

A new species of *Lobatus* Swainson, 1837 (Gastropoda: Strombidae) from French Guiana (Guyane), South America

David Massemin¹, Edward J. Petuch² & David P. Berschauer³

¹ Research Associate, Muséum National d'Histoire Naturelle, Paris, 57 rue Cuvier, CP 5, F-75231 Paris cedex 05, France david.massemin@gmail.com

² Department of Geosciences, Florida Atlantic University, Boca Raton, Florida
Corresponding author: ecphora3@outlook.com

³ Museum Associate, Santa Barbara Museum of Natural History
2559 Puesta del Sol, Santa Barbara, California 93105 shellcollection@hotmail.com

ABSTRACT A new species of the strombid genus *Lobatus* Swainson, 1837 is described from off Guyane (French Guiana) in the Surinamian Subprovince of the Caribbean Molluscan Province. This new strombid, here named *Lobatus palikur*, was trawled by commercial shrimp boats from 30-50 m depths off Cayenne and is readily distinguishable from the only other living *Lobatus* species, *L. raninus*, by being a more slender shell with a higher spire, in having 13-16 small pointed knobs around the sharply-angled shoulder, and in having lower and less-pronounced spiral cords on the body whorl.

KEY WORDS Strombidae, *Lobatus*, *Lobatus palikur*, Guyane, Surinamian Subprovince

INTRODUCTION

The coastline of northern South America, from the Orinoco River mouth of Venezuela to the Amazon River mouth of Brazil, has been found to house a rich and highly endemic molluscan fauna unlike any other found within the Caribbean Sea and Caribbean Molluscan Province. Unlike other geographical subdivisions of the Caribbean Molluscan Province, this easternmost area is dominated by organic-rich mud seafloors and coastlines composed of dense mangrove forests; the results of the immense mud and freshwater effluent of the two great river systems. Because of the differences of the resident molluscan fauna when compared to other areas within the Caribbean Province, this area was defined quantitatively and referred to as the Surinamian Subprovince (named for Suriname, the geographical center of the subprovince; Petuch, 2013; Petuch and Berschauer, 2021) (Figure 1).

The new strombid described here lives within a Surinamian molluscan fauna that has a high level of endemism and contains characteristic species such as the strombid *Strombus guyanensis* Massemin, Petuch, and Berschauer, 2025, the muricids *Phyllonotus guyanensis* Garrigues and Lamy, 2016 and *Siratus springeri* (Bullis, 1964), the fascioliariid *Fasciolaria guyanensis* Lyons and Snyder, 2016, the turbinellid *Turbinella rianae* Delsaerd, 1987, and the cone shells *Dauciconus massemini* (Monnier and Limpalaer, 2016), *Conasprelloides guyanensis* (Van Mol, 1973), and *Kellyconus rachelae* (Petuch, 1988) (see Massemin, Petuch, and Berschauer, 2025 for details on the marine ecosystems found off Guyane).

While conducting field research along the coast of Guyane (French Guiana), the senior author recently discovered many other molluscan taxa that were new to science, most of which had



Figure 1. Map of the Surinamian Subprovince of the Caribbean Molluscan Province. As shown here, this biogeographical unit extends from the mouth of the Orinoco River, Venezuela southeastward to Amapa State, Brazil and the mouth of the Amazon River. Unlike other faunal subdivisions of the Caribbean Molluscan Province, the Surinamian Subprovince (named for Suriname, the geographical center of the subprovince) is dominated by organic-rich mud seafloors and coastlines composed of dense mangrove forests; the results of the immense mud and freshwater effluent of the two great river systems. This Caribbean Subprovince is now known to house a rich and unusual molluscan fauna comprising large numbers of undescribed endemic species.

never been reported in any of the previous literature on the area. Among these new discoveries was the second-known species of the genus *Lobatus* Swainson, 1837, the “Hawk Wing Conchs”. This new species is distinct from the only other living species, the genotype *Lobatus raninus* (Gmelin, 1791) (Plate 2), and differs in a number of important aspects, all of which are described in the following sections. Named here as *Lobatus palikur* Massemin, Petuch, and Berschauer, n. sp., the new Hawk Wing Conch may also have a wider range than shown here and may extend out onto the Guiana Plateau and southward to Amapa State, Brazil. The holotype of the new species, along with the listed paratypes, are deposited in the collections of the Musée National d’Histoire Naturelle de Paris (Paris Museum of Natural History) and bear MNHN-IM catalog numbers.

