

australasian nudibranch NEWS

No.8 April 1999



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Hypselodoris nigrostriata (Eliot, 1904)

This genera is defined by a relatively high body with a narrow overlap along the sides, widening anteriorly. The gills (usually simple, sometimes triangular in section) form a circle, sometimes open posteriorly, around the anus.

H. nigrostriata is one of a group of species of *Hypselodoris* in which the body resembles a nembrothid, with a narrowing of the mantle skirt and a heightening of the body.

This species has dark blackish lines, usually diagonal, and the yellowish patches between. The body colour has a bluish or purplish tinge, the rhinophores are orange red and the gills, triangular in cross-section, are edged with the same colour.

There is some colour differences between animals from the western Indian Ocean and the Western Pacific, with yellow being less pronounced in the Pacific, and many of the black lines on the dorsum being longitudinal.

Further study will indicate whether the Indian and Pacific Ocean colour forms are separate species. The Indonesian Archipelago and into Thailand will need to be studied in more detail.

These specimens were photographed at Cathie's Corner, Milne Bay, New Guinea. Details: 30-50mm long, found at 9m, in May 1985.

Reference:

Rudman, W.B. (1977) *Chromodorid Opisthobranch Mollusca from East Africa and the tropical West Pacific*. *Zoological Journal of the Linnean Society* 61: 351-397.

Rudman, W.B. (1999) *The Sea Slug Forum*
Willan R. and Coleman N. 1984. *Nudibranchs of Australasia*. Sydney: Australian Marine Photographic Index.

Editors Notes

No nudibranch is ever likely to force the closure of marinas, but in Darwin this has happened because of the invasion of a bivalve. For further information visit <http://www.nt.gov.au>.

This month's Nudibranch of the Month on our website is *Doto sp* (see page 3). It is one of the many interesting specimens to be found at Lord Howe Island, off the Eastern Australian coast.

The feedback being received indicates anNEWS is reaching a wide cross section of readers. In the coming months I'm looking forward to including information from South Africa on diving conditions and recent discoveries.

Erwin Kohler's recent trips to the region seem to be generating a lot of interest amongst other "branchers". He is certainly turning out plenty of photographs (see the Sea Slug Forum). Mike Miller is heading to the region shortly. We will all be waiting with interest for his finds. Maybe Mike will send a report on his trip.

What's in a Name

Scientific names at times seem daunting, especially to those of us outside academia. In 1758 Carolus Linnaeus devised a system of classification (*Systema Naturae*) which is still in use today. Common names change from region, country, language, etc. Scientific nomenclature is a worldwide language which remains constant wherever it is used.

Pronunciation can be tricky for the uninitiated, these simple guidelines may assist:

All c's are hard as in card.

Syllables should be pronounced separately, eg ae-o-lid-i-ell-a.

All i's are normally long as in bicycle.

All a's are short as in hat.

Names derived from people's or place names should be pronounced appropriately.

Taking the time to learn the scientific name helps understand more about the species eg:

Doris – a sea nymph in greek mythology.

Discodoris – rounded Doris.

Acanthodoris – Spiny Doris.

Archidoris – ancient or original Doris.

Chromodoris – coloured Doris

Goniodoris – angular shaped Doris

Onchidoris – tuberculate Doris

Diaphorodoris - diaphanous Doris

Gymnodoris – naked Doris

Aeolid – Aeolis, the greek god of the wind.

Dendronotus – dendros (tree) and notus (back).

Tritonia – after Triton, Roman god of the sea

pustulata – pustulose

quadrilineata – four-lined

rubescens – reddish, becoming red

rubra – red

sanguinea – blood-red

Okenia – after Oken, student of Linnaeus

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Fig.1 A pair of *Hypselodoris bennetti* mating



Fig.2 *Hypselodoris obscura*. There is some confusion with this and *H. infucata*.



Fig.3 *Hypselodoris saintvincentius* known only from South Western Australia Photo: © Bill Rudman and used with permission.

Blue Australasian Hypselodoris

Within Australasian waters there are several blue bodied *Hypselodoris*, *H. bennetti*, *H. obscura*, *H. infucata* & *H. saintvincenti*.

Hypselodoris bennetti. (Angas, 1864) (fig.1)

A common temperate water species of eastern Australia growing 60mm. The elongate mantle is a pale blue with blotches of red and a yellow margin (this does not extend to the foot). The rhinophores are pale blue with a magneta stripe on the front or uniformly magneta. The 8 to 10 simple gills are pinkish with magneta stripes. *H. bennetti* seems to be photographed mating more frequently than other species in Australasian waters.

Hypselodoris obscura (Stimpson 1855). (fig.2)

Common from Dampier Archipelago in Western Australia to southern Queensland. The body is a dark ink black/blue with intense small yellow and black spots. The margin has a cream undulating line and on some there is a white mid-dorsal zone. The rhinophores and 8-13 simple gills are dull red (the gills have red streaks on their inner and outer axes). *H. obscura* prefers silty conditions and shallow water. It is reported to feed on a white *Dysidea* sponge (Willan and Coleman 1984). I have observed specimens "feeding" on a pale blue sponge. The photograph in *Sea Slugs of Western Australia*, (Wells & Bryce, 1993 #140) is possibly *H. infucata*. (Gosliner & Johnson 1999).

