

Feature Creature

Plocamopherus tilesii Bergh, 1877

Plocamopherus tilesii is an impressive beast, measuring 10–12cm with vibrant orange markings and a spotted brown and white body. The greyish coloured gills stand out in the centre of the back. This animal commands attention, especially on a silty muddy bottom.

The photograph below was taken at the Co-op (sewer pipe), Port Stephens, NSW. It was the first one I had ever seen and thought it to be a rather large *Plocamopherus imperialis*. Observing both species, the size and colour differences are noticeable.

Known from Japan, China and Eastern Australia and reportedly feed on bryozoans. These animals can use their rear end like a paddle to swim through the water with vigorous lateral movements.

References

Rudman.W.B. 1999. *Sea Slug Forum*

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Editor's Notes...

Time for a facelift and expand the range of topics. Miquel Pontes is contributing material on Mediterranean species and now some of the other opisthobranch groups will be included.

Your feedback has been helpful when considering content. With so many keen amateur naturalists, divers as well as students and professionals reading anNEWS, the information presented can only continue to improve.

In the coming year the aim is to include articles on photography, scanning and computer graphics, nudibranchs in aquariums, endemic species etc. Some of this is outside my range of knowledge and well within the range of many of you. If you have used particular equipment such as scanners, underwater housings, video, etc or know some neat tricks for photo editing, photographing in the field or the lab, etc, tell us about it.

Is it mollusc or mollusk? Applying simple science one would think two spellings, two different meanings. Which came first, which is the synonym? Will nudibranch become nudibrank? Anyone willing to take this one on???



Mass Slug Stranding

In early August 50-60 sea hares washed ashore from Pummicestone Passage on the western shore of Bribie Island, (30 minutes north of Brisbane, Queensland, Australia). This is an environmentally sensitive and valuable section of the Moreton Bay Marine Park. National Parks officers were concerned that pollution may be affecting the waterway. The two specimens delivered were tentatively identified as *Alpysia sowerbyi* Pilsbry, 1895. (Both are now housed in the Queensland Museum's wet collection).

Like all sea hares this species mate, lays eggs and then die. Some wash ashore before fully deceased.

Alpysia sowerbyi has a creamish body with mottled brown spots and grows to 60–80 mm usually and can reach 150 mm. When disturbed they extrude large amounts of purple dye. They feed on red and green algae and occur among sea grasses on sheltered rocky shores or muddy areas. Known from the Indo–West Pacific. They occur in many areas of Moreton Bay and northern New South Wales.

After hatching from the egg the larvae spends three weeks suspended in a planktonic state before settling. Veracious graziers they grow rapidly.

On the 9th September, 1980 Dr. Richard Willan recorded several hundred wash ashore at Scarborough (northern end of Moreton Bay).

References

Wild Guide To Moreton Bay. 1998 – Queensland Museum
Willan R.W. August 1999. pers comm.
Benn. S. August 1999. pers comm and specimens



Mediterranean Nudibranchs

The Dotted Sea Slug

by Miquel Pontes and Josep M^cDacosta

This nudibranch is well known by all those who dive in the Mediterranean Sea. Most people have the pleasant experience of knowing it after few dives, since it is one of the most common opisthobranchs and it is very easy to spot.

The scientific name is *Discodoris atromaculata* and was first described by Bergh in 1880. Formerly it had a different scientific name: *Peltodoris atromaculata*.

What does the name mean?

According to the mythology, *Doris* is a marine divinity that gives name to the *dorid* nudibranchs. *Doris* was the daughter of the Greek gods *Ocean* and *Thetis* and was married to the marine god *Nereus*, becoming parents of 50 marine nymphs or *Nereids*.

"*Atro-*" is from the Latin word "*ater*" which means "black" while "*maculata*" comes from Latin "*maculatus*" that means "*spotted*". The scientific name *Discodoris atromaculata* means "black spotted round dorid", origin of the common English name: "dotted sea slug".

In Europe it is known by other names, always related to its characteristic spots. For example, it is known as "leopardschnecke" (leopard slug) in German, "vaquita marina" or "vaquita suiza" (marine or Swiss cow) in Spanish, "vacchetta di mare" (marine cow) in Italian or "doris dalmatien" (for its similitude to a Dalmatian dog) in French.

