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CANAL

(WITH ONE PLATE)

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U. S. National Museum



(PUBLICATION 3774)

CITY OF WASHINGTON
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A NEW SHIPWORM FROM THE PANAMA CANAL

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*Curator of Mollusks and Cenozoic Invertebrates
United States National Museum*

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The United States National Museum has received a shipment of shipworms from James Zetek, entomologist of the Panama Canal Zone. These specimens are accompanied by data as follows:

- 25384. Balboa, Canal Zone. 4 months' exposure in laminated board assembly, May 1944.
- 25385. Balboa, Canal Zone. 2 months' exposure in laminated board assembly, March 1944.
- 25386. Cristobal, Canal Zone, Atlantic side. In test timbers, May 1944. I also sent under the same number some taken from test timbers placed Sept. 1943 and examined April 1944; hence only shells and pallets.
- 25387. Balboa, Canal Zone. From our teredo tests, Oct. 1943.

This sending contains three species, one of which proves to be undescribed and is here christened. All three belong to the genus *Bankia*, but to three subgenera of that genus. The two previously described species are *Bankia (Neobankia) zeteki* Bartsch¹ and *Bankia (Nausitoria) jamesi* Bartsch.² They came from the Canal Zone and were both discovered by Mr. Zetek. In the present sending are specimens of *zeteki* from stations 25384, 25385, 25386, and 25387, and of *jamesi* from station 25387.

The new species, described herein as the canal shipworm, belongs to the subgenus *Bankia*, which heretofore was known only from the northern and southern part of the east Pacific coast.

BANKIA (BANKIA) CANALIS, new species

Plate 1

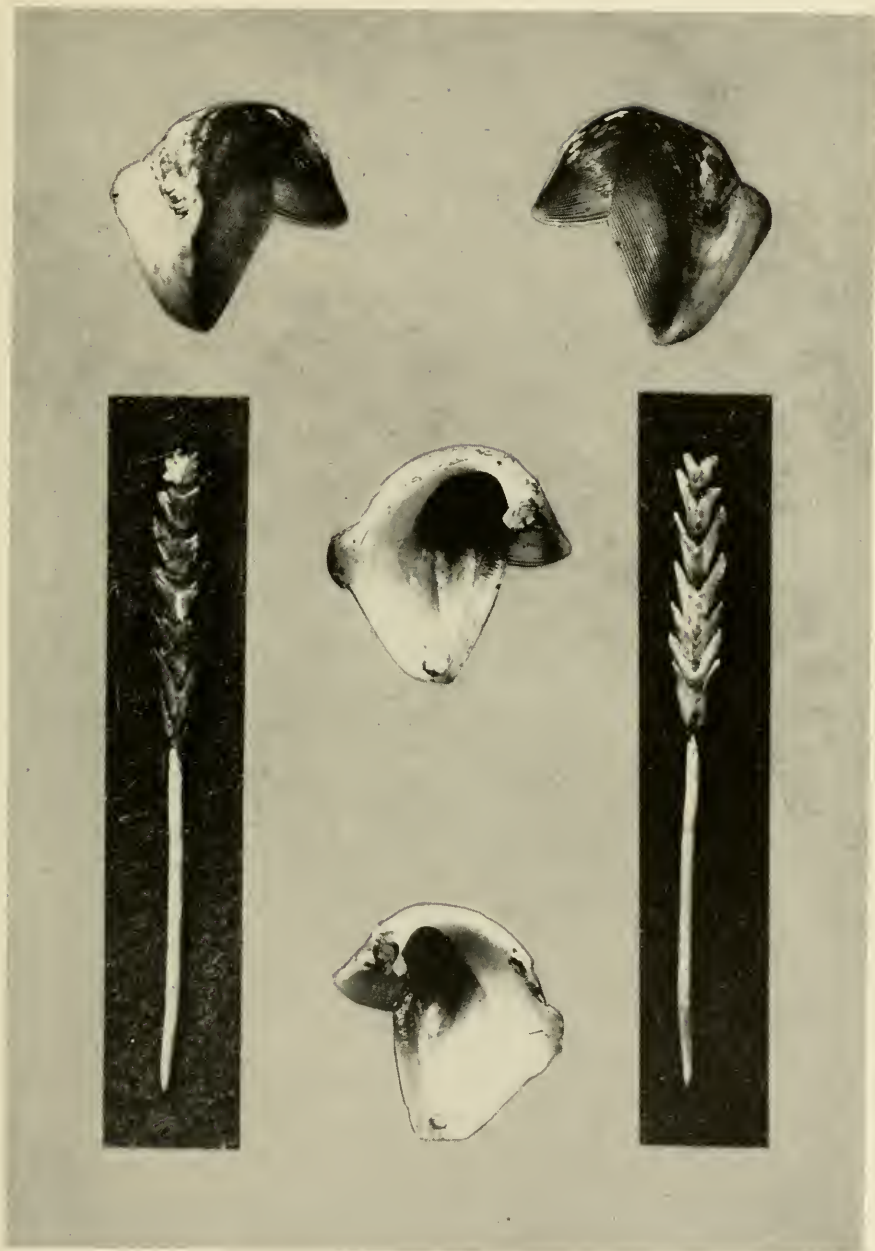
Shell small, globular. The extreme anterior area, the posterior portion of the median area, and the posterior area are white; the rest olive green, becoming paler ventrally. The anterior part has a strong