All the specimens I have found (Sth Qld Australia) have been at extreme low tides.

Hypselodoris infucata (Ruppell & Leuckart, 1828)

A common Indo-Pacific species. The body colour has light & dark patches, not uniform as in *H. obscura* (to which it is closely related).

The photograph in *Sea Slugs of Western Australia*, (Wells & Bryce, 1993 #139) is possibly not *H. infucata* (Gosliner & Johnson 1999).

Hypselodoris saintvincentius (Burn, 1962) (fig.3).

Gosliner & Johnson (1999, p38-40) proposes that #139 in *Sea Slugs of Western Australia*, (Wells & Bryce, 1993) is possibly a undescribed species. Bill Rudman in his November 28, 1998 reply to Akos Lumnitzer, "Colour forms of *H. obscura* mating", identifies the species as *H. saintvincentius* (Burn, 1962).

This species is probably part of a complex including *Hypselodoris obscura* and *Hypselodoris infucata*. May feed on *Dysidea* sponges. Known from South Western Australia (South Australia to Western Australia).

References

Gosliner T.M. and Johnson Rebecca.F. 1999. *Phylogeny of Hypselodoris (Nudibranchia: Chromodorididae) with a review of the monophyletic clade of Indo-Pacific species, including descriptions of twelve new species.* *Zoological Journal of the Linnean Society* (1999) 125: 1 – 114. With 62 figures.

Rudman W.R. 1984. *The Chromodorididae (Opisthobranchia: Mollusca) of the Indo-Pacific: a review of genera.* *Zoological Journal of the Linnean Society* (1984) 81: 115–273. With 102 figures.

Willan R. and Coleman N. 1984. *Nudibranchs of Australasia.* Sydney: Australian Marine Photographic Index.

Coleman N. 1989. *Nudibranchs of the South Pacific.* Queensland, Australia: Sea Australia Resource Centre.

Wells F. & Bryce C. 1993. *Sea Slugs of Westenn Australia.* Perth: Western Australian Museum.

Burn, R.F. (1962) *Notes on a collection of Nudibranchia (Gastropoda: Dorididae and Dendrodorididae) from South Australia with remarks on the species of Basedow and Hedley, 1905.* *Memoirs of the National Museum, Melbourne* (25):149-171, pl. 1.

In Review

Doto sp:

A undescribed species of *Doto* (Dendronotoidea: Dotidae). The dendronotoidea is one of the four suborders of Nudibranchia and it resembles the aeolids in processing cerata. But unlike the aeolids they have tubular sheaths that surround the rhinophores (rhinophoral sheaths), a mid-lateral anus on the right side, with tufts of gills along the sides of the broad mantle. The head usually has an oral veil (velum). If there is a mantle skirt it is small. Size ranges from 1-30cm. They feed on soft corals, anemones or hydroids.

In Fig.1. the hydroid is obscuring the rhinophores, but they have the sheaths surrounding them like all the other dendronotoideans and the cerata are arranged in multiple tiers, which is not (or rather hardly ever) the case in aeolids. Carol Buchanan has slides of what is probably this same new species from Split Solitary Island, Coffs Harbour. Dr Richard Willan thinks this species of *Doto* is closest to, but different from, the new species from Tasmania in Willan & Coleman's, *Nudibranchs of Australasia* (1984: species no.166).

Dr Richard Willan in a recent personal communication made this observation.

"....it's not an aeolid, but it is a wonderful example of convergent evolution within the Nudibranchia. One finds dorids that have tall papillae so they resemble aeolids, dorids that mimic other (toxic) dorids, aeolids that mimic other aeolids, aeolids and dorids that are camouflaged to resemble their food, arminoids that resemble dorids, arminoids that resemble aeolids, and (as here) dendronotoids that resemble aeolids, etc. It goes to show how bewildering nature can be. Understanding these relationships is a challenge of our study".

This species was photographed during the 1987 Lord Howe Island Marine Fauna Survey conducted by Neville Coleman. It was located on a hydroid and had possibly just laid eggs (the white mass above it).

Photographic equipment: Nikonos IV-A with an Aqua-Sea Strobe and 2-1 extension tubes.

References:

Willan & Coleman (1984) *Nudibranchs of Australasia*

Willan R. (1999) *pers comm.*

Nudibranchs of Southern Africa

A Guide to Opisthobranch Molluscs of Southern Africa – Terrence Gosliner. 1987

**Softcover, 136 pages,
200x250mm, (8 x 10 inches)
Photos: 268 Color Photos
Publisher: Sea Challengers, Inc.**

Terry is one of the most prolific Opisthobranch specialists and has researched and identified many Indo-Pacific species.

This is the first monograph on this group of South African molluscs and contains 268 colour photographs, detailed keys, review of biology, evolutionary history, systematics, biogeography, detailed species descriptions and natural histories. It is a useful tool for the better understanding of Opisthobranchs, especially those of the Indo-Pacific Oceans.

