

australasian nudibranch NEWS 2:4

Feature Creature

Aeolidiella indica
Bergh, 1888



Synonym: *Aeolidiella takanosimensis*
Baba, 1930.

Found in many different locations throughout the world. These specimens were found at Alexander Headland, SEQ under intertidal rocks, probably feeding on hydroids.

A moderately large aeolid at 20 mm, it's body is translucent, suffused with orange especially over the heart. There is a distinctive pattern of large, white, diamond shaped spots mid-dorsally and a white spot on the anterior margin of the head. The cerata have pale orange, green or brown bases with vivid white distal sections. Rhinophores and oral tentacles are smooth.

References: Willan & Coleman., 1984. *Nudibranchs of Australasia*.

Editor's Notes...

Season's Greetings. This is the last issue for 1999 and in keeping with the season I have included a Legend who bears a strong resemblance to the big man himself. I hope the information in this issue is useful to you and look forward to your input and continued readership into the next century.

Feedback

I noticed you are collecting info on sightings, so here are some recent ones of mine. I have included only those that I am sure about, and excluded some I have not been able to identify. Western D'Entrecasteaux Islands, Papua New Guinea, September 1999 Water temperature: 77F Depths mostly very shallow. *Chelidonura varians*, *Chromodoris annae*, *Chromodoris coi*, *Chromodoris elizabethina*, *Jorunna funebris*, *Micromelo undatus*, *Plakobranchus ocellatus*,

Continued on page 16

Legends



Dr Richard Willan, Curator of Molluscs at the Northern Territory Museum of Arts & Sciences showing some of his many talents; diving for molluscs in the marine environment, playing santa claus and acquiring some new furniture for the museum. Richard is the author of many scientific papers and co-authored the land mark Australian book "Nudibranchs of Australasia" with Neville Coleman in 1984. With Julie Marshall he is working on a new book, due out sometime in 2000.

Always helpful and encouraging Richard has provided valuable information and guidance with this newsletter and questions on opisthobranchs.

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Mediterranean Nudibranchs

Flabellina affinis

by Josep M^a Dacosta and Miquel Pontes

The genus name "*Flabellina*" derives from the Latin "*flabellum*" meaning "fan" and it defines a specific gender of nudibranchs that share certain physical characteristics, like having a dorsal fan of appendices called *cerata*. The species name, "*affinis*", means "*similar*" in ancient Latin. So when we talk about *Flabellina affinis* (Fig.1 & 2) we have a nudibranch "*similar to a fan*". These etymological definitions can be found in the glossary of scientific Latin names of Picton and Morrow's book (See review page 16) **NUDIBRANCHS OF THE BRITISH ISLES**, or on the website of the same name at <http://www.pictonb.freeserve.co.uk/nudibranchs/latin.html>.

Flabellina affinis is coloured translucent violet, an attractive colour underwater, which may resemble phosphorescent to divers, and is probably used by the animal as a warning to possible predators. It is widely accepted that the size of this aeolidacean reaches a maximum of 50mm, most of which is the narrow foot.

It has two violet lamellated rhinophores, (Fig.3) with about 15 horizontal rings each, laid perpendicular to the axis of this appendix, something characteristic of this species. The *cerata* are also violet and are distributed in 7 or 8 groups, each attached to a lateral appendix or peduncle, which protrudes from the body. The top third of each *cerata* has a more intense colour than the rest and the red to dark orange digestive gland can be seen inside.

The *Flabellina affinis* can be distinguished from the very similar *Flabellina pedata* (fig.5) by having a smaller number of *cerata*, which end in white tips, become less in number as they progress to the tail, and protrude directly from the body, lacking the base peduncles of the *cerata*, (a characteristic aspect of the *Flabellina affinis*). The rhinophores are flat instead of annulate and the egg masses are white. Violet strings laid by *Flabellina affinis*. (Fig.4) As with other nudibranchs that feed on stinging polyps, the urticant cells or *cnidocysts* are not released when eaten, instead they are transported to a sack located in the medium intestine and from there to the tip of the *cerata*, and are known as "*cleptocnidia*" ("urticant stolen cells"). The *cerata* and their stinging contents are used as an active defence system by the nudibranch. When a predator attacks, one or more *cerata* detach, and release the active urticant cells, often deterring the attacker.

