



ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

OPEN ACCESS



Discodorididae is one of the most diverse families under Nudibranchia with a total of 305 species distributed among 32 genera from around the world (Bouchet 2015). Discodorids are generally distributed in the coastal waters of the tropical regions particularly in reef environments. The genus *Halgerda* is represented by 35 species from around the world (Bouchet & Gofas 2015) of which, India accounts for only five species (14.2%) viz.: *H. bacalusia* Fahey & Gosliner, 1999, *H. stricklandi* Fahey & Gosliner, 1999, *H. tessellata* (Bergh, 1880), *H. formosa* Bergh, 1880 and *H. punctata* Farran, 1902 (Prasade et al. 2012). Among these, the former three are known from the Andaman and Nicobar Islands (Ramakrishna et al. 2010; Sreeraj et al. 2010) while the latter two have been reported from the Tamil Nadu coast (O'donoghue 1932). *H. tessellata* has been reported from the Lakshadweep Islands by Apte (2009). Recent marine faunal surveys in Havelock Island of Ritchie's Archipelago revealed the presence of *Halgerda dalanghita* Fahey & Gosliner, 1999, which is herein reported as a new distribution record to India.

Marine faunal surveys were conducted by snorkelling and skin diving in the sub-tidal regions and photographs were taken using a Sea & Sea DX-1G digital camera. The reported species was accidentally spotted during one of the sub-tidal surveys in Havelock Island of Ritchie's Archipelago. The specimen was collected and preserved in 10% formaldehyde. All possible external taxonomic features were noted and data with respect to habit and habitat were collected. The specimen was confirmed to be *H. dalanghita* after thorough comparison with

HALGERDA DALANGHITA FAHEY & GOSLINER, 1999 (GASTROPODA: NUDIBRANCHIA: DISCODORIDIDAE) - A NEW RECORD FOR INDIA FROM THE ANDAMAN ISLANDS

Titus Immanuel¹, M.P. Goutham-Bharathi² & R. Kiruba-Sankar³

^{1,2,3}Marine Research Laboratory, Division of Fisheries Science, ICAR-Central Inland Agricultural Research Institute, Post Box No. 181, Garacharma (Post), Port Blair, 744 101, Andaman and Nicobar Islands, India

¹titusimmanuel@yahoo.co.in (corresponding author), ²gouthamrussia@gmail.com, ³rkirubasankar@gmail.com

the distinguishing characters described of the holotype in Fahey & Gosliner (1999). The specimen has been deposited in the National Zoological Collection of Andaman & Nicobar Regional Centre, Zoological Survey of India, Port Blair.

***Halgerda dalanghita* Fahey & Gosliner, 1999 (Image 1)**

Phylum: Mollusca
Class: Gastropoda
Order: Nudibranchia
Family: Discodorididae
Genus: *Halgerda* Bergh, 1880
Halgerda dalanghita Fahey & Gosliner, 1999
Specimen examined: ZSI/ANRC/12568, 23.i.2014, Single specimen measuring 2.4×1.5 cm, Havelock Island, Ritchie's Archipelago, South Andaman, 12°02'30"N & 92°58'47"E, depth 2m, coll. Titus Immanuel and M.P. Goutham-Bharathi.

DOI: <http://dx.doi.org/10.11609/jott.2288.8.3.8626-8628> | **ZooBank:** <urn:lsid:zoobank.org:pub:37E46070-D77A-462E-9E53-9475D0517B7F>

Editor: M. Nithyanandan, Environmental Department, La Ala Al Kuwait Real Estate. Co. K.S.C., Kuwait. **Date of publication:** 26 March 2016 (online & print)

Manuscript details: Ms # 2288 | Received 10 September 2015 | Final received 22 February 2016 | Finally accepted 02 March 2016

Citation: Immanuel, T., M.P. Goutham-Bharathi & R. Kiruba-Sankar (2016). *Halgerda dalanghita* Fahey & Gosliner, 1999 (Gastropoda: Nudibranchia: Discodorididae) - a new record for India from the Andaman Islands. *Journal of Threatened Taxa* 8(3): 8626–8628; <http://dx.doi.org/10.11609/jott.2288.8.3.8626-8628>

Copyright: © Immanuel et al. 2016. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use of this article in any medium, reproduction and distribution by providing adequate credit to the authors and the source of publication.