SYSTEMATICS

Class Gastropoda Cuvier, 1795
 Subclass Prosobranchia Milne Edwards, 1848
 Order Mesogastropoda Thiele, 1925
 Superfamily Stromboidea Rafinesque, 1815
 Family Strombidae Rafinesque, 1815
 Genus *Lobatus* Swainson, 1837

Lobatus palikur Massemin, Petuch, and
 Berschauer, new species
 (Plate 1, Figures A-H; Plate 2, Figures A, B, C)

Description. Shell of average size for genus between 65 to 70 mm in length, broad, inflated; shoulder sharply angled, subcarinate, edged with 12-16 (most shells have 13) proportionally small, equal-sized sharply pointed knobs; spire high, protracted, distinctly stepped,

subpyramidal; shoulder and spire whorls sloping; spire whorls with 10-12 small, rounded knobs per whorl; body whorl and spire shiny and polished; body whorl sculpted with 14-16 large, rounded, evenly separated raised cords; shoulder and sloping subsutural areas ornamented with 8-10 fine raised cords, proportionally smaller than main body whorl cords; anterior end of body whorl ornamented with 5-6 large spiral cords; stromboid notch of siphonal area proportionally large and well developed, deeply indented; stromboid notch aligns with narrow raised ridge around anterior end of body whorl; outer lip of adults flaring, developed into large winglike varix, with body whorl cords producing crenulated edge to lip; posterior end of varix in adults developed into pointed extension that projects beyond end of varix; some specimens with smaller secondary extension next to spire, producing bifurcated posterior end of outer lip; shell base color pale salmon-pink overlaid with 3 wide bands of darker reddish-tan, one anterior of shoulder angle, one below mid-body line, and one around anterior end; many specimens also have pale violet or lavender base colors, overlaid with dark chocolate amorphous patches and zebra stripes arranged longitudinally, extending from subsutural area and shoulder to midbody of body whorl; interior of aperture white, grading to pale salmon-orange deeper within; protoconch and early whorls tan in color.

Type Material. HOLOTYPE - length 67.5 mm, from 30 m depth off Cayenne, Guyane (French Guiana), MNHN-IN 2000-29768. PARATYPES - in the Massemin Collection, as follows: No. 1 77.7 mm in length; No. 2 measuring 65.0 mm in length; No. 3 measuring 71.2 mm in length; No. 4 measuring 69.3 mm in length; No. 5 measuring 62.4 mm in length; No. 6 in 42.7 mm in length; No. 7 measuring 51.6 mm in length; No. 8 measuring 71 mm in length; No. 9 62.0 mm in length; No. 10 measuring 69.0 mm in length;

No. 11 measuring 47.0 mm in length; No. 12 in the Petuch Collection measuring 69.0 mm in length; No. 13 in the Berschauer Collection measuring 97.8 mm in length; No. 14 in the Berschauer Collection measuring 85.4 mm in length.

Type Locality. The holotype and the entire type lot were dredged by commercial shrimp boats from a mud sea floor at 30 m depth off Cayenne, French Guiana (Guyane).

Range and Ecology. As of the present time, *Lobatus palikur* is known only from the coast of Guyane off the capital, Cayenne, where it inhabits muddy, organic-rich seafloors at 30-50 m depths. The new strombid may also range out onto the shallow Cayenne Plateau off Suriname and southward into the trans-Amazonian area of Amapa State, Brazil.

Etymology. The name honors the Palikur People of French Guiana (Guyane) and Amapá State, Brazil, the original inhabitants of the area. The taxon is proposed as a noun in apposition.

Discussion. Until the discovery of this distinctive new species, the genus *Lobatus* was thought to be represented by only one living species, *L. raninus* (Gmelin, 1791), which ranges from southern Florida to Colombia and Barbados (Clench and Abbott, 1941: 2-4). Although being the same general length as an average *L. raninus*, the new Surinamian Subprovince species differs in being a more slender shell that has a distinctly narrower shell profile and a narrower, less flaring varical lip. As seen on Plate 2, the shoulder and outer lip of *L. raninus* are much wider and better developed, giving the shell a much more inflated appearance. Although both species have the same number of cords on the body whorl, those of *L. raninus* are much stronger and better developed, giving the shell a much coarser appearance. The body whorl cords of *L. palikur* are proportionally lower and more flattened, giving the shell a smoother overall appearance.

The most important diagnostic character seen between the two congeners is the difference in the number and development of the shoulder knobs. In *Lobatus raninus*, only 8-10 large, rounded knobs are present, with the central, mid-dorsal knob being extremely well developed. This central knob is often more than 5 or 6 times larger than the other shoulder knobs (like the specimen shown here on Plate 2 F), extending well beyond the shell outline. The last knob in the series is also well developed and forms a pair of hornlike structures along with the over-sized mid-dorsal knob (giving rise to the synonym name *bituberculatus* Lamarck, 1822). This is in direct contrast to the row of 13 or more uniformly small, pointed shoulder knobs seen on *L. palikur*. Maxwell *et al.* 2020 provides an overview of the American Strombidae, including the genus *Lobatus*.

