

Synonyms

Voluta porphyria Linnaeus, 1758
Porphyria fasciata Röding, 1798
Porphyria tentorium Link, 1807
Oliva panamensis Montfort, 1810
Oliva leveriana Perry, 1811



Plate 1. *Oliva porphyria* (Linnaeus, 1750). This shell was picked up alive at 4-6 meters deep in October 1998 at Santa Ynez Bay, Baja California, Mexico. Size: 116.70mm (CMAP 3447).

Introduction

There can be no doubt, *Oliva porphyria* (Linnaeus, 1758) is the most known among the species which belong to the Genus *Oliva*. The special design (Fig.1), its size and lack of intraspecific variability makes it instantly identifiable. These features make us think to *Oliva porphyria* as the ideal type for the Genus *Oliva*, which, as we know, has very variable species. Furthermore this is one of the two olives named by Linnaeus, even if he set them into the Genus *Voluta*. In his "Systema Naturae", 1758, ed.10 p.729 *Voluta porphyria* have the No.349, while *Voluta oliva* have the No.350.



Fig.1
 The design of *Oliva porphyria* is called "tent" because it resemble a camp of indian tepees.

In 1798 P.F.Röding, conchologist of Hamburg, in his famous work "Museum Boltenianum" (Bolten Catalogue) chose *Voluta porphyria* Linnaeus, 1758 as species type of a group at the generic level, the Genus *Porphyria*. Consequently *Phorphyria porphyria* was the type of the Genus *Porphyria* Röding, 1798 by tautonomy and monotypy (Fig.2). Unfortunately nine years

before Bruguière had made the same using *Voluta oliva* Linnaeus, 1758 to name a new group to generic level, the Genus *Oliva*. Consequently *Oliva oliva* is the type of the Genus *Oliva* Bruguière, 1789 by tautonymy and monotypy. Sadly *Oliva oliva* is extremely variable and we still not know the limits of its intraspecific variability.

About the name Olsson & Dance (1966) wrote: "The term "Porphyria" is commonly translated to signify a purple color [...]. There is also the possibility that the name was given first in allusion to the tentlike markings bearing a resemblance to the angular outlines of crystals in the polished surface of an igneous rock such as, graphic granite".

The shell of *Oliva porphyria* is the bigger in the Genus *Oliva*. In 1980 a specimen in the collection of Ed Swoboda was well known because it measured 134.5 mm. Because of its size and its design, in the eighteenth century, *Oliva porphyria* was often mistaken for the much more rare and precious *Conus gloriamaris* Chemnitz, 1777. Finally, it is interesting to recall that the ancient peoples who lived in the Central America (Maya) carving up small ritual masks in the solid thickness of this shell.

