6

www.biodiversityjournal.com

ISSN 2039-0394 (Print Edition) ISSN 2039-0408 (Online Edition)

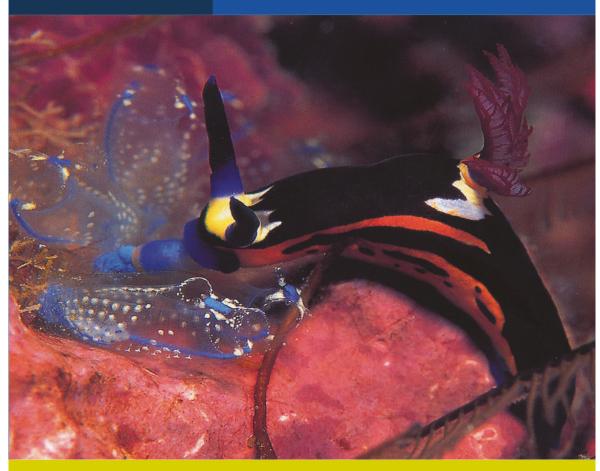
with the support of



Biodiversity Journal

MARCH 2012, 3(1): 1-96

FOR NATURALISTIC RESEARCH AND ENVIRONMENTAL STUDIES



Nembrotha megalocera Yonow, 1990 - Red Sea

BIODIVERSITY JOURNAL 2012, 3 (1): 1-96.

Quaternly scientific journal edited by Edizioni Danaus, via V. Di Marco 41, 90143 Palermo, Italy www.biodiversityjournal.com biodiversityjournal@gmail.com

Official authorization no. 40 (28.12.2010)

ISSN 2039-0394 (Print Edition) ISSN 2039-0408 (Online Edition)

EDITORIAL STAFF

Managing Editor Ignazio Sparacio - Palermo, Italy

Chief Editor Maria Stella Colomba University of Urbino "Carlo Bo", Italy

Secretary Fabio Liberto - Cefalù, Italy

Assistant Editors
Michele Bellavista - Palermo, Italy
Salvatore Giglio - Cefalù, Italy
Armando Gregorini
University of Urbino "Carlo Bo", Italy
Tommaso La Mantia - University of Palermo, Italy
Nunzia Oliva - Palermo, Italy
Agatino Reitano - Catania, Italy





upper: Nembrotha guttata (orange spots) with the only Indian Ocean locality record of N. cristata (green spots), Maaya Tila, Ari Atoll, 6-8 m depth, March 1994 (photo H. Voigtmann); lower: N. kubaryana, Tulamben, Bali, Indonesia, July 2010 (photo K. Lee). Cover: N. megalocera, Red Sea (photo H. Sjøholm).

SCIENTIFIC COMMITTEE

Vittorio Aliquò - Palermo, Italy

Marco Arculeo - University of Palermo, Italy

Alberto Ballerio - Brescia, Italy

Maurizio Bombace - GMS Palermo, Italy

Attilio Carapezza - Palermo, Italy

Renato Chemello - University of Palermo, Italy

Alan Deidun - University of Malta, Msida, Malta

Gianniantonio Domina - University of Palermo, Italy

Gerhard Falkner - Deutsche Malakozoologische Gesellschaft, Germany

Ren Hirayama - Waseda University, Shinjuku-ku, Tokyo, Japan

Pietro Lo Cascio - Associazione "Nesos", Lipari, Italy

Nathalie Yonow - Swansea University, Swansea, Wales, U.K.

Federico Marrone - University of Palermo, Italy

Bruno Massa - University of Palermo, Italy

Pietro Mazzola - University of Palermo, Italy

Alessandro Minelli - University of Padova, Italy

Marco Oliverio - University of Roma, Italy

Roberto A. Pantaleoni - CNR National Research Council, Sassari, Italy

Salvatore Pasta - Palermo, Italy

Roberto Poggi - Museo civico di Storia naturale "G. Doria", Genova, Italy

Francesco Maria Raimondo - University of Palermo, Italy

Marcello Romano - Capaci, Italy

Giorgio Sabella - University of Catania, Italy

Danilo Scuderi - Catania, Italy

Giuseppe Fabrizio Turrisi - University of Catania, Italy

Errol Véla - Université Montpellier, France

The genus Nembrotha (Bergh, 1877). The genus Nembrotha is widely distributed throughout the tropical Indo-West Pacific, characterised by bright colours and patterns. It belongs to the family Polyceridae, which are nudibranchs with a reduced mantle margin, the presence of a frontal veil or ridge, and a group of gills located forward or at the mid-dorsal point and have no pocket within which to retract. The rhinophores are lamellate, sometimes a contrasting colour to the body, and issue from a pocket with a raised rim which may be coloured. Many have large obvious oral tentacles, often in a contrasting colour. With a long 'tail' many species can swim using lateral flexions of the body. Species of Nembrotha appear to feed on ascidians: their radular teeth, a good diagnostic character for most other species and genera, are not very helpful in identification of species in this genus. The ribbon is narrow, with a broad central tooth, a large hooked lateral tooth on each side, and a short series of small outer lateral plates on each side. N. megalocera Yonow, 1990 is a species endemic to the Red Sea, and feeds on the violet ascidian Diazona. It is known to swim, but mating and spawning have not been recorded. It has similarly coloured sibling species in the Indian and Pacific oceans which never occur in the Red Sea; equally, N. megalocera has not been recorded outside the Red Sea, even in the Gulfs of Aden or Oman, which support a few Red Sea endemics. This is fairly typical of species of Nembrotha, some species having a very limited distribution and no external variation, whilst others have a large range and vary in colour and pattern. Another species with a very limited range is N. guttata Yonow, 1994, which is only found in one Indian Ocean island group, the Maldives archipelago. It belongs to a small group of black species which have coloured pustules, interesting because most species are linearly patterned. In this species the pustules are orange, with those around the frontal margin and on the head edged in green. Nembrotha cristata Bergh, 1877 is a Pacific species known only from the Maldives in the Indian Ocean, and has green pustules, green gills, and green rhinophore sheaths and tentacles. A third species in this colour group is N. kubaryana Bergh, 1877, found in both the Indian and Pacific oceans.

Nathalie Yonow. Conservation Ecology Research Team, Department of Biosciences, College of Science, Swansea University, Singleton Park, Swansea SA2 8PP, Wales, U.K.; email: n.yonow@swansea.ac.uk