

NEW RECORDS OF *Isometrus basilicus* (SCORPIONES: BUTHIDAE) FROM SRI LANKA

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ABSTRACT

In this paper, new records of *Isometrus basilicus* Karsch, 1879 from lowland wet zone forests of Sri Lanka are reported. Descriptions of the two specimens and a color photo of a live specimen are given. The specimens were observed in leaf litter.

Keywords: Biodiversity, taxonomy, Oriental region

INTRODUCTION

Sixteen species of Scorpions, including three subspecies, occur in Sri Lanka (Pocock, 1899; Lourenço, 1997; Couzijn, 1981; Vachon, 1982; Kovařík, 2003; Stockmann & Ythier, 2010). They belong to 3 families, Buthidae, Chaerilidae and Scorpionidae. 10 species of Buthidae are known from Sri Lanka (Stockmann & Ythier, 2010). However, this count does not include *Isometrus thurstoni* Pocock, 1893 from Sri Lanka (Kovařík, 2003). During the course of an ongoing survey on soil arthropods of Sri Lanka conducted by the National Institute of Fundamental Studies of Sri Lanka (NIFS) two specimens of *Isometrus basilicus*, a species not recorded since its original description by Karsch (1879) were collected. This species is found in the lowland wet zone forests of Sri Lanka. The two specimens, a male and a female, were observed in the primary rain forest patches, Hiyare in the Kombala-Kottawa forest reserve, Galle and Sudagala forest reserve, Kuruwita (Figure 1).

MATERIALS AND METHODS

The two specimens were identified according to Vachon (1982). Measurements were taken under a stereomicroscope (Olympus SZX 7) with the aid of a digital caliper (Mitutoyo CD-6CSX) according to methods described by Pocock (1900). Specimens were photographed with a Nikon D80 digital camera equipped with a macro attachment. All specimens will be deposited in National Museum, Colombo.

RESULTS

Isometrus basilicus Karsch, 1879

(Figures 1-2)

Isometrus basilicus Karsch, 1879: 113.

Isometrus basilicus: Vachon, 1982: 91-93, figs. 40-46.

Material examined. Sri Lanka: Southern Province, Galle District, Hiyare, Kombala-Kottawa forest reserve, 1 male, 06°03'30"N, 80°18'55"E, 100 m; Sabaragamuwa Province, Ratnapura district, Sudagala, near Deerwood Estate (Kuruwita), 1 female, 06°48'13"N, 80°23'25"E, 400 m.

The specimens are in accordance with the description given by Vachon (1982). Biometrics of the two specimens are as follows (male/female): pectinal teeth, 14 & 12 (left) and 15 & 13 (right); total length (in mm), 45.84 & 36.97; carapace, 5.2 & 4.67; tail, 28.79 & 21.97; movable chelal finger, 4.95 & 4.83. Both leg. SP. Benjamin and S. Batuwita.

DISCUSSION

Previous records of *I. basilicus* reported from India and Nepal (Pocock, 1900; Stockmann & Ythier, 2010). Present discovery of the species extends its range southwards and to a much lower elevation. Regarding the taxonomy of scorpions of Sri Lanka, Vochan's (1982) paper appears to be the first comprehensive account of Sri Lanka's scorpion fauna, which was based on collections of scorpions deposited in the Natural History Museums of Geneva, London and Paris. Biodiversity of the Sri Lankan scorpion fauna is less known due to lack of modern studies. Current knowledge on their systematics is largely based on a handful of disparate publications (Pocock 1900; Couzijn 1981; Kovařík 1997; Lourenço & Huber, 1999; Huber *et al.*, 2002; Lourenço, 2002; Lourenço & Huber, 2002; Kovařík, 2003).

Our specimens of *I. basilicus* were found in the leaf litter. All Buthidae species are categorized as toxic to very toxic to humans (Stockmann & Ythier, 2010). However, the biology of Sri Lankan species are less known, leaving much room for further studies (Wright *et al.*, 1977).

