

A NEW SPECIES OF *POIRIERIA* (*PAZIELLA*) (GASTROPODA:MURICIDAE)
FROM THE PUNTA GAVILAN FORMATION, NORTHERN VENEZUELA

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When Rutsch originally described the molluscan fauna of the Pliocene Punta Gavilan Formation, northern Venezuela (1934), he included only two muricid species. These are: *Murex recurvirostris* Broderip, 1833 [later assigned to the Recent *Haustellum donmoorei* (Bullis, 1964) by Vokes, 1990, p. 18], and *Murex domingensis* Sowerby, 1850 [= *Chicoreus* (*Siratus*) *domingensis* in Vokes, 1990, p. 50]. Subsequently, the living species *Chicoreus* (*Chicoreus*) *brevifrons* (Lamarck, 1822) was added to the fauna (Vokes, 1990, p. 35). Later (Vokes, 1992, p. 41), the Gatun species *Poirieria* (*Panamurex*) *gatunensis* (Brown and Pilsbry, 1911) was also added and, at the same time, *Poirieria* (*Panamurex*) *rutschi* was described (Vokes, 1992, p. 52, pl. 11, figs. 1-4) from the fauna. Most recently, a Punta Gavilan specimen of the living *Murexiella* (*Murexiella*) *macgintyi* (Smith, 1938) was figured (Vokes, 1994, p. 104, pl. 14, fig. 3).

Thus, the muricid fauna has grown to six in number and, of these, three are species found living today in the waters off Venezuela. Of the other three, *P. rutschi* is closely related to the Recent *Poirieria* (*Panamurex*) *velero* Vokes, 1970, and *C.(S.) domingensis* is thought to be ancestral to the living *C.(S.) springeri* (Bullis, 1964). Only *P. gatunensis* evidently has no living counterpart in the local fauna.

Two of these Recent analogs of the Punta Gavilan fauna were described in a landmark paper on the hitherto almost unknown deep-water fauna from off northeastern South America by Harvey Bullis (1964). In that same paper a third spectacular species of *Paziella* was named *Murex* (*Poirieria*) *oregonia* (Bullis, 1964, p. 106, figs. 5, 6), with the type material coming from 105 to 275 fathoms [192-503 meters], at locations ranging from Trinidad to the Amazon River.

Therefore, it was not totally unexpected to see a specimen recently collected at Punta Gavilan by Bernard Landau of what, at first glance, appeared to be *P. oregonia*. However, closer examination shows the incomplete specimen to have a combination of traits of *P. oregonia* and the smaller *Poirieria* (*Paziella*) *nuttingi* (Dall, 1896), which so far as we know is limited

to the Gulf of Mexico. Although the holotype of *P. nuttingi* came from only 27 meters, off Key West, Florida, most examples come from depths of approximately 200 meters.

Although the Punta Gavilan specimen is an incomplete, silicified replacement, all of the essential characteristics of the species are preserved and, given the unlikely possibility of collecting a better example, I have concluded that the presence of this unusual species warrants description.

POIRIERIA (*PAZIELLA*) *LANDAUI*
Vokes, n. sp.
Text-figure 3

Description: Shell large for the subgenus; six teleoconch whorls in holotype, probably eight in completely adult shell; protoconch unknown. Spiral ornamentation on spire whorls of two simple cords, with a slightly stronger cord at shoulder. On body whorl, five cords anterior to shoulder, plus one additional cord on siphonal canal. Axial ornamentation presumed to be of eight thin, only slightly raised, lamellar varices on each whorl, undulated by spiral cords; only at intersection of varices with cords at shoulder and siphonal canal short, open spines produced. Suture deeply impressed, subsutural ramp almost perpendicular to shell axis. Aperture poorly preserved but presumably with a smooth appressed columellar lip and a denticulate outer lip. Siphonal canal short, broad, distally recurved, giving rise to a marked siphonal fasciole.

Holotype: Naturhistorisches Museum Basel NMB H-17775; height 58.8 mm, diameter (as is) 32.2 mm.

Type locality: Punta Gavilan Formation; Punta Gavilan, Edo. de Falcon, Venezuela.

Occurrence: Known only from the type locality.

Etymology: Named in honor of Bernard M. Landau, of Albufeira, Portugal, who collected the holotype specimen.

