Synonyms

Voluta oliva Linnaeus, 1758
Oliva oriola Lamarck, 1811
Oliva flaveola Duclos, 1835
Oliva orolinella Duclos, 1835
Oliva pygmaea Reeve, 1850
Oliva ispidula var. longispira Bridgman, 1906
Oliva ispidula var. algida Vanatta, 1915
Oliva ispidula var. gratiosa Vanatta, 1915

Introduction

Here I do not want to go through the intricate history (*) of Oliva oliva (Linnaeus, 1758), or even give a taxonomic value to these pages. As with the other cards, I just want to show the intraspecific variability of this species. Once removed Oliva tigriddella Duclos, 1835 and Oliva samarensis Johnson, 1915 from “Oliva oliva complex”, many among us thought that things would be clearer. I myself thought about Oliva oliva as a taxon with an intraspecific variability no wider than other Oliva species. Unfortunately the mystery is still present because we can observe four forms (Fig.1) clearly identifiable. These forms don't seem to be geographic forms but morphological forms which make to think to four different species. The only geographic form seems to be the form longispira Bridgman, 1906 which is present only in a small geographic zone.

The specimen of Oliva oliva in the Linnean collection, the famous n.350, was designed as lectotype by Olsson and Dance in 1966. This shell is 28mm long and by its morphology it seems to be a sub-adult, furthermore it seems to belong to the form living in the Southern India and Sri Lanka. This is why I chose to depict an indian specimen as “type” in the photo under the title.

Oliva oliva also has two other biological characteristics that can be misleading. The first is that during the growth of the shell it changes its morphology. The juveniles are very slim, slender (**), while adults appear more swollen on the shoulder taking on a cylinder shape. The second thing is that often there are colonies of Oliva oliva composed exclusively of young individuals or at most sub-adults, while others are formed only by adults. We can therefore understand how these two features together can lead us into error and make us believe to be confronted with two different species. For this reason, in these pages I have given more space to represent both juveniles specimens and growth series.

(**) Very often juvenile or subadult specimens of Oliva oliva are confused with the form longispira Bridgman, 1906.

Plate 1. Oliva oliva (Linnaeus, 1758) Subadult specimens from Southern India. Average size 23.50mm.
Here we can see the three forms belonging to the *Oliva oliva* “complex”. Each of them shows a variability within its area of diffusion.

A) This is the “normal” form named by Linnaeus. We can find it in Southern India, Sri Lanka, Indonesia, Philippines and Australia. The variability is wider than in the other forms and it is relative to the size, the color and pattern.

B) I call this form “beehive” because its shape remember me the old beehives. It is present in Indonesia, Australia and New Caledonia with a moderate variability.

C) I call this form “sleek” because its shape is slender. It is present in Gulf of Bengala and Indonesia. I think that *Oliva februaryana* Falconieri, 2008 belongs to this form. Its variability is mainly in size and color/pattern.

Here I have not showed the form *longispira* Bridgman, 1906 because it is already clearly separated within the *Oliva oliva* “complex”.

Fig.1  *Oliva oliva* (Linnaeus, 1758)
Key Discriminators

Fig. 2 *Oliva oliva* (Linnaeus, 1758)

A) Usually convex spire callus  
B) Shoulder spiral band  
C) No double spiral band  
D) No orange-blue separation  
E) Clear columella/inner lip transition by a step  
F) Aperture brown, sometime with white margin  
G) In the adult specimens are usually visible only two plications, one of which deeper.

Range and Size

This species is present from Southern India and Sri Lanka to the Eastern coasts of the Indian Ocean. In the Indonesian Archipelago and Philippines, North Australia and Papua New Guinea. Melanesia. The adults rarely exceeding 46mm.

Live mollusk

Fig. 3 *Oliva oliva* (Linnaeus, 1758). Live animals in Kuta beach, Bali Is. Indonesia. Two forms are present on the same beach: “A” form sleek, “B” form beehive.

Plate 3. *Oliva oliva* (Linnaeus, 1758) form “beehive” . Subadult specimens from Broome, Western Australia. Average size 24.15mm
Growth Series

Plate 4. *Oliva oliva* (Linnaeus, 1758) form “beehive”. Growth series from Broome, Western Australia. Collected by G.B. in the 80’s. Size from 18.09mm to 26.33mm.

Plate 5. *Oliva oliva* (Linnaeus, 1758) form “normal”. Growth series from Santa Cruz, Marinduque Is., Philippines. Size from 17.50mm to 35.10mm. Note the very high spire in the juvenile and sub-adult specimens.
Two different forms from the same beach

The following two plates show two growth series of specimens which come from the same beach on Bali Is. (Indonesia). The morphology of the shells is very different so we can think that they belong to two different species. The elongate form showed in the plate 8 (form “sleek”) is present on many Indonesian islands but as I know, it is not found in Philippines. The form showed in the plate 9 is the "normal" form and it is present in India, Indonesia (sometime with a zig-zag pattern) and Philippines.


Plate 7. *Oliva oliva* (Linnaeus, 1758) form “normal”. Growth series from Kuta Beach, Bali island, Indonesia. Collected in July/August 2001, the bigger in June 2008. Size from 18.00mm to 34.30mm.
Plate 8. *Oliva oliva* *form longispira* Bridgman, 1906. Growth series from Hansa Bay, Papua New Guinea. Size from 18.20mm to 24.60mm.

Plate 9. *Oliva oliva* (Linnaeus, 1758) *form “normal”*. Color variations from Sri Lanka. Size from 31.50mm to 36.30mm.
Plate 10. *Oliva oliva* (Linnaeus, 1758) form “normal”. Subadult specimens showing different shapes of the spire. From Kuta Beach, Bali island, Indonesia. Average size 25.50mm.

Plate 11. *Oliva oliva* (Linnaeus, 1758) form “normal”. Adult and subadult specimens with a very nice zig-zag pattern. These shells were collected by B.O. and come from Sepekan Is., Indonesia. Average size 32.00mm.


Plate 14. *Oliva oliva* (Linnaeus, 1758) form “sleek”. Juvenile specimens from Kuta Beach, Bali is.
**Plate 15.**
*Oliva oliva* (Linnaeus, 1758) form "sleek". Adult specimens from Pangandaran Bay, SW Java Is., Indonesia. Size 42.60mm and 36.40mm.

**Plate 16.** *Oliva oliva* (Linnaeus, 1758) form "sleek". Adult specimens from Southern Java Is., Indonesia. Size from 42.50mm to 45.00mm.