

Article



A new species of the genus *Lepidocyrtus* Bourlet and a new record of *Seira* delamarei Jacquemart (Collembola: Entomobryidae) from the east coast of India

FENG ZHANG^{1,3}, TAPAS CHATTERJEE² & JIAN-XIU CHEN¹

¹School of Life Science, Nanjing University, Nanjing, P. R. China. E-mail: xtmtd.zf@gmail.com

² Deaprtment of Biology, Indian School of Learning, I.S.M Annexe, P.O.-ISM, Dhanbad-826004, Jharkhand, India.

E-mail: drtchatterjee@yahoo.co.in

³Corresponding author

Abstract

A new species, *Lepidocyrtus* (*Lanocyrtus*) absens **sp. nov.**, and a new record, *Seira delamarei* Jacquemart, 1980, both from intertidal zone of the east coast of India are described. The complete dorsal chaetotaxy on each tergite, including Schaetae and microchaetae, is exhaustedly explored in *L. absens* sp. nov.; s-chaetae d1 and d2 on lateral Abd. III and median sensillum on Abd. V, setae Ll and im on Abd. III, and setae C1p, pe and s on Abd. IV are absent. The ciliate basal seta and 2 sublobal hairs on maxillary outer lobe, vestigial seta r and ciliate setae a1–5 on labium, and elongate median inner tooth on unguis are also diagnostic features of the new species. The tropical species *S. delamarei* is recorded for the second time from Asia besides Thailand.

Key words: Collembola, taxonomy, chaetotaxy, India

Introduction

As one of the largest and most widespread genus in Collembola, *Lepidocyrtus sensu lato* is characterized by 4-segmented antennae, 8+8 eyes, bidentate mucro, and apically rounded and finely striated scales on body and ventral side of furcula. The validity of subgenera diagnostic characters proposed by Yosii (1959a), Yoshii (1982), Yoshii and Suhardjono (1989) are still under discussion (Christiansen & Bellinger 1991, Soto-Adames 2000).

The s-chaetae (setulae) of lepidocyrtiform were firstly explored in *Pseudosinella alba* (Packard) and *Lepidocyrtus curvicollis* Bourlet by Szeptycki (1979), while more records of incomplete s-chaetae were found in previous literature. The complete s-chaetae of Th. II–Abd. V, particularly Abd. IV, are provided in the present study for the first time.

The genus *Seira*, predominantly an African and tropical American genus (Christiansen & Bellinger 2000), bears 4-segmented antennae, 8+8 eyes, falcate mucro, coarsely striated scales on body and dental side of furcula, and absence of dental spines. Yosii (1959b), Coates (1968), Jacquemart (1974, 1976, 1980), Yoshii & Suhardjono (1992), Christiansen and Bellinger (2000), and Soto-Adames (2008) made significant contributions to the taxonomy of *Seira*.

So far, 12 *Lepidocyrtus s. l.* and about 12 (status of several species unclear) *Seira* species have been reported from India. Three of them belong to *Lepidocyrtus* (*Lanocyrtus*), 6 *L.* (*Lepidocyrtus*), and 3 *L.* (*Ascocyrtus*); most lack detailed information. In the present paper, a new species, *Lepidocyrtus* (*Lanocyrtus*) absens is described and a new record of *Seira delamarei* Jacquemart from India is given.