



New records of *Copidognathus* mites (Acari: Halacaridae) from mangroves in Brunei Darussalam with descriptions of two new species

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Abstract

Three species of the genus *Copidognathus* were collected from the algal cover of mangrove pneumatophores in Brunei Darussalam. Two of the species are new and are described as *Copidognathus mangrovorum* and *C. bruneiensis*. *C. rhombognathoideus* Bartsch is reported for the first time from Brunei Darussalam.

Key words: Taxonomy, estuarine halacarids, mangrove, *Copidognathus*, Brunei, new records

Introduction

The genus *Copidognathus* is known from diverse marine, brackish and freshwater habitats. A few parasitic forms are also known. This genus is also associated with mangrove epibionts. *Copidognathus paluster* Bartsch, 1991 was reported from *Cladophora* algae on mangrove flats in Hong Kong (Bartsch 1991). *Copidognathus caloglossae* Procheş, 2002 was reported associated with the algal complex, 'Bostrychietum', covering the pneumatophores of the mangrove tree *Avicennia marina* at Richards Bay, Isipingo and Beachwood mangrove forests in KwaZulu-Natal, South Africa, and at Inhambane, Mozambique (Procheş *et al.* 2001; Procheş 2002; Procheş & Marshall 2002). *C. lutarius* Bartsch, 2003 and *C. piger* Bartsch, 2003 were reported among the turf of *Avicennia marina* on the east coast of the Burrup Peninsula, Dampier, Western Australia (Bartsch 2003). Bartsch (2006a) further described *C. rhombognathoideus* Bartsch, 2006 from algae on sediments, pneumatophores and stems of mangroves in Singapore. Halacarid mites belonging to the genera *Acarothrix*, *Agauopsis*, *Isobactrus*, *Rhombognathus* have also been reported associated with mangroves (Bartsch 1997, 2003, 2005, 2006a, b; Procheş *et al.* 2001; Procheş 2002; Procheş & Marshall 2002). In the present paper *Copidognathus mangrovorum* sp. nov., *C. bruneiensis* sp. nov. and *C. rhombognathoideus* Bartsch, 2006 were collected from algae in a mangrove area in Brunei Darussalam. This is the first report of *Copidognathus* mites from Brunei Darussalam.

Material and methods

The material examined in the present study was collected from algal turf associated with mangroves in Brunei Darussalam (Fig. 1). Halacarids were cleared in lactic acid and mounted in glycerine jelly. Some specimens were preserved in ethanol after examination. Drawings were prepared using a camera lucida. The positions of setae and gland pores on dorsal plates are given in a decimal system, with reference to the length of a plate, from the anterior to the posterior margin. Detail measurements are taken from one male and one female specimen for new species. Type specimens will be deposited in the museum of Montenegro, Podgorica, Montenegro. The following abbreviations are used in the text and figure legends: AD, anterior dorsal plate; AE, anterior epimeral plate; ds₁₋₆, dorsal setae 1–6 on idiosoma; Epimeral process I, EPI; GA, genitoanal plate; GO, genital opening; OC, ocular plate(s);