A NEW SHIPWORM FROM VENEZUELA

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A sending of shipworms collected in Maracaibo Bay, Venezuela, includes an undescribed species belonging to the subgenus Neoteredo. This now gives us three species in that subgenus, namely, Teredo (Neoteredo) reynei Bartsch from British Guiana and Surinam; Teredo (Neoteredo) miraflora Bartsch from the Canal Zone, Panama, and the present species, Teredo (Neoteredo) healdi from Venezuela.

When I published my monograph of the American shipworms, Bulletin No. 122, United States National Museum, I did not have the pallets of Teredo (Neoteredo) miraflora. These have since come to hand. I am, therefore, now able to give comparative data of both shell and pallet characters.

The dental ridges on the anterior part are finer and more closely spaced in Teredo (Neoteredo) reynei and Teredo (Neoteredo) miraflora than in the new species. In the types of the three species the following number of dental ridges remain: Teredo (Neoteredo) reynei, 125; Teredo (Neoteredo) miraflora, 97; Teredo (Neoteredo) healdi, 56. The anterior median area bearing the dental ridges is almost twice as wide in Teredo (Neoteredo) reynei as it is in Teredo (Neoteredo) healdi, while in Teredo (Neoteredo) miraflora it is intermediate between the two. The number of dental ridges in the types of the three species across the anterior median area parallel with the ventral border of the anterior area are: Teredo (Neoteredo) reynei 83; Teredo (Neoteredo) miraflora, 46; Teredo (Neoteredo) healdi, 38. The pallets of the three species also offer diagnostic characters. In Teredo (Neoteredo) reynei the blade is quite small; it measures: Length, 7.2 mm.; diameter, 2.5 mm. In Teredo (Neoteredo) miraflora it measures: Length, 7.1 mm.; diameter, 3.1 mm. In Teredo (Neoteredo) healdi it has a length of 7.5 mm. and a diameter of 3.3 mm. The outside of the blade is also less deeply cut in Teredo (Neoteredo) healdi than in Teredo (Neoteredo) miraflora, which it most resembles. The sulcus below the cup is also less defined in the present species.
TEREDO (NEOTEREDO) HEALDI, new species

Plate 1, figs. 1-5

Shell large, subglobbose, yellowish white, excepting the central portion of the median area which is a little darker; the interior is bluish white. The extreme anterior edge forms a moderately deep sinus bordered by a moderately thick callus. From the inner edge of this callus the dental ridges spread in a fan-shaped manner. The earlier of these dental ridges have been eroded, but 56 of them remain, of which the later are much more closely spaced than the early ones. The earlier ridges are separated by spaces about three times as wide as the ridges at their posterior extremity, while in the last portion of the space that separates the dental ridges is less than the width of the ridges at their posterior extremity. These ridges are finely denticulated at the free border. The sides of these dental ridges slope much more abruptly dorsally than ventrally. The anterior median portion is moderately broad and is marked by closely approximated denticulated ridges, of which 35 are present in a line parallel with the ventral border of the anterior part. These ridges join those of the anterior part at a considerably larger angle than a right angle. The cusps on these dental ridges are large and single cusped and not denticulated. The central median portion is somewhat depressed, its anterior border being strongly marked off from the posterior, anterior portion; its anterior half being marked by rough, irregularly curved transverse lines. The posterior median portion is about as wide as the anterior and middle median portion combined, and is marked by rough lines of growth which curve more abruptly anteriorly than on the posterior part where they assume a decidedly dorsal slant. The posterior part forms only a moderately strong auricle, which is slightly concave and is marked by inconspicuous wrinkled lines of growth. It should be said here that the dorsal portion of the shell in adult specimens, including the auricle, is badly eroded. The suture joining the anterior and median portion is not conspicuous on the inside. The central median portion is marked by a shallow roughened groove, bearing a conspicuous knob at its ventral termination. The anterior portion of the posterior part projects over the median part as a strong shelf. The blade, projecting from the umboe, is irregular in shape and extends obliquely a little more than half-way across the inside of the shell, having its origin immediately beneath the quite prominent umbonal knob. The pallets are spoon shaped, cupped at the distal extremity with a stalk one and one-half times the length of the blade. The stalk shows as a rib on the inside of the blade.

The type, Cat. No. 381921, U. S. N. M., was taken from a piling by Mr. K. C. Heald, at Cabimas about 20 miles southeast of Mara-
caibo, Venezuela, on the east side of the lake. It measures: Height, 10.7 mm.; length, 10.2 mm.; thickness, 12.0 mm. The pallets measure: Length, 7.5 mm.; diameter, 3.3 mm.

In addition to the type other specimens were collected by Mr. Heald in Maracaibo Harbor and at Lagunillas about 40 miles southeast of Maracaibo on the east side of the lake. These are also in the collection of the United States National Museum.

EXPLANATION OF PLATE

Figure 1. Exterior view of type.
2. Interior view of type.
3. Exterior view of pallet.
4. Interior view of pallet.
5. Lateral view of pallet.