he discovered a new shrub seemingly unrelated to any other plant of the region. The hollylike form of the evergreen leaves, an inch or less in length, lead to the suggestion of hollybush as the common name of this shrub.

Further features of the plant are that the capsule has the unusual number of 4 cells, each cell containing 2 ovules, that the leaves are opposite, and that the plant is dioecious. These characteristics, together with the absence of a corolla, indicated a relationship with *Tetracoccus dioicus*. That plant is the only species of the genus *Tetra-*

¹ Received September 3, 1936.



1936. "A new crassatellid from the Waccamaw formation of North and South Carolina and the Caloosahatchee marl of Florida." *Journal of the Washington Academy of Sciences* 26, 528–530.

View This Item Online: <https://www.biodiversitylibrary.org/item/123166>

Permalink: <https://www.biodiversitylibrary.org/partpdf/70653>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: Permission to digitize granted by the rights holder

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.