Discussion: The traits that *P.(P.) landau* shares with *P.(P.) oregonia* includes the large size and the relatively strong (compared to *P. nuttingi*) spiral cords. However, in most aspects the new species has more in common with *P. nuttingi*, including the broader shell outline, with a

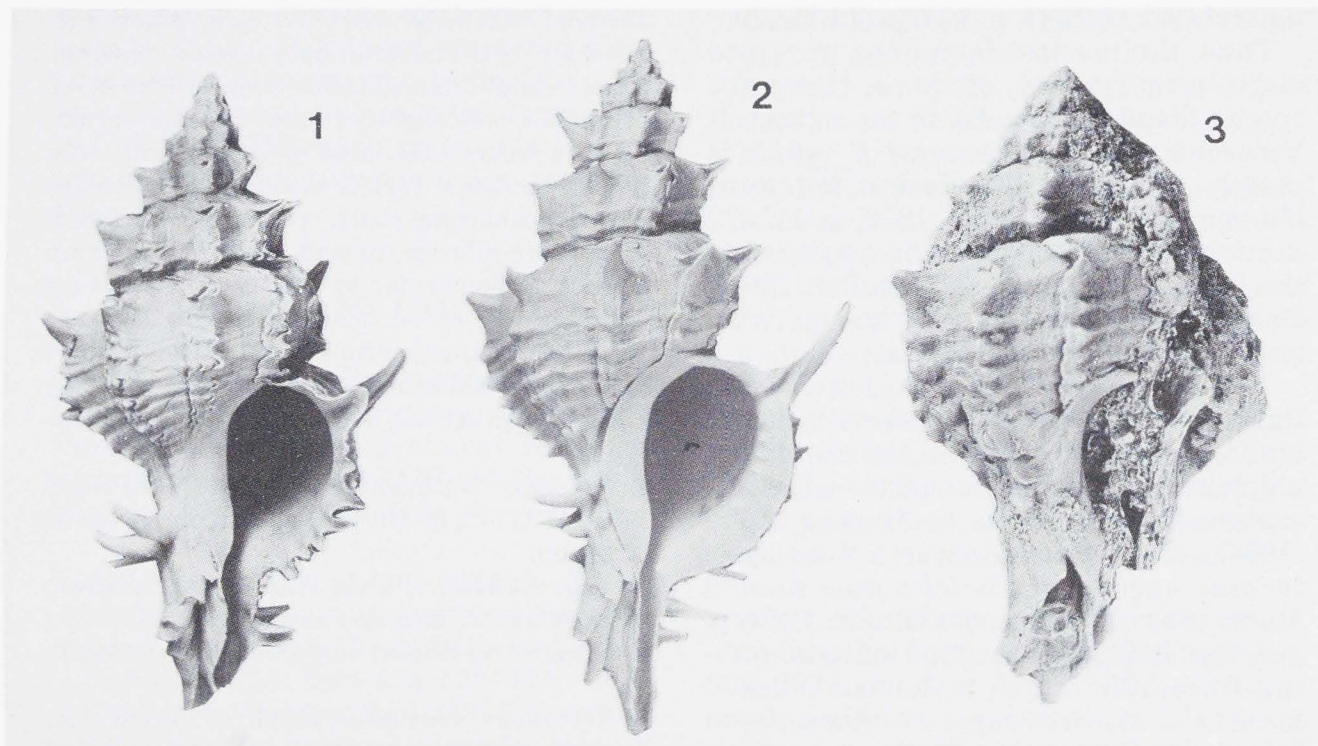
shorter broader siphonal canal and marked siphonal fasciole. The number of spiral cords anterior to the shoulder in most specimens of *P. nuttingi* is about four (the holotype is rather "atypical" with two additional secondary spirals), in *P. landaui* it is five, and in *P. oregonia* it is six. Both *P. nuttingi* and *P. landaui* have a single row of spines on siphonal canal, in contrast to the two rows in *P. oregonia*.

As noted by Bullis (1964, p. 106), *P. oregonia* is more than twice as large as *P. nuttingi* with the same number of whorls; both holotypes (text-figure 1, *P. nuttingi*; text-figure 2, *P. oregonia*) have eight whorls. A specimen of *P. landaui* with eight whorls would approximate the size of *P. oregonia*. The shell outline in *P. landaui* is lower-spired than either of the other two species.

LITERATURE CITED

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Text-figure 1, *Poirieria (Paziella) nuttingi* (Dall); USNM 107372 (holotype); height 44.4 mm, diameter 20.5 mm (excluding spines) (X 1 1/2). Text-figure 2, *Poirieria (Paziella) oregonia* (Bullis); USNM 635149 (holotype); height 85.2 mm, diameter 37.8 mm (excluding spines) (X 3/4). Text-figure 3, *Poirieria (Paziella) landaui*, n. sp.; NMB H-17775 (holotype); height 58.8 mm, diameter 32.2 mm (as is) (X 1).