The spots are randomly distributed, although the biggest and darkest spots are usually located in the central part of the animal's body. The reason of such a festive coloration is no other than camouflage purposes. It's hard to believe, but the system works, and it is known as "disruptive coloration" that makes the animal almost indistinguishable to its food, the sponge *Petrosia ficiformis*.

The body of the animal is smooth and, when it is resting, the contour is almost circular. The body's consistency is coriaceous, hard and rough to touch. This roughness is caused by conical protuberances distributed on the surface of the body that give it a granulated affect. It is generally accepted that its maximum length is about 7-12 centimeters.

The dotted sea slug has a branchial tuft on the back end (posterior) of the body and two rhinophores near the front end (anterior). Both are retractile and in fact only a cautious diver could see them, as the nudibranch withdraw them when disturbed. When danger passes the rhinophores and gills are again extended very slowly and generally the rhinophores first.

Discodoris atromaculata is found in shady or dark areas of the marine bottom, in caves, on walls and overhangs, and can be found in shallow or deep water. It is generally found laying on the sponge *Petrosia ficiformis* of which it preys exclusively. Looking for the sponge is the common way to find this beautiful opisthobranch.



Discodoris atromaculata
(Bergh 1880).

Length: ~4 cm

Depth: 9 m

Date: 5.07.1998

Time: 8:30 GMT

Location: Illa Pedrosa, Torroella de Montgrí, Costa Brava, Spain



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Photographer:

Miquel Pontes

Technical data:

Nikonos V with Nikkor
35mm lens

M-3 extension ring for
macrophotography (1:3)

TTL Strobe Sea&Sea YS-
60N

Fuji film 100 ASA

F Stop: f16, mode A

Continued on page 3

An endemic (exclusive) Mediterranean species it is present all year, although more frequent in Summer.

You may find excellent pictures of this species at Medslugs, Erwin Köhler's Mediterranean slug site http://www.medslugs.de/E/Mediterranean/Discodoris_atromaculata.htm

The CIB, a Spanish diving club, has adopted this popular opisthobranch as their mascot, and use it as their logo. We can see that the regulator is located (logically) on the gills, and therefore on the back of the animal...



A Guide To Singapore Nudibranchs

Uma Sachidhanandam and Lim Yun Ping have put together a well laid out, site featuring nudibranchs of the Singapore region.

Glossodoris atromarginata welcomes us to the site. From here the site consists of three sections:

- Singapore Nudibranchs contains thumbnail images of 16 species with links to higher resolution images.
- Collection Sites with maps showing where particular species were located.
- Nudibranch List containing 20 species (some linked to images).

The nudibranchs are only some of the total number of species that have been recorded to date from Singapore. Uma, together with Dr. Richard Willan is currently in the process of writing up 2 papers detailing all the species found in Singaporean waters. This work was done as part of Uma's Masters thesis on the Nudibranchs of Singapore and hopefully with Yun Ping (the web savvy person) they can put up the rest of the pictures on the site soon.



Feedback

I just got back from diving Sipadan in Borneo. Great photography, but nudis were few & far between for some reason...

Bill Chambers. Lake Macquarie Australia (chambers@fastlink.com.au)

I've just came back from Bali (Indonesia) where I did a few dives around the island and it was really exciting. It was my first time in a tropical sea and I had no enough eyes to catch all down there. Oaoooh! But, to my surprise, it was quite difficult to see nudibranchs. That was what I most expected to see and what I missed the most. Where they hiding from me? Sleeping maybe?

I can only remember 3 different nudis: *Phyllidia coelestis*, one i can't find anywhere which is black with white/green spots, and one (the best in my opinion) which is similar than *Chromodoris magnifica* but I'm not sure.

Anyway, my first dives out the Mediterranean Sea have been a great experience. I hope the next time I'll be able to see more little nudis.

Thank you for your time and the great job you are doing.

Eduard Sisquella Manresa, Spain (iris@minorisa.es)

I saw another *Ceratosoma trilobatum* at Curtin Artificial Reef on Sunday (15th Aug), about 9cm long on one of the walls in the forward cargo hold of the Enterprise wreck. Also found a small (~1 cm) nudibranch at Flinders reef - it was yellow with black spots and black rhinopores, with a transparent end portion of its foot - never seen it before - it had a *Hypselodoris*-like shape. Also saw heaps of small (2-3cm) *Phyllidia pustulosa* at the Wall off Flinders reef (20-25m). It was a fun day diving, especially hearing the humpback whales.