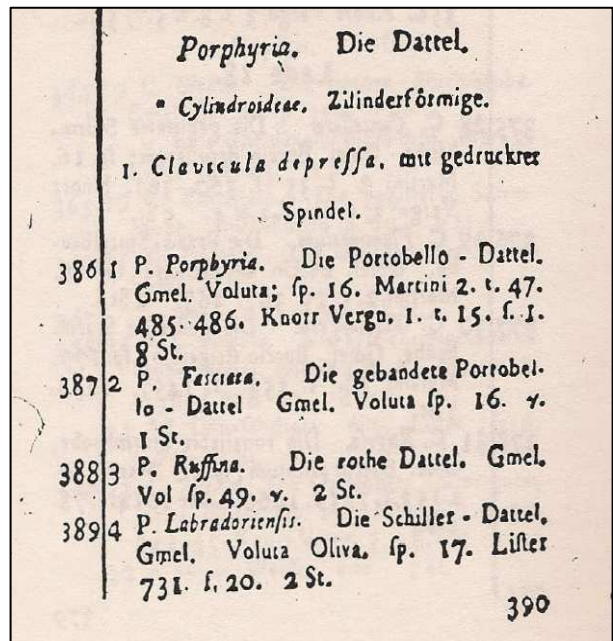


Fig.2 Museum Boltenianum, page 32, n.386

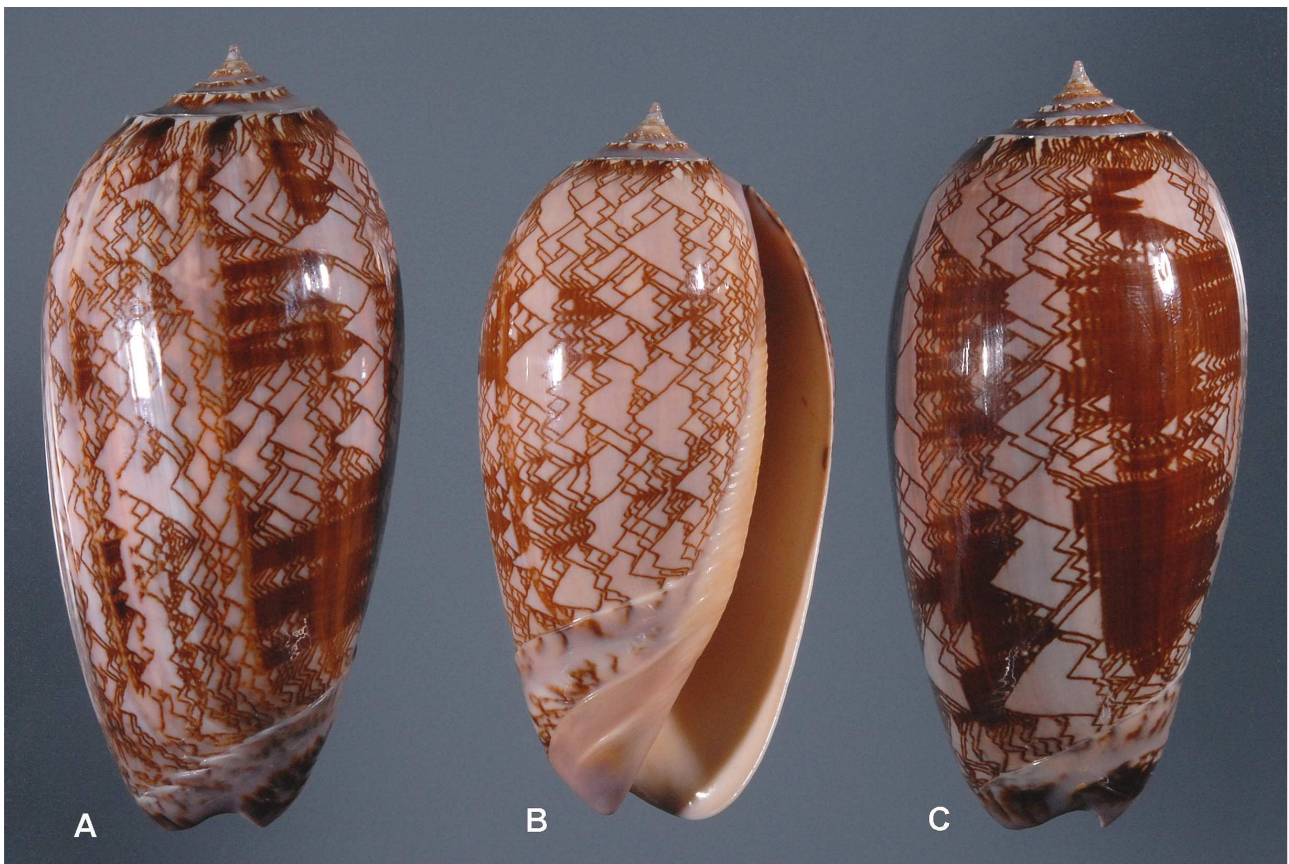


Plate 2. *Oliva porphyria* (Linnaeus, 1758). These three specimens come from Santa Ynez Bay, Baja California, Mexico. Their size: "A" 102.60mm (CMAP 0388), "B" 93.30mm (CMAP 1326) and "C" 100,50mm (CMAP 2232).

