

First Report of Dendrophylliid coral *Rhizopsammia verrilli* from Andaman & Nicobar Islands

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Short Communication

Abstract

Reefs of Andaman & Nicobar Islands are formed by highly diverse hermatypic scleractinian corals and a few numbers of ahermatypic corals. The present study reports presence of *Rhizopsammia verrilli* van der Horst, 1922 under the genus *Rhizopsammia Verrill*, 1870 as a new record to Indian fauna, identified from Andaman & Nicobar Islands. The taxonomic description of newly reported azooxanthallate coral with its distribution is given in detail.

Keywords: ahermatypic coral, *Rhizopsammia*, new record, Andaman & Nicobar Islands.

Introduction

Scleractinian corals are one of the most widely distributed anthozoans which support several coral associated faunal communities in Andaman & Nicobar Islands. The reefs of Andaman & Nicobar Islands harbor 17 families of scleractinian corals out of the 18 families reported worldwide. The family Dendrophylliidae can be found throughout the world in horizontal (except Antarctica) as well as vertical distribution from intertidal to the maximum depth of 2165 m (Cairns, 2001). According to the Holocene species richness, Dendrophylliidae takes a position of third among all the coral families and fourth according to the Holocene genus richness

(Cairns, 1997). Among all the species of this family, 91% species were encountered as azooxanthallate (Cairns, 1999). The genus *Rhizopsammia Verrill*, 1870 bears most elementary level of corallites organization along with another genus *Eguchipsammia*, under the family Dendrophylliidae (Cairns, 1994). This paper deal with the characteristic features of a newly recorded ahermatypic coral i.e. *Rhizopsammia verrilli* van der Horst, 1922 in Indian water from Andaman & Nicobar Islands.

Material and methods

An underwater survey for corals was conducted at various sites in Ritchie's Archipelago during November, 2011 by employing Self Contained Underwater Breathing Apparatus (SCUBA) diving and snorkeling up to a maximum depth of 41m. The specimen was sampled to examine detailed morphological characters for taxonomic study. The collected specimen was kept in fresh-water for few days and washed thoroughly in running water and dried. Identification was made in conjunction with Cairns (1991). Corallites of the specimen were examined in detail to study the morphological features under stereo microscope (Leica, M 205 A). On completion of detailed structural study, the specimens were registered in National Zoological Collection of India and deposited at Zoological Survey of India, ANRC, Port Blair.

Results

Taxonomic description of the newly recorded azooxanthallate scleractinian coral is given below.

Order: Scleractinia Bourne, 1900

Suborder: Dendrophylliina Vaughan and Wells, 1943

Family: Dendrophylliidae Gray, 1847

Genus: *Rhizopsammia* Verrill, 1870

Rhizopsammia verrilli van der Horst, 1922, Fig.1-2

Material examined: Twenty four colonies were observed at Wall (Lat. 12°03.313' N & Long. 092°57.730' E) of Havelock