Christine McEwan Brisbane Australia (cmc_tigger@hotmail.com)



The CIB, a Spanish diving club, has adopted this popular opisthobranch...

....dealer in new, secondhand & antiquarian items (books, periodicals & reprints/offprints/separates) on recent & fossil Mollusca.

No minimum order. Postage is extra. No creditcard-facilities. Postal business only, no shop. The prices are in Dutch guilders....

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Ed: With all the rain this year, nudibranchs on the rock platforms around the Sunshine Coast, have been very scarce. Maybe La Niña is taking hold in the western Pacific. NASA (<http://earthobservatory.nasa.gov/Study/EINinoColor/>) has interesting information on El Niño and La Niña.

Stiliger fuscatus

(Gould, 1870)

Synonyms: *Calliopaea* (?) *fuscata* Gould, 1870

? *S.evelinae* Marcus, 1959

Glen Leiper from the **Jacobs Well Environment Centre** (between Brisbane and the Gold Coast) located these small Sacoglossids opisthobranchs which were "swarming" over the mud in the mangroves in the area yesterday. Glen had never seen them before.

S.fuscatus is a herbivorous relative of nudibranchs(Sacoglossa: Stiligeridae). The body is chocolate brown with scattered pale specks. The undersides of the rhinophores, the foot, the area around th anus (on right just behind the heart), around the eyes and the tips of all the cerata are grey-brown of cream in colour. The rhinophores are sometimes grooved and propodial tentacles are present. The body is robust, opaque and bears numerous inflated cerata down each side. Recorded length is 2-8mm. The front of the head is flattened

Thompson in his 1973 paper made these interesting comments. Page 240: "Many specimens on filamentous algae on a salt marsh near Wynnum, Queensland, May 1968. In extended length they measured alive 2-8 mm. White coils of spawn were common. The specimens lived for some weeks in fully saline water in the laboratory, and continued to spawn profusely. The colour of the animals remained unaltered in the laboratory; even after starvation for up to 10 days at 20 degrees C."

Page 242: "The present material is identical with that recorded as *Stiliger boodleae* Baba, 1938 from Lytton, Queensland, in August 1958 by Kenny (1960) and from other Brisbane River localities by Kenny (1970)."

Daryll Potter from the Queensland Museum's Malacology department also noted the "toughness" of these little creatures when preparing specimens for preservation.

References

Thompson, T.E. 1973. *Sacoglossan Gastropod Molluscs from Eastern Australia. Proceedings of the Malacological Society of London* 40: 239-251.

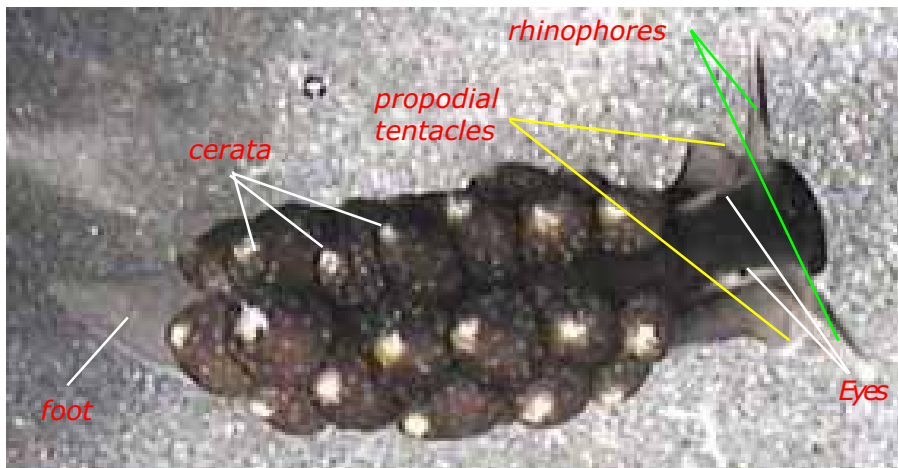
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Willan. R.C. 1999. *pers comm.*

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