Flabellina affinis is considered common at depths of 5 to 20 meters, in shady areas with moderate hydrodynamism, the appropriate environment for its food: the *Eudendrium* hydrarian colonies. This nudibranch is distributed along the Mediterranean Sea and nearby Atlantic Ocean, being present the whole year round, although it seems more frequent in summer.

The *Flabellina affinis*, together with the *Cratena peregrina* (= *Hervia costai*) and the *Peltodoris atromaculata*, are three nudibranch common species found while diving or snorkelling along the coast of Spanish Costa Brava.

You will find more interesting images at Erwin Köhler's web site for Mediterranean Nudibranchs, Medslugs, at http://www.medslugs.de/E/Mediterranean/Flabellina_affinis.htm



Fig. 1



Fig.2



Fig. 3



Fig. 4



Fig.5

Opisthobranch Feature

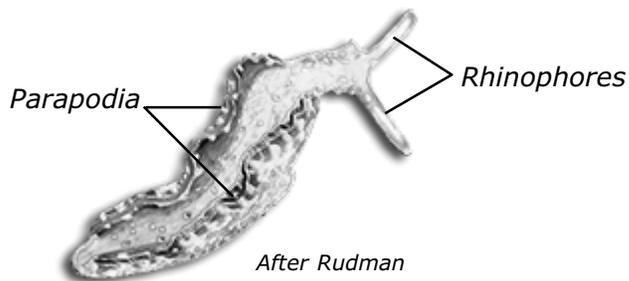
Elysia ornata (Swainson, 1840)

This species is circumtropical, ranging throughout the Indo West-Pacific and the Carribean. It reaches 4cm and are by some, considered rare, although this is probably due to the animals blending in with the green algae on which they live. Behrens, Gosliner & Williams (#546 Coral Reef Animals of the Indo-Pacific) and Jensen (1992) suggest *E. ornata* feeds on the feathery, soft delicately textured *Bryopsis* which grows on rocks or other plants. Debilius suggests (p 165 Nudibranchs & Sea Snails) that these animals are active during the day, feeding and mating. *Pterogasteron marginatus* Pease, 1871 is a synonym. Recent anatomical studies suggest that *Elysia marginata* (Pease, 1871) from the Indo-West Pacific is the same species.

E. ornata is readily identified by the pale green body, black marginal parapodia & submarginal narrow white & broad orange bands along the parapodia. The tip of the rhinophores often have the same colour bands. There are also numerous black and white dots all over the body. Typical of the genus rudimentary eyes are located behind the rhinophores.

Elysiidae is the largest family of sacoglossans (sap sucking slugs). Elysiids have lost their shell & the foot is narrow and the parapodia is large, leaf like and wraps along the side of the body or forms tall wings.

These photographs was taken on the 5/9/1999 in 10m of water at Flinders Reef, Moreton Island, South East Queensland by **tim murrell**.

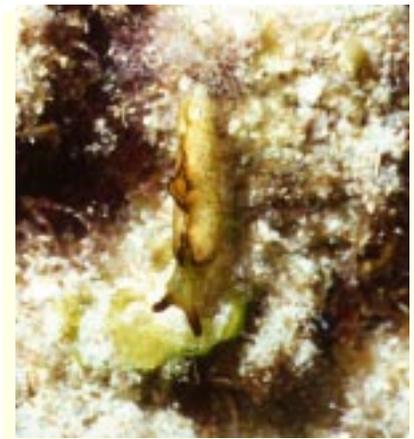


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- Debilius., 1996 1998. Nudibranchs and Sea Slugs
Davie & Assorted Authors., 1998. Wild Guide to Moreton Bay
Wells & Bryce., 1993. Sea Slugs of West Australia
Assorted Authors., 1998. Mollusca. A Southern Synthesis.
Gosliner, Behrens & Williams. 1996. Coral Reef Animals of the Indo-Pacific
Fuhrer, Christianson & Allender., 1981. Seaweeds of Australia
Rudman. W. B. 1999 (Nov 4) *Elysia ornata* (Swainson, 1840) [In] Sea Slug Forum. <http://www.austmus.gov.au/seaslugs/elysorna.htm>