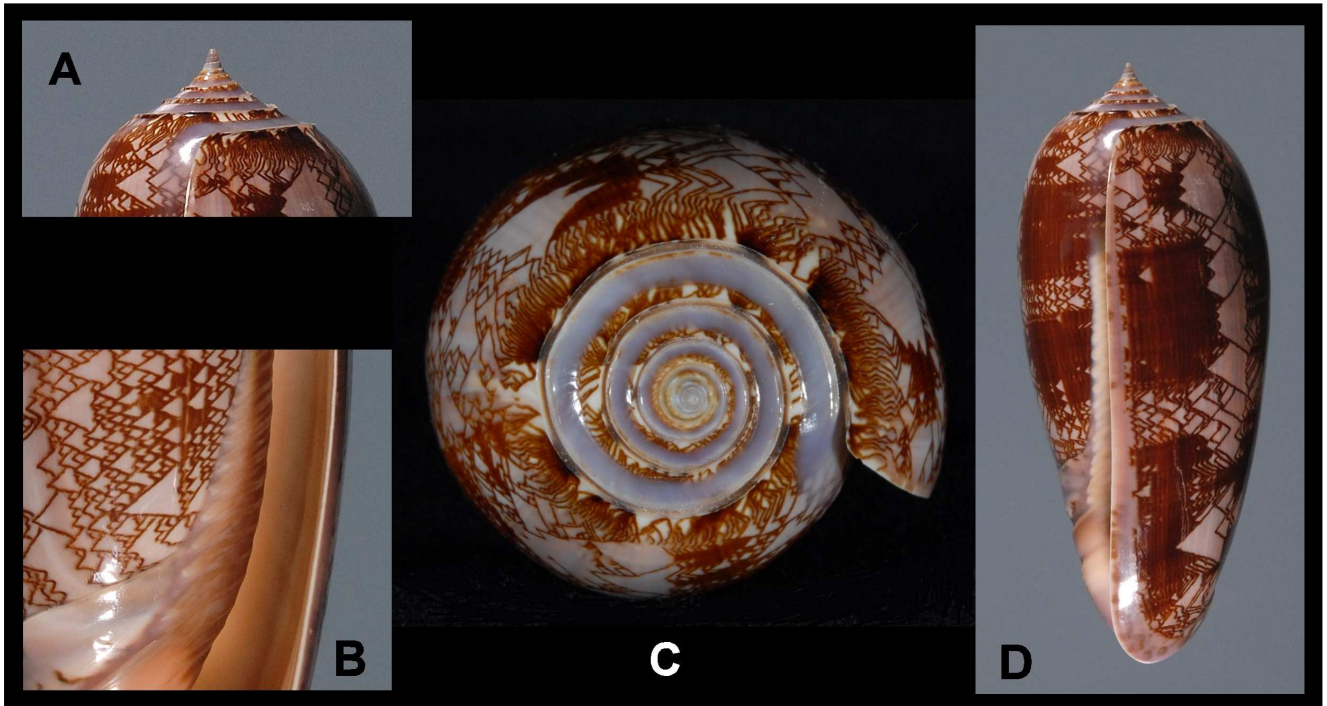


Plate 3. *Oliva porphyria* (Linnaeus, 1758) Features of the shell: "A" The protoconch and the spire are always perfect also in the bigger specimens. "B" The outer lip is not very thick also in the older specimens. "C" The filament channel is wide even if a violet callus is present. "D" In the 10th edition of the Systema, Linnaeus uses the significant expression "*Labro medio retuso*" which refers to a curious inswing or curvature of the margin of the outer lip so that in a profile view its edge is seen to be slightly concave in its middle section.

Habitat at Bahia de Santa Ines

At the end of October 2000, my American friend Ernie and I were again in Baja California, Mexico, to work on the geographic distribution of the many forms which belong to the *Oliva spicata* "complex" (Röding, 1798). In our previous trips we had met a Mexican fisherman, called Ernesto, who picked up olives in Bahia de Santa Ines, a wonderful place at South of Punta Chivato. This time he offered us a fantastic batch of over 35 *Oliva porphyria* (Fig.3). Ernesto picked up the shells with a small boat and a very old compressor that pumped air into a long tube. With this rudimentary system he fell about 5 meters deep to search for the olives. At Bahia de Santa Ines the seabed is very clean without stones, gravel and seagrass. The *Oliva porphyria* lives between 3 and 6 meters deep at approximately two hundred meters from the coast. Other three species of oliva live in that bay: *Oliva spicata* (Röding, 1798), *Oliva incrassata* Lightfoot, 1786 and *Oliva polypasta* Duclos, 1835 (Perini, 1999).



Fig.3 *Oliva porphyria* (Linnaeus, 1758). Specimens from Bahia de Santa Ines, South of Punta Chivato, Baja California, Mexico.



Plate 4. *Oliva porphyria* (Linnaeus, 1750). The specimens "A" (CMAP 3029, size:29.70mm) and "B" (CMAP 3030, size: 31.45) come from Pacific side of Panama. "C" (CMAP 0198, size: 54.20mm) come from Cebaco Is. Panama. "D" (CMAP 0051, size: 71.10mm) dredge off Uvas Is. Panama and "E" (CMAP 0387, size: 85.35) come from Santa Ynez Bay, Baja California, Mexico.



Plate 5. *Oliva porphyria* (Linnaeus, 1758). This is a particularly clear sub-adult specimen which come from Baja California, Mexico. Size: 68.80mm. (CMAP 1266)

Distribution

From Panama to Gulf of California.

Live mollusk

No picture available.

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