Funding: Centre for Marine Living Resources and Ecology (Ministry of Earth Sciences).

Conflict of Interest: The authors declare no competing interests.

Acknowledgments: The authors would like to acknowledge The Director, CIARI for the facilities provided. The financial support provided by the Earth System Science Organization (ESSO), Ministry of Earth Sciences Government of India to conduct this research is also gratefully acknowledged.



Halgerda dalanghita Fahey & Gosliner, 1999 is bright orange in colour (Image 1A) and aptly named after a tropical fruit found in the Philippines. The specimen was 2.4 cm long and 1.5 cm wide when crawling at full stretch. The mantle was firm and quite rigid, typical of most *Halgerda* sp. The body felt rough to touch on the dorsal surface and smooth on the ventral surface. The body profile was relatively high and the dorsum had a network of angular ridges that are ornate with short white stripes, which are frequently alternated by white dots. Points where the ridges meet are raised to form small, relatively blunt monticles. Brown dots outline the edge of the mantle and the ridges, especially concentrated on top of the monticles. The ridge running dorso-ventrally, down the centre of the mantle has the tallest monticles. The underside of the mantle and upper surface of the foot are ornate with dark brown spots (Image 1B).

The prominently stalked rhinophores are lamellate and seen tapering towards the tip. The lamellae are brown in colour with the tip and base of the lamellate region being white. The stalk is predominantly translucent white with two brown blotches at the posterior side of the base (Image 1C). There are a total of eight branchial leaves that are highly pinnate. The gills have black lines on the underside of the branches and the branches are light brown in colour with white pinnate structures. The gills are arranged around the anal papilla that is orange in colour.

Habitat: The specimen was found underneath coral rubbles at a depth of 2m. The area had a muddy bottom and was close to a small patch of mangroves.

Distribution: Natal, South Africa, Papua New Guinea and Philippines (Fahey & Gosliner 1999).

Recent interest in nudibranch biodiversity of the Andaman and Nicobar Islands has led to several new

