

FIGURE 5-Graph showing length vs. thickness (triangles), and length vs. widthecircles) for Terebratalia bateguia n. sp. Black triangle and circle represent holotype. 38 specimens measured: IGM 5943-5947, 5950, USMM 476730. Dimensions in mm. Correlation coefficient for length vs. thickness = 0.512, for length vs. width = 0.779.

Suborder TEREBRATELLIDINA Muir-Wood, 1955 Superfamily TEREBRATELLACEA King, 1850 Family LAQUEIDAE shomson, 1927, emended Richardson, 1975 Subfamily TEREBRATALIINAE Richardson, 1975 Genus TEREBRATALIA Beecher, 1893

Type species. - Terebratula transversa Sowerby, 1846, p. 94.

TEREBRATALIA BATEQUIA n. sp. Figures 3.1-3.19, 3.22, 4.1, 4.2, 5

v ?Terebratalia n. sp.? Squires, GOEDERT, AND KALER, 1392, Pl. 1, figs. 9-11.

Diagnosis. - Biconvex profile, rounded to elliptical outline; wide hinge line; erect beak, large pedicle foramen, disjunct deltidial plates; ornament of broad, non-bifurcating ribs; crenulate commissure, anterior commissure weakly sulcate.

Description. - Biconvex profile, outline rounded to elliptical, ranging from length and width approximately equal to width greater than length; hinge line wide; beak erect, beak ridges subangular, large pedicle foramen, disjunct deltidial plates; point of maximum width in posterior half of valve length; ornament of broad, non-bifurcating ribs, developed over anterior of valves (half to three-quarters of valve surface), neanic stage generally smooth; ribbing not significantly raised above valve surface; crenulate commissure, anterior commissure weakly sulcate; a very weak, broad sulcation present on pedicle valve, defined by two slightly prominent ribs; growth lines well marked; punctate; internal structures of brachial valve include cardinal process and brachidium with lateral connecting bands joining with median septum; rudimentary dental lamellae in pedicle valve.

Discussion. - A review of the literature has not revealed a named species of Terebratalia with an ornament of broad, nonbifurcating ribs comparable to that of Terebratalia batequia n. sp. Therefore the material from Baja California Sur, Mexico, is referred to a new species. The extant species Terebratalia transversa has bifurcating and more strongly developed ribs than in Terebratalia batequia n. sp. There is considerable variation in outline and development of ribbing in Terebratalia batequia n. sp. This is interpreted as intraspecific variation. Schumann (1991) recently indicated a broad range of morphotypes, from ribbed to smooth forms, for Recent specimens of Terebratalia transversa from the San Juan Islands, U.S.A. Terebratalia n. sp.? (Squires et al., 1992, Pl. 1, figs. 9-11) from the early Eocene of Washington State appears to possess non-bifurcating ribs. The apparently smooth "fold" in the brachial valve of the figured specimen from Washington State may be a matter of preservation. This form is very likely closely related to Terebratalia batequia n. sp.

Specimens of the new species range from forms in which length and width are approximately equal to forms in which width is greater than length (Figure 5). Some asymmetry of outline is shown, indicating crowding during growth. Small rotund juvenile(?) forms are also present (Figure 3.1-3.4). The size-range of complete (two-valved), measured specimens indicates that they may be close to representing a biocoenosis. A number of specimens show shell repair from nonlethal predatory. attacks. In addition, borings referable to Oichnus paraboloides Bromley, 1981 (e.g., Figure 3.2), and possible Podichnus sp. Bromley and Surlyk, 1973, were seen. Epifauna observed on two specimens includes Serpula batequensis Squires and Demetrion, 1992.

In a few specimens of *Terebratalia batequia* n. sp. the median septum and attached lateral branches of the trabecular loop (Richardson, 1975 = terebrataliform) are preserved (Figures 3.19, 3.22, 4.1, 4.2). The ascending branches and transverse band of the brachidium have not been seen.

Material.-Holotype, IGM 5943 (Figure 3.9-3.12), dimensions: L 11.9; W 12.0; T 6.2 mm, paratypes, IGM 5944-5950; comparative non-type, non-figured material, USNM 476730; locality and horizon as for holotype. In total, 178 specimens comprising: 85 articulated specimens; separate valves, some fragmentary, 33 brachial valves, and 61 pedicle valves; additional fragmentary material; locality and horizon as for holotype.

Etymology.—Named after the Bateque Formation from which the specimens were collected.

Occurrence.-Locality CSUN 1519, Baja California Sur, Mexico, upper part of Bateque Formation, middle Eocene = type locality.

ACKNOWLEDGMENTS

C. Perrilliat (IGM) arranged for paleontologic collecting in Baja California Sur and provided type-specimen numbers. MRS thanks R. Doescher for assistance from SIBIC (Smithsonian International Brachiopod Information Center), J. DeMouthe, California Academy of Sciences, San Francisco, and E. Wilson, Natural History Museum of Los Angeles County, for the loan of specimens, A. Langenkamp for taking photographs for Figure 3, and M. Langenkamp for measuring the specimens of Terebratalia. Support from the University of Dayton Research Council and the University of Dayton Student Fellows Program is appreciated. Herr Maiazza assisted with Scanning Electron Microscopy, and Frau Dukat printed the photomicrographs for Figure 4, taken whilst MRS was recipient of an Alexander von Humboldt Research Fellowship at the Geologisch-Paläontologisches Institut, Technische Hochschule Darmstadt, which is gratefully acknowledged, as is the support of host professor D. Schumann. Thanks to A. Logan, University of New Brunswick, St. John, and M. Foster, Bradley University, for helpful reviews

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which improved the manuscript. Acknowledgment is made to the Managing Editor, Contributions in Science, Natural History Museum of Los Angeles County, for permission to use Figure 2.

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Accepted 5 January 1994