¹ U. S. Nat. Mus. Bull. 122, pp. 9-10, pls. 6, 7, 30, fig. 1, 1922.

² Smithsonian Misc. Coll., vol. 99, No. 21, pl. 1, 1941.

sinus at the extreme anterior margin which is covered with a thick callus reflected over the exterior and forming a slight crest at its posterior margin. The rest of the anterior part is marked by slender, riblike dental ridges, which are more closely approximated at the anterior callus than at their junction with the median part where the spaces that separate them are a little wider than the ridges. Fifty-five of these ridges are present in the type, the early ones being worn away at the umbone. The dental ridges from the umbone to the ventral margins are remarkably uniform in size and spacing. In cross section the dental ridges are roughly triangular and bear numerous minute, closely spaced denticles on their outer dorsal margin which lend them a serrated aspect. The anterior median part joins the anterior part at its ventral margin in almost a right angle. The junction of the anterior part and median part appears as a slightly impressed line extending from the umbone to the ventral margin. The anterior and posterior median portions are convex, while the middle median portion is slightly concave. The anterior median portion is broad and marked by closely crowded dental ridges, which are less strong than those on the anterior part. These ridges bear strong, closely crowded tubercles whose long axis is transverse to that of the ridges. The ridges are separated by deeply impressed lines. Under high magnification this part of the shell appears as an efficient file. The middle and posterior median parts are marked by rather irregular incremental lines. The posterior part forms a small auricle marked by weak incremental lines only. The interior is bluish white. The umbones form a strong knob from the inner underside of which the slender sickle-shaped blade curves across two-thirds of the inside of the shell toward the strongly rounded ventral knob of the median part. The junction of the anterior and median part forms a threadlike ridge. The posterior portion extends rather widely over the median on the inside, having its anterior margin very oblique and projecting as a thin shelf. The pallets are long and slender, with the rounded stalk as long as, or longer than, the blade. The blade consists of rather distantly spaced, cone-in-cone-shaped elements of which seven are present in the type. The hard portion of these elements is rounded on its distal portion on the outside and deeply V-shapedly incised on its inner face. The cone-in-cone-shaped elements are covered with a thin, horn-colored, transparent periostracum, which develops into awnlike spines on the lateral margin, while the intermediate space between these awns is finely finned on the outside.

The type, U.S.N.M. No. 568817, comes from station 25385, and was taken from a laminated board assembly that had been exposed



THE CANAL SHIPWORM

for 2 months at Balboa, Canal Zone. The shell of the type measures: Height, 6.3 mm.; length, 6.2 mm.; diameter, 6.2 mm. The pallet measures: Entire length, 18.4 mm.; length of stalk, 10 mm.; diameter of blade, 2.0 mm.

A large number of additional specimens from the same station are in the United States National Museum collection, as well as lots from stations 25386 and 25387.

Bankia (Bankia) setacea Tryon, which ranges from Unalaska to San Francisco Bay, is easily distinguished from the present species by its huge size, while *Bankia (Bankia) chiloensis* Bartsch, from Chiloé Island, Chile, is small like the present species but has the auricle greatly reduced and the cone-in-cone elements much more condensed.