One of the recognized synonyms of *L. raninus*, *L. magolecciai* (Macostay & Campos-Villarreal, 2001), which was described from off Isla Margarita, Venezuela (in the Venezuelan Subprovince, a lineal distance of some 1,200 kilometers) is now known to be simply a variant with a single pointed extension on the posterior end of the wing varix. (Landau *et al.* 2010). Unlike *L. palikur*, this pointed extension on the wing is far more pronounced and better developed and projects well beyond the height of the spire, a character that has never been seen in *L. palikur*. Unfortunately, the designated holotype of *L. magolecciai* was never deposited in a reference collection and remains in Oliver Macostay's private collection (Landau *et al.* 2010).

Cite as:

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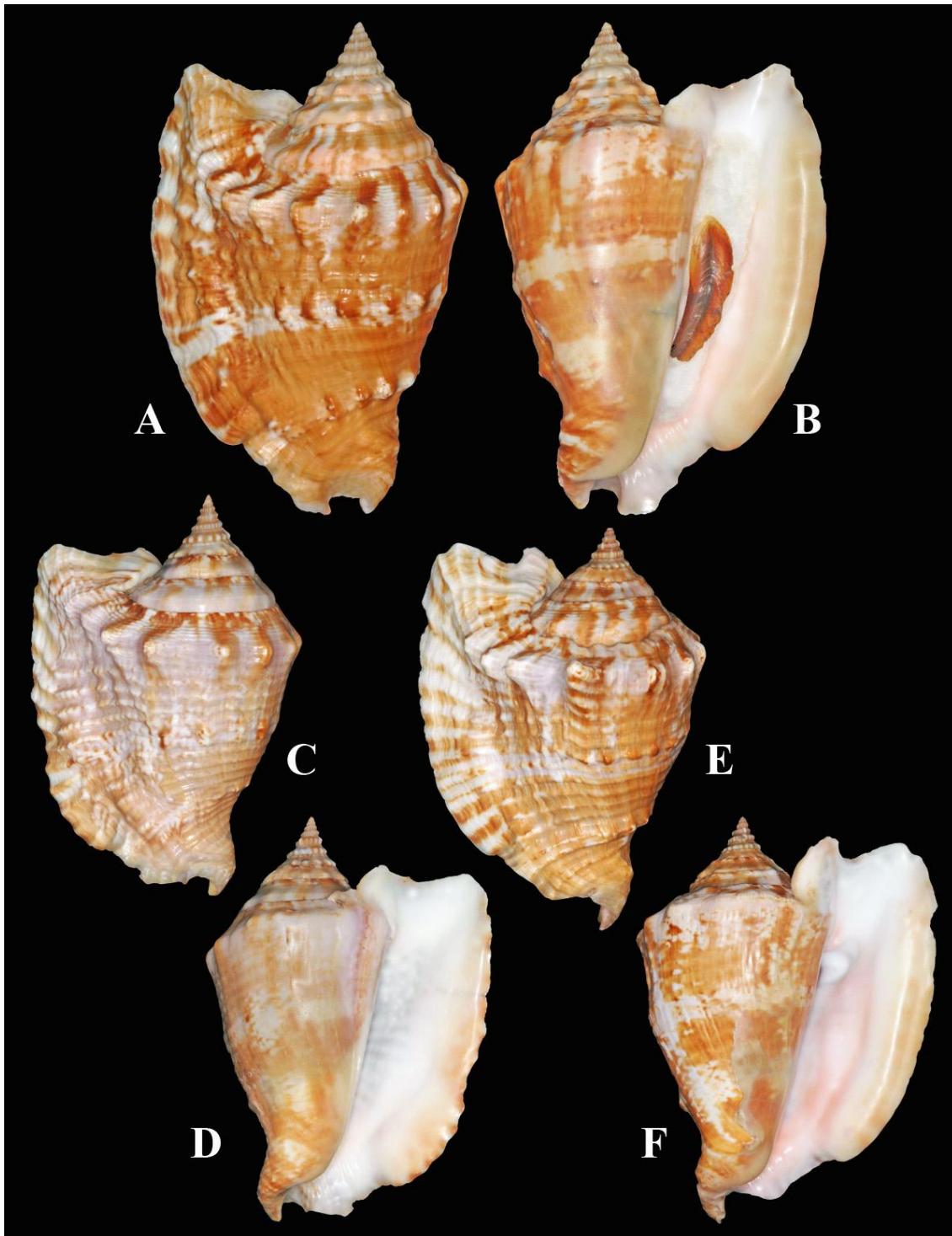


Plate 1. *Lobatus palikur* Massemin, Petuch, and Berschauer new species.