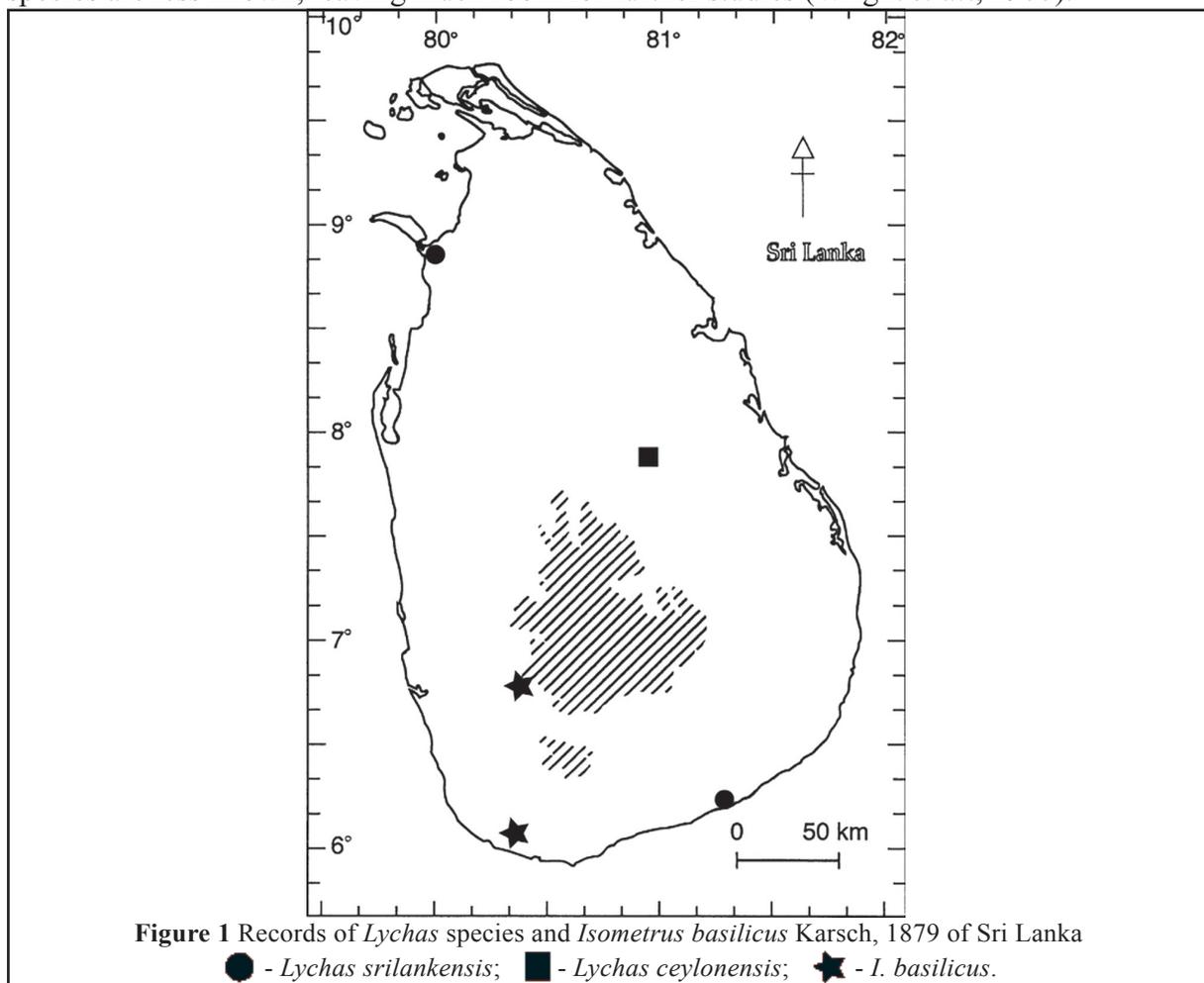




Figure 2 Dorsolateral view of female *Isometrus basilicus* Karsch, 1879, in life, from Hiyare in the Kombala-Kottawa forest reserve.

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