

ON THE OCCURRENCE OF *STROMBINA CYPHONOTUS*
AND *STROMBINA LESSEPSIANA* IN THE DOMINICAN REPUBLIC

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In the description of *Strombina lessepsiana* (Brown and Pilsbry, 1911, p. 352, pl. 25, figs. 11, 12) the authors compared their new species from the Gatun Formation with two as-yet undescribed species in the Gabb Collection from Santo Domingo. In order to demonstrate the relationship between these three species, in an extended footnote (Brown and Pilsbry, 1911, pp. 352-353) they published descriptions of these two new species extracted from "Johnson and Pilsbry's [*i.e.*, Pilsbry and Johnson, 1917] report on Gabb's Santo Domingo fossils (not yet published)." The species were cited correctly as Pilsbry and Johnson and were figured on pls. 25, figs. 6, 7 and 9, 10. When Pilsbry and Johnson (1917) was published there was no mention of these two species. In the final report (Pilsbry, 1922, p. 351) they are simply listed as having been described and figured in the Pilsbry and Johnson 1911 paper.

Although both species were mentioned by Maury (1917) as occurring in the Miocene of the Dominican Republic, no locality was given. Jung discussed these species in his study of the Dominican species of *Strombina* (1986, 1989) and, as no further specimens had been found to date, Jung concluded there probably had been an error and the specimens allegedly from the Neogene of the Dominican Republic originally had formed a single lot collected from the Gatun Formation of the Panama Canal Zone.

I had the opportunity to collect in the Dominican Republic in December, 1994, and February, 1995. The first of the two trips fortunately coincided with the end of the dry season, following an unusually dry rainy season. Consequently, the rivers were lower than normal, even for the dry season.

In December, 1994, on the west bank of the Río Yaque del Norte (north point of locality NMB 17265, text-fig. 21 of Saunders,

Jung, and Biju-Duval, 1986; see text-figure 1), the lowest part of the river bed exposed grey silts extremely rich in mollusks, *Strombina* being the predominant gastropod genus. This locality falls within the Baitoa Formation, late Early Miocene (Saunders, Jung, and Biju-Duval, 1986). Twenty-three specimens of *S. cyphonotus* and five of *S. lessepsiana* were collected. On the second visit eight weeks later the beds were no longer exposed.

I have had the opportunity to compare the specimens of *S. lessepsiana* from the Dominican Republic with specimens from the type locality (Gatun Formation of Panama). The specimens originally described as *S. prisma* are undoubtedly conspecific with *S. lessepsiana*, as pointed out by Jung (1989, p. 66). Therefore, there are only two species: *S. lessepsiana*, of which *S. prisma* is a synonym, and *S. cyphonotus*. Both of these species occur in the Late Miocene Gatun Formation of the Panama Canal Zone.

The specimens of *S. cyphonotus* and *S. lessepsiana* collected from the Río Yaque del Norte are identical to those figured by Jung (1986, pls. 1-2) as doubtfully occurring in the Dominican Neogene. Although there are several features that tend to distinguish the two species (Jung 1986, pp. 11-12; 1989, p. 57), these are variable, only the longer anterior canal in *S. lessepsiana* consistently separates the two. This is the first time these two species have been reliably recorded with locality data confirming their occurrence in the Dominican Neogene.

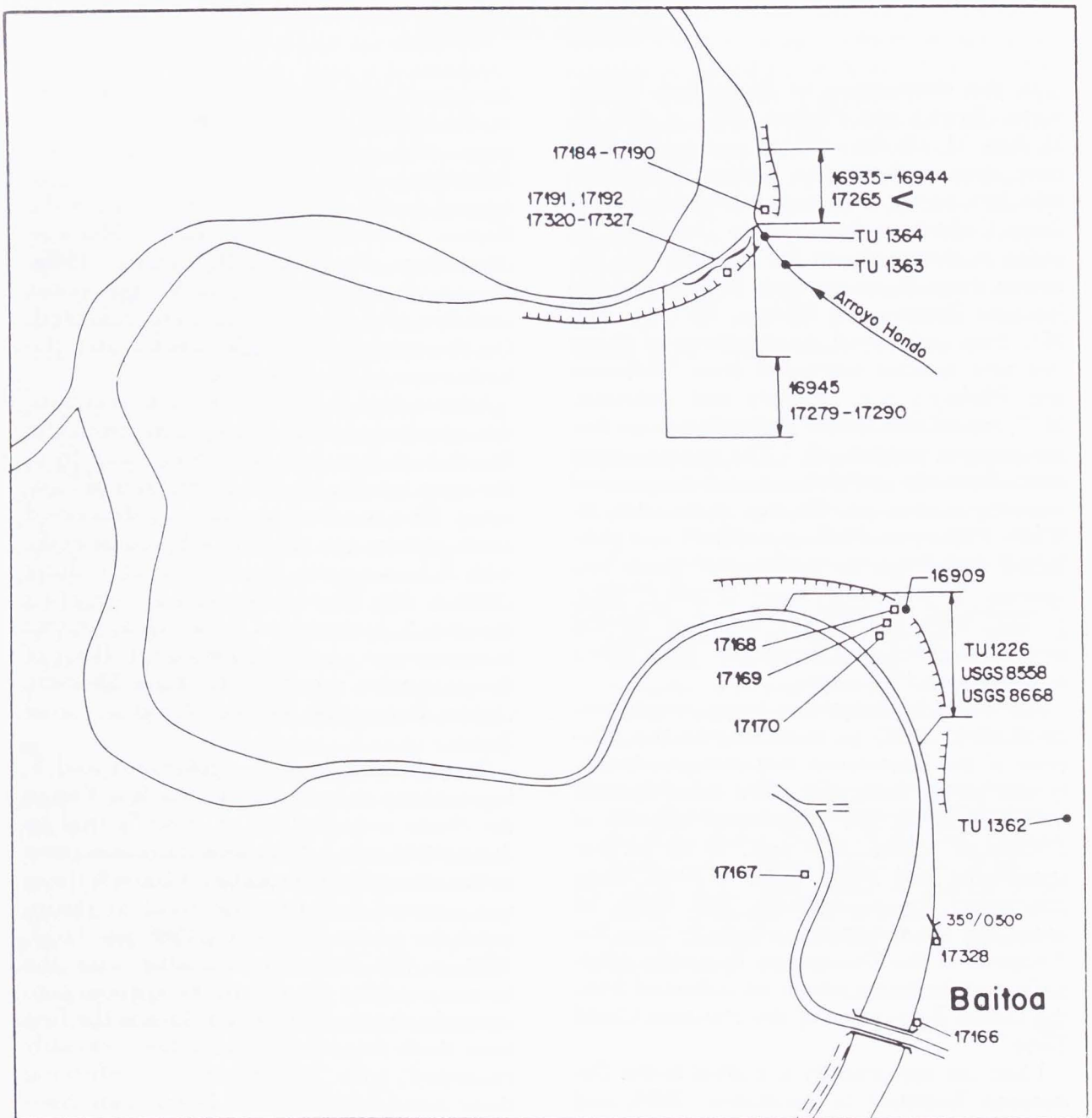
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Text-figure 1. Map of Río Yaque del Norte, below the village of Baitoa, Dominican Republic (after Saunders, Jung, and Biju-Duval, 1986, text-figure 21).

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