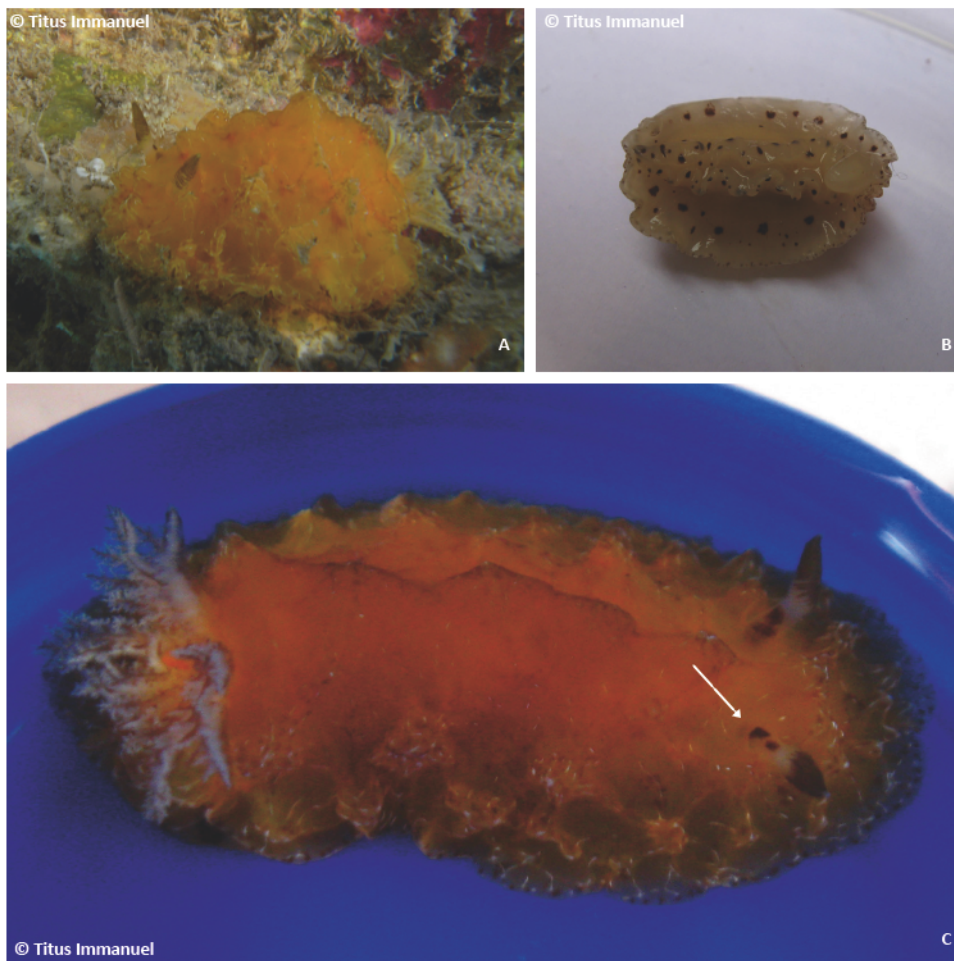


Image 1. *Halgerda dalanghita* Fahey & Gosliner, 1999 from Andaman Islands (ZSI/ANRC/12568).

A - In-situ (2m depth); B - Ventral view showing both foot and underside of mantle ornate with dark brown spots; C - Dorsal view showing a prominent median ridge, extended highly pinnate gills and rhinophoral stalks with two brown blotches (indicated by the arrow).

distribution records in the past decade (Ramakrishna et al. 2010; Sreeraj et al. 2010), bringing to light the rich biodiversity of this scarcely studied group of molluscs. A total of five species of the genus *Halgerda* have been recorded from India so far of which *H. bacalusia*, *H. stricklandi*, *H. tessellata* are known from the Andaman Islands (Ramakrishna et al. 2010; Sreeraj et al. 2010). The present record extends the known geographical distribution of *H. dalanghita* and this is only the sixth species representing the genus *Halgerda* in India. Intensive surveys in the coral reef environments of the Islands may certainly increase India's contribution to the discodorid diversity.

References

- Apte, D.A. (2009).** Opisthobranch fauna of Lakshadweep Islands, India with 52 new records to Lakshadweep and 40 new records to India. *Journal of the Bombay Natural History Society* 106(2): 162–175.
- Bouchet, P. (2015).** Discodorididae Bergh, 1891. In: MolluscaBase (2015). World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=1761>. Accessed on 25 June 2015.
- Bouchet, P. & S. Gofas (2015).** Halgerda. In: MolluscaBase (2015). World Register of Marine Species at <http://www.marinespecies.org/aphia.php?p=taxdetails&id=205320>. Accessed on 26 June 2015.
- Fahey, S.J. & T.M. Gosliner (1999).** Descriptions of three new species of *Halgerda* from the Western Indian Ocean with a redescription of *Halgerda formosa* Bergh 1880. *Proceedings of the California Academy of Sciences* 51(8): 365–383.
- O'donoghue, C.H. (1932).** Notes on Nudibranchiata from southern India. *Proceedings of the Malacological Society of London* 20:141–166.
- Prasade, A., V. Bhave, D. Apte & P. Kale (2012).** A review of discodorid opisthobranch molluscs along Indian coasts. Proceedings of the National Seminar on Biodiversity and conservation of coastal and marine ecosystems of India, 74–79pp.
- Ramakrishna, C.R. Sreeraj, C. Raghunathan, C. Sivaperuman, J.S. Yogesh-Kumar, R. Raghuraman, T. Immanuel & P.T. Rajan (2010).** *Guide to Opisthobranchs of Andaman and Nicobar Islands*. Zoological Survey of India, 196pp.
- Sreeraj, C.R., P.T. Rajan, R. Raghuraman, C. Raghunathan, R. Rajkumar, T. Immanuel & Ramakrishna (2010).** On some new records of sea slugs (Class: Gastropoda, Subclass: Opisthobranchia) from Andaman and Nicobar Islands, pp 289–298. In: Raghunathan, C., C. Sivaperuman & Ramakrishna (eds.). *Recent Trends in Biodiversity of Andaman and Nicobar Islands*. Zoological Survey of India, Kolkata.

