



***Terebra limatula* Dall, 1889 and *T. acrior* Dall, 1889 (Gastropoda: Terebridae); two problematic taxa from the western Atlantic**

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In a recent paper Terryn (2011) synonymized *Terebra limatula* Dall, 1889 and *T. l.* var. *acrior* Dall, 1889. This paper proposes that the two taxa are separate species; and that Terryn's determination that *Terebra crassireticula* Simone, 1999 is a junior synonym of *T. limatula* may also be in error.

When Dall first described *Terebra limatula*, he had with him specimens from a number of localities that ranged from Barbados to the Gulf of Mexico to North Carolina. He advised the reader that there seemed to be two different types of sculpture: "The sculpture of the Antillean specimens tend to be stronger, the alveoli between the ridges deeper, and the spirals fewer than in the northern specimens. The latter usually have three or four above the suture, the Antillean two or three. If these differences are worth naming, the variety may be called *T. limatula* var. *acrior*" (Dall, 1889: 66).

Unfortunately, Dall did not choose a holotype or a type locality for either taxon, and, to complicate matters, the form from Puerto Rico shown by him and Simpson (Dall & Simpson, 1901; pl. 57, fig. 6) is not the "Antillean" form *T. limatula* var. *acrior*, as stated in that work, but the "northern" form with more numerous spirals and weaker ornamentation (Fig. 1). Dall's *lapsus* and imprecision has caused the author of a recently published paper (Terryn, 2011) to conclude, erroneously in my view, that *Terebra limatula* and *T. l.* var. *acrior* are synonymous. Terryn also designates a lectotype from the type series (USNM 93971; see Figs. 2a, 2b herein).

In his study, Terryn also considers that *Terebra limatula* is synonymous with *T. crassireticula* Simone, 1999 (nom. nov. pro *Terebra reticulata* Simone & Verissimo, 1995) (Fig. 3). Unfortunately, and based on his synonymy, Terryn refers us to Simone & Verissimo, 1995 and Simone, 1999 for the description and protoconch image of *T. limatula* instead of giving us an original description as well as an image of the lectotype's protoconch. Simone & Verissimo describe the *T. crassireticula* protoconch as having "1.5 whorls, smooth, bluntly round" (p. 462; Fig. 3).

Although the general characters of the designated lectotype of *Terebra limatula* and the holotype of *T. crassireticula* are very similar (compare Figs. 2 and 3), the columellar structures of the two specimens differ. Terryn indirectly addresses these differences by stating that while the lectotype and paralectotypes of *T. limatula* are all damaged shells, the holotype of *T. crassireticula* is "fully adult and complete" and "with thickened columellar callus" (p. 70); however, Luiz Simone informs me (2 Dec., 2011) that none of the specimens of *T. crassireticula* has the central columellar fold shown in the lectotype of *T. limatula* (Fig. 2) and in the specimen of the same taxon shown by Dall & Simpson (Fig. 1).

The type locality, as per the lectotype of *T. limatula* designated by Terryn (and quoting from Dall, 1889: 66) is "U. S. Fish Commission Station 2402, in the Gulf of Mexico, between the delta of the Mississippi and Cedar Keys Fla., in 111 fms, mud." Terryn adds the coordinates 34.33°N, 76.2°W, which are discrepant with Dall's locality, as these coordinates would place the station off the east coast of the United States and not in the Gulf of Mexico. I have contacted the NOAA Central Library and was told that the coordinates for *Albatross*, the ship by which the specimen in question was dredged, Station 2402, are 28°26'N, 85°33.3'W (Skip Theberge, 5 Dec., 2011). These coordinates are compatible with Dall's locality.

I have in my collection two lots referable to *T. limatula* dredged off Alabama and therefore in the general area of the lectotype. One was dredged at 29°21'N, 87°42' W, in 140 m (EFG 14421), and another was dredged at 29° 28'N, 87° 27.30'W in 173 m (EFG 14650; Fig. 4). I have a third specimen dredged in Bahía de Campeche that is also referable to *T. limatula* (EFG 26290, Fig. 5). Although the yellowish banding of this specimen does not appear in the coloration described by Dall ("white to pale buff", p. 63), Dall's specimens were collected empty and damaged. The specimens in my collection show a protoconch of approximately 2 whorls, and more bulbous than that of *T. crassireticula* (compare Fig. 3 with Figs. 4, 5). There are three specimens at the Academy of Natural Sciences, Philadelphia (ANSP 33723) collected in Bimini, Bahamas by Dr. William Rush. They are probable syntypes of *T. limatula*, as the collecting data and the collector's name coincide with Dall's listing of type material (p. 66). Mr. Terryn chose only one of them (Figs. 6a, 6b) as a paralectotype of *T. limatula*, indicating that the other two specimens "clearly belong to a different species (and genus/group)" (p. 64). However, all three specimens (two of them rather eroded) seem to be referable to *T. limatula* (Terryn, 2011; figs 5–7).