



New species and new records in *Roccellaceae* (*Arthoniales*) from the Andaman Islands, India

T. A. M. JAGADEESH RAM

T. A. M. Jagadeesh Ram: Botanical Survey of India, Andaman and Nicobar Regional Centre, Port Blair – 744102, Andaman and Nicobar Islands, India.

E-mail: tamjagadeesh@yahoo.co.in

Abstract

Four new species in *Roccellaceae*: *Bactrospora littoralis*, *B. medians*, *Chiodecton andamanicum* and *Sagenidiopsis atroalba* are described from the Andaman Islands, India. *Bactrospora littoralis* has acicular, 7-septate *Patellarioides*-type ascospores whereas *B. medians* has biclavate, 15–24-septate, *Homalotropa*-type ascospores. *Chiodecton andamanicum* has much small ascomata, thin, hyaline to pale brown hypothecium and 4–5-septate ascospores. *Sagenidiopsis atroalba* has a byssoid thallus with white prothallus, dark brown to blackish hypothallus and smaller ascomata, asci and ascospores. *Bactrospora carolinensis* (Ellis & Everh.) R.C. Harris, *Opegrapha apomelana* A. Massal., *O. dekeselii* Ertz, *O. irosina* Vain. and *O. robusta* Vain. are reported as new records for India.

Key words: Lichenized fungi, *Ascomycota*, *Arthoniomycetes*, taxonomy, tropical lichens

Introduction

The Andaman group of Islands consists of more than 325 islands with an area of 6,408 sq km stretching out more or less in north-south direction in the Bay of Bengal lies between 10°30' and 13°41' N and 92° 11' and 93° 07' E at a distance of about 1126 km from the east coast of mainland India. The major groups of islands are the North Andamans, Middle Andamans, South Andamans and Little Andaman. The topography is generally hilly and undulating. The main hill range runs from north to south and the Saddle Peak (732 m) in North Andaman is the highest point in these islands (Thothathri 1960, Dagar & Singh 1999).

Floristically the region is rich and including the Nicobar group of Islands possesses 2428 species of Angiosperms, 8 species of Gymnosperms, 142 species of Pteridophytes and 76 species of Bryophytes (Pandey & Diwakar 2008). Nylander (1873) initiated lichenological studies from the Andaman Islands and reported 63 species including 42 new species based on the collections of S. Kurz, then Superintendent, Indian (Royal) Botanic Garden, Kolkata (Calcutta) during 1867. Since then, over 350 species were added from the region. Recently, Singh & Sinha (2010) included 363 species of lichens in 82 genera and 30 families from the Andaman Islands in the '*Indian Lichens: An annotated checklist*'. The family *Roccellaceae* is represented by 19 species in *Bactrospora* (1 sp.), *Cresponea* (1 sp.), *Lecanactis* (1 sp.), *Mazosia* (5 spp.), *Minksia* (1 sp.), *Opegrapha* (8 spp.), *Pulvinodecton* (1 sp.) and *Sclerophyton* (1 sp.).

During the on-going course of floristic investigation on the lichens of the Andaman Islands, the author has made collections extensively from the large as well as the small, unexplored Islands and reserve forests. While studying the family *Roccellaceae*, four new species: *Bactrospora littoralis*, *B. medians*, *Chiodecton andamanicum* and *Sagenidiopsis atroalba* have been discovered. Besides, *Bactrospora carolinensis* (Ellis & Everh.) R.C. Harris, *Opegrapha apomelana* A. Massal., *O. dekeselii* Ertz, *O. irosina* Vain. and *O. robusta* Vain. have also been identified as new records for India. All the new species are described in detail and short notes on the new records are provided.

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