The updated species list has been published in *anNEWS* # 3 (November, 1998).

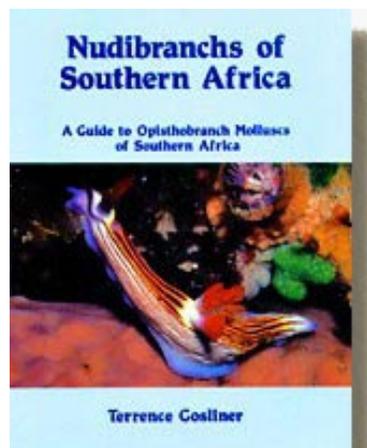


Fig. 1. Doto sp photographed at Lord Howe Island, NSW, Australia.

**Copies of
Neville's Coleman's
"Nudibranch's of the South
Pacific" are available for \$15 Aust
plus postage
[Email for details](#)**

Available from:

USA
Dave and Diana Behrens
[Sea Challengers](#)
35 Versailles Court
Danville CA 94506-4454 USA
Email: seachallengers@earthlink.net
URL: <http://www.seachallengers.com/>

Australia
Check [Patty Jensen's](#) or [Peter Stone's](#) sites.

Europe
Contact [Sea Challengers](#) for details of European distributors.

Feedback

I have a small breeding establishment for marine ornamentals and have for some time been hoping to establish a viable propagation methodology for nudibranchs with commercial potential. The info. in anNEWS has really been helpful in this.

Regards, William. South Africa

I have some photos of Nudibranch in my Underwater Photo Gallery of my Web site, I am a seashell collector but I like to see and take photos of Nudibranch when I am shelling. I have photos of Nudibranchs from Greece but not so good if you like I can sent you by e-mail.

Best regards. George Greece

Have you ever seen those huge Pleurobranchus I've heard about down there? Perhaps you might like to see the slug videos on our lab's webpage (very much under construction)? <http://www.life.uiuc.edu/slucy>

Best, Rhanor Gillette USA

I'm a really beginner in diving (only 38 dives, all of them in the Mediterranean Sea) but I'm really interested in Nudibranchs. On my last dive I was able to find three different kinds of them and decided to start knowing anything about those little fantastic creatures. Looking for information I found your homepage (very useful for me) and your ANEWS. I think it's a great work (with a very good presentation). I also have a homepage about diving but it's in Catalan so I'll wait till I'll be able to translate it into English.

Eduard, Spain

Requests

Are nudi's territorial and does temperature effect them?

I have found on the Aliwal Shoal, the reef we dive, that you will tend to find the same nudi in the same patch of reef and when the water temperature drops, it becomes harder to find them. I was wondering if this was the norm?

We have very diverse diving conditions on the shoal, with the temperature changing from 24 to 15 degrees celcius in a single day. It is due to a sea outfall pipeline from a paper pulping factory. This cold water and bad vis conditions have been destroying the reef and possibly taking out the marine life with it.

Thanks, Dale (braum@iafrica.com) South Africa

I am a student of marine biology in México (Universidad Autónoma de Baja California Sur), and am looking for information about gastropods coralivores, in special about *Quayula madreporarum* species.

This is because I am doing my thesis about this species. Could you help to find some information?

Carlos Solis Bautista (airdrian@bcs1.telmex.net.mx). Mexico

I'm Sazlina and a student from Univercity of Sciences Malaysia and intend on doing a Masters Degree on Nudibranch. At this mean time I'm in the middle of writing my proposal. I intend to do the diversity of Nubibranch in the Johore Islands which is located in the South China Sea. With this I require your help in dealing with the correct taxanomy of the Nudibranch in my study area.

Sazlina Salleh (sazlinas@hotmail.com) Malaysia.

Contacts

Web Sites

[Mike Miller's Slug Site](#)

A great reference site, a must see

[Australian Museum's Sea Slug Forum](#)

Bill Rudman's site

[The Okinawa Slug Site](#)

Another site to visit regularly

[Sherif's Malaysian Slug Site](#)

A site for Malaysian nudibranchs

[New Zealand Nudibranch Site](#)

Ian Skipworth's site

[Steve Long's Opistobranch Site](#)

Don't miss this page, great links.

[Photos by Wayne Ellis](#)

Erwin Kohler provides space for my photos

[Bernard Picton's Nudibranch Site](#)

Great nudibranch information section

[Mediterranean Slug Site](#)

Erwin Kohler's Site

[German Slug Site](#)

Wolfgang Seifarth's site

[Bibliographia Nudibranchia](#)

Gary McDonald's nudibranch database site

Books on the Web

[Capricornica Publication](#)

Patty Jansen's natural history book site

[Sea Challengers](#)

Dave & Diana Behren's marine books site

[Oceans Enterprises](#)

Peter Stone's diving related book site

[Coral Sea Imagery](#)

Books, videos and CD,s relating to the marine environment in Townsville Qld Aust.

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