A, B= *Lobatus palikur* Massemin, Petuch, and Berschauer new species, holotype, MNHN-IM-2000-29768, 67.5 mm in length; **C, D=** paratype No. 1, in the Massemin Collection measuring 77.7 mm in length; **E, F=** paratype No. 2 in the Massemin Collection measuring 65.0 mm in length. All figured specimens collected in French Guiana in April 2000, by a shrimp trawler on sandy-muddy bottoms, at 30 m depth. Photographs in this plate by Philippe Maestrati, MNHN.

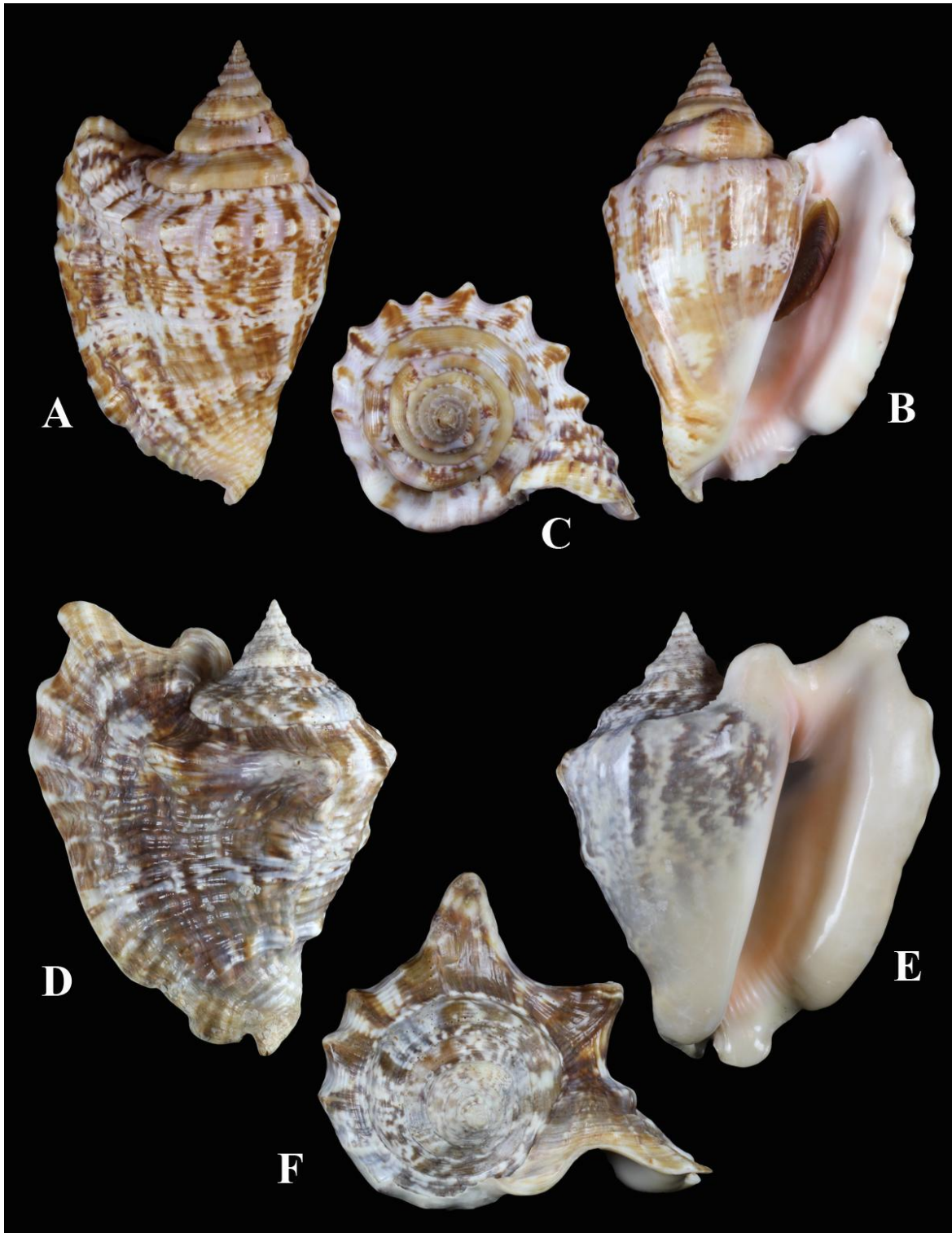


Plate 2. Comparison of *Lobatus palikur* and *Lobatus raninus*.

A, B, C= *Lobatus palikur* Massemin, Petuch, and Berschauer new species, paratype No. 14 in the Berschauer Collection measuring 85.4 mm in length; **D, E, F= *Lobatus raninus*** (Gmelin, 1791), length 89 mm, found in Turtle Grass (*Thalassia testudinum*) bed in 0.5 m depth off Missouri Key, Lower Florida Keys, Monroe County, Florida. Photographs in this plate by David P. Berschauer.