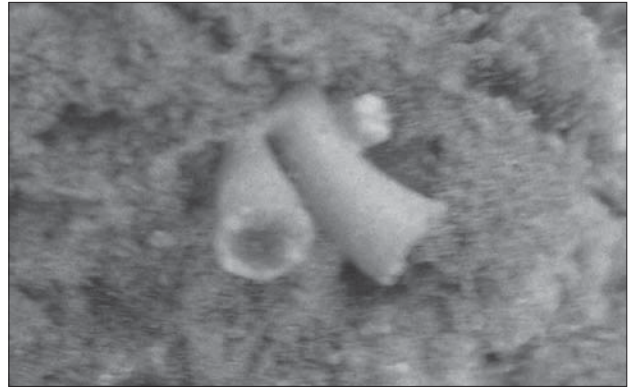


Fig. 1. Colony of *Rhizopsammia verrilli* van der Horst, 1922

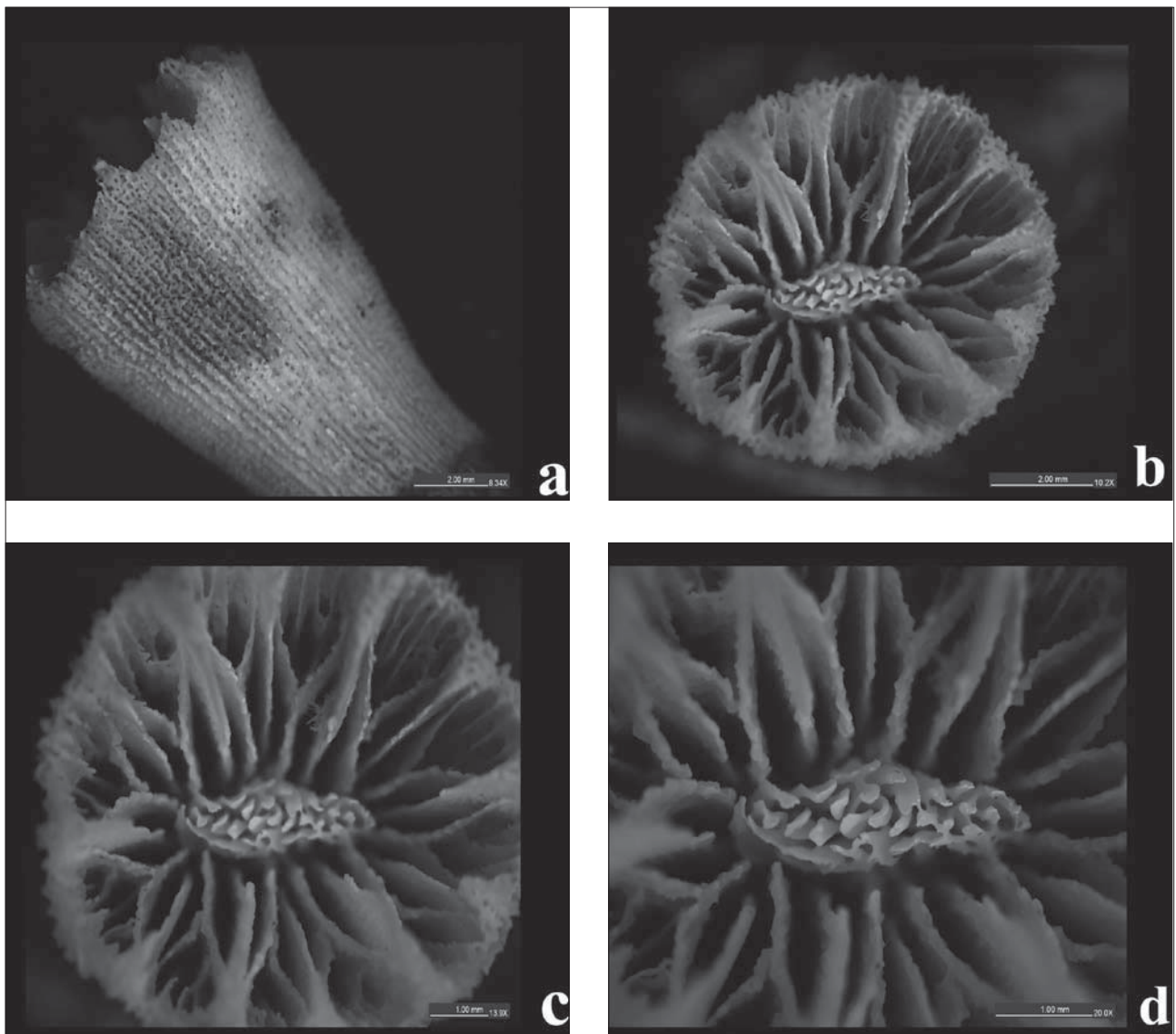


Fig. 2 *Rhizopsammia verrilli* van der Horst, 1922

a. Corallite with stolon; b. Polar view of corallites; c. Septal arrangement; d. Columellae

Island, Ritchie's Archipelago on 15.11.2011 at depths of 12 to 32 m. A portion of the colony was sampled for detailed taxonomic study (Reg. No.: ZSI/ANRC-7050).

Description: Corallites are ceratoid to cylindrical in structure. Corallites are mostly well separated from one another or interconnected by cylindrical costate stolons. The diameter of the stolons ranges from 2.5-3.5 mm and 3 or 4 such stolons were found to originate from the base of each corallite. All the costae are equal in width and coarsely granulated. The region of intercostae is porous and almost as wide as costae. Septa are hexametrical in arrangement in five complete cycles. There are 72 septa in a corallite. The first order septa are large and solid, with straight inner edges that project well into fossa and reach columella. The second order septa are much smaller, but also reach columella lower in fossa. Higher cycle septa arranged according to an exaggerated Pourtales Plan, their inner edges dentate to lacinate. Septal faces covered by low pointed granules. Fossa is moderately deep. Columella is elongate with spongy mass.

Distribution: India: Havelock Island of Andaman & Nicobar Islands; Global: Galapagos: off Santiago, Floreana, Marchena, Wolf, Cocos Island, off Timor and Indonesia.

Discussion

On the basis of Indian Scleractinian Coral's database, it is observed that most of the works dealt with hermatypic corals are to investigate the species composition, diversity, distribution and effects of climatic as well as anthropogenic factors upon them. The constraint to work on azooxanthallate might be due to vertical distribution of these organisms at greater depth. Ramakrishna *et al.* (2010) listed 8 species of Dendrophylliids in the checklist of Scleractinian corals from A & N Islands. Report of *Rhizopsammia verrilli* van der Horst, 1922 was made for the first time in Indian waters from Andaman & Nicobar Islands is a new record of species under Dendrophylliidae. The inclusion of this new record from India will widen the distributional range of Scleractinian corals.

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