

## THE SPRINGTAILS (INSECTA: COLLEMBOLA) OF CHITTAGONG UNIVERSITY CAMPUS

Santosh Mazumdar\*

Department of Zoology, University of Chittagong, Chittagong-4330, Bangladesh

The present endeavour is to provide a brief taxonomic information on the springtails of Chittagong University campus, Bangladesh, which would be useful for the researchers to identify and to get information on Springtails of the area. The Chittagong University campus lies between 22°27'30" and 22°29'0" North latitudes and 91°46'30" and 91°47'45" East longitudes. The campus extends for about 1264.73 acres and comprises of small hills and the remaining part with plain land and small water bodies. The vegetation of the campus is semi-evergreen.

Springtails are minute arthropods, usually less than 1 cm long, wingless and externally varied in their colour. Mouthparts entognathous and chewing type; antennae usually 4 segmented; the first 3 segments provided with muscles; compound eyes absent. They have six abdominal segments that bear three peculiar appendicular derivatives: a colophore, tenaculum and frucula (Imms 1957). Springtails may also have a post-antennal organ (Fig. 1). Pronounced sexual dimorphism is rare. All species moult throughout their life (Marshall *et al.*, 1990). Springtails are part of the community of decomposers that break down and recycle organic wastes and live in a variety of habitats where they feed

as scavengers on decaying vegetation and soil fungi. From an economic point of view, the springtails are regarded as of minor importance when compared with certain other better known insects; yet some of them have been accused of rather serious depredations upon garden crops (Guthrie 1903). Record of springtails is available from publications of Altschule *et al.*, 2004; Bedejo *et al.* 1998; Rodgers and Kitching 1998; Berch *et al.*, 2001; Rusek 2002; Schreiner and Bethlenfalvay 2003; Hazra and Bhattacharyya 2003, Bellini and Zeppelini 2004; Hogg and Hebert 2004; and Mandal and Hazra 2010) from different countries.

About 8,000 species of Collembola have been described Worldwide (Janssen, 2010). But the fauna of Collembola in Bangladesh is very poorly known (Bhuiya *et al.*, 1990; Islam *et al.*, 2003; Hossain 2010, Hossain *et al.* 2012). Using Malaise trap, more than three hundred individuals were collected from January 2009 to May 2010. The trap was set in an area of high activity, such as gap between dense vegetation, where flight lines are concentrated. Springtails were identified following Mitra (1973, 1976); Christiansen and Bellinger (1992); and Janssens (2010) for confirmation of the scientific names (Table 1).

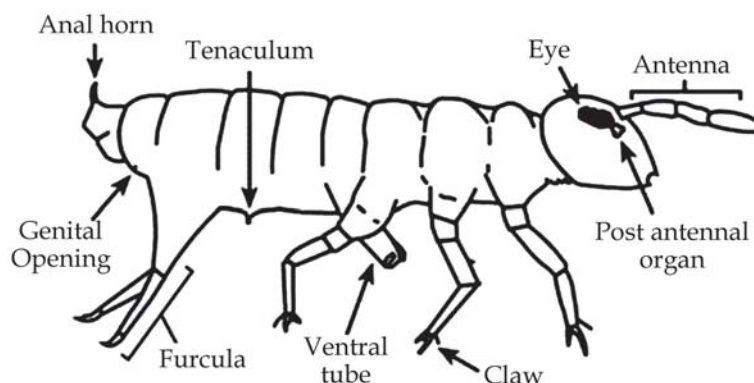


Fig. 1 : A typical springtail.

\* Corresponding author: E mail : santu\_ctg@yahoo.com

**Table 1.** List of Springtails from Chittagong University Campus.

Scientific Name	Family	Distribution and Previous record	Record from Bangladesh
<i>Salina indica</i> (Imms) Yosii	Entomobryidae	India, Mitra, 1973	New record
<i>Salina striata</i> (Handschin) Yosii		India, Mitra, 1973	New record
<i>Seria arunachala</i> Mitra		India, Mitra, 1976	New record
<i>Isotoma Bourlet</i>	Isotomidae	Hawaii, Christiansen and Bellinger, 1992	Islam <i>et al.</i> , 2003
<i>Dicyrtoma Bourlet</i>	Sminthuridae	Hawaii, Christiansen and Bellinger, 1992	Islam <i>et al.</i> , 2003

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