



mediterranean

# nudibranchs

## miquel pontes

### Hypselodoris picta

This is the largest dorid nudibranch found in the Mediterranean, reaching a maximum size of 19-20cm. *Hypselodoris picta* has a long body, coloured in shades varying from yellowish grey to blue, violet and even black, depending on the local variations of the species. All variations are decorated with yellow spots more or less uniformly scattered along the body, which in certain cases can be aligned forming stripes, circles or irregular designs.

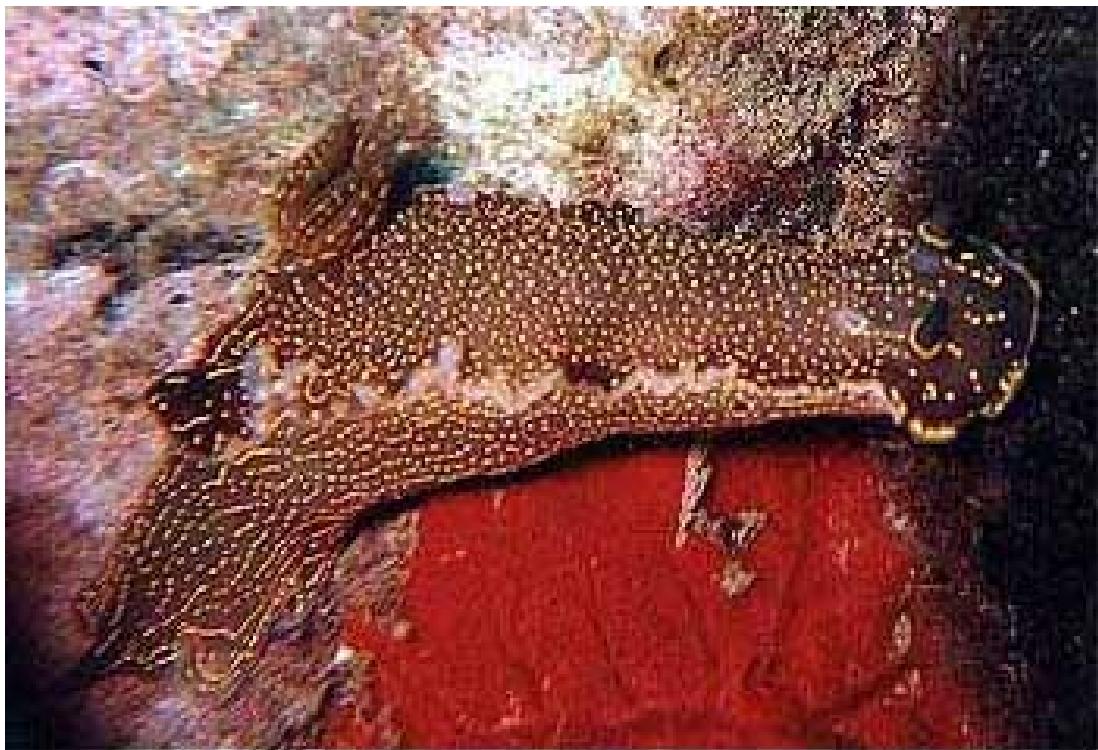
Juveniles may be coloured navy blue, with the edge of the dorsum coloured yellowish white, and show longitudinal continuous stripes along the body, interleaved with discontinuous stripes.

The rhinophores are coloured dark blue, with the tips lamellated. The branchial plume, consisting of 10-12 unipinnated branches, is located in the back of the dorsum and is similarly coloured to the rhinophores but in a paler shade and the underside of the branches is often longitudinally striped in yellow.

Both the rhinophores and branchial plume retract into their respective sheaths and into the body in case the animal is disturbed, and it takes many minutes for the animal to relax and expose them again. If the animal is severely disturbed it may form a ball by bending the foot longitudinally, showing only the coloured parts of it.

On the head, below the dorsum edge, we find two labial tentacles. The foot, also located below the dorsum, is longer, so the exposed part forms a kind of tail, which is also spotted in yellow. The edge of the foot is undulated.

There was an active controversy about the classification of this animal. After Prof. Ortea's work on the subject (Avicennia, 1996, Sup. 1: "Review of the atlantic species of the family Chromodorididae (Mollusca: Nudibranchia) of the blue chromatic group"), published back in 1996, the name *Hypselodoris picta* is



considered synonym of *Hypselodoris elegans* (Cantraine, 1835), *H. valenciennesi* (Cantraine, 1841) and *H. webbi* (d'Orbigny, 1839). It was formerly known as *Glossodoris valenciennesi* and *Chromodoris valenciennesi*.

This nudibranch has daily habits and lives on rocky bottoms, usually from depths of 15 to 40 metres, and feeds on sponges of the *Ircina* genus, from which it extracts secondary metabolites for its own defence, as they are toxic to most predators. The showy coloration of this species seems to be related to its toxicity, something well known by the possible predators, as established by Sánchez Jerez, P. and collaborators (of the Alicante University) in their work "Coloración de advertencia y defensa química en los moluscos nudibranquios del género *Hypselodoris* del Mediterráneo".

The *Hypselodoris picta* is found the whole year round and despite it's not very frequent, it is known by most experienced divers because of it's huge size (by Mediterranean standards).

This *Hypselodoris picta* is endemic to the Mediterranean. In certain locations it is found in only one coloration scheme while in other places this nudibranch is found in all possible colour variations. The violet coloured *Hypselodoris picta* seems to be restricted to locations close to the Atlantic Ocean, where can be confused with some species from that water mass. It is not yet clear if these Atlantic species enter into the Mediterranean basin through Gibraltar strait or not.

You can find more interesting pictures at Erwin Köhler's site about Mediterranean nudibranchs: Medslugs ([http://www.medslugs.de/E/Mediterranean/Hypselodoris\\_picta.htm](http://www.medslugs.de/E/Mediterranean/Hypselodoris_picta.htm))