Further Reading

- Carlson, C.H. and Hoff, P.J. 1978. The identifiable *Elysia* from Guam (*Elysiidae*, *Sacoglossa*, *Opisthobranchia*). *Micronesica* 14 ; 89-113
Jensen, K.R. 1992 Anatomy of some Indo-Pacific *Elysiidae* (*Opisthobranchia*: *Sacoglossa* (= *Ascoglossa*), with a discussion of the generic division and phylogeny. *Journal of Molluscan Studies*, 58(3):257-296.



Images ©1999 tim murrell



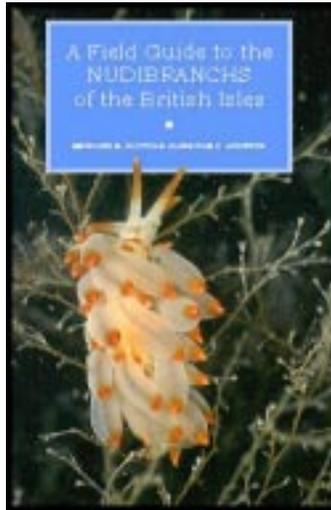
Flinders Reef supports the richest fish and marine invertebrate life in southern Queensland. This small, isolated reef has the highest number of coral species of any sub-tropical or temperate reef along Australia's east coast. The reef is protected and designated a Protection Zone under the **Moreton Bay Marine Park**.

Dave Behren's Book Review

A Field Guide to the Nudibranchs of the British Isles.

1994. Bernard E. Picton and Christine C. Morrow

A Field Guide to the Nudibranchs of the British Isles is more than the regional nudibranch guide book, the title implies. Picton and Morrow have compiled a comprehensive and authoritative text describing all aspects of nudibranch biology and taxonomy. The authors take additional steps presenting you the resources to make you a successful collector and observer, armed with photographic techniques and helpful guidance, including all the technical terminology used in discussing this group of mollusc and their Latin scientific names.



The book is written for the diver, underwater photographer and biologist alike. The species description section presents each of the 112 species with a superb, large, colourful and diagnostic photo, supplemented with rich text carefully describing those taxonomic characters (colour, body morphology and anatomy) most useful in the species identification, its size, preferred food (when known) and its documented distribution. As if the fine photography and comprehensive text is not enough "Key Characteristics" are highlighted at the end of each species description for rapid identification.

No species known to the British Isles is excluded. In the few rare cases where a high quality photo was not available, the text is supplemented by diagnostic drawings attained from early scientific works. Picton and Morrow have overlooked nothing.

Published by Immel Publishing, London. Softbound, 143 pages, 6 x 9 inch format, over 112 colour photos.

Item: # 109PM this book is available from Sea Challengers Natural History Books, Etc. for \$32.00US, plus shipping.



Continued from page 13

Risbecia tryoni

Barkley Sound, British Columbia, Canada, November 1999

Water temperature: 47F

Dendronotus iris - at least seven, at Chup Point, near Rainy Bay, 30-50 feet Lots of *Pachycerianthus fimbriatus* (burrowing anemone) to eat About half/half white/orange, all large (3-5 inches)

Dirona albolineata - Nettle Island *Dirona aurantia* - Mahk Rock *Triopha catalinae* - Also at Chup Point

Ray Izumi, izumirm@sprynet.com

Have just read your Australasian Nudibranch Newsletter, my goodness, didn't know that such a wealth of information and pictures exists, fantastic job! This will certainly help me a lot with identification of my various pictures with - at least until recently - unknown critters....

Rainer Mau rainer.mau@hanse-net.de



**35 Versailles Court
Danville, CA 94506 USA
Ph. 925-327-7750
Fax. 925-736-8982
dave@seachallengers.com
www.seachallengers.com**



Dave & Diana Behren's own and operate Sea Challengers providing informed friendly service world-wide.

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