



Range extension of the Indian Sand wasp *Stizoides blandinus* (F. Smith, 1856) (Hymenoptera: Crabronidae: Bembicinae)

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Abstract

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The present study discusses on the range extension of Indian sand wasp *Stizoides blandinus* (F. Smith, 1856) with two new distributional records. The species so far known from Uttar Pradesh and West Bengal are newly reported from the states of Uttarakhand and Delhi. Diagnostic characters and figures are provided.

1. Introduction

Stizoides blandinus (F. Smith, 1856) is a stizine sand wasp coming under subfamily Bembicinae of family Crabronidae. The tribe Stizini is a mixed tribe of hopper hunters & brood parasites (Evans & O'Neill, 2007). Their size ranges from medium to large, stoutly built and often seen in colours of yellow and black, red and black or rarely all black (Bohart and Menke, 1976). Three genera are known under Stizini, which are *Stizus* Latreille, 1802, *Stizoides* Guérin-Ménéville, 1844 and *Bembecinus* A. Costa, 1859. Among them, *Stizus* and *Bembecinus* are provisioners while *Stizoides* are obligate brood parasites (Evans & O'Neill, 2007). Available evidences shows that all species of *Stizoides* are kleptoparasites on Orthoptera hunting sphecid wasps (Ohl, 1999).

Even with stoutly built body, larger size and astonishing appearance, *Stizoides* wasps has received little attention. The knowledge of these wasps in general are very poor owing to the fact that most of the species are rarely collected (Ohl, 1999). To date, about 30 species of *Stizoides* wasps are known worldwide of which 7 species are

recorded from India (Pulawski, 2021). The species *Stizoides blandinus* (F. Smith, 1856) is recorded from India (Cameron, 1890), North India (Smith F, 1856), Kolkata and Allahabad (Bingham, 1897). It is suggested that *S. blandinus* is distributed in South India and may be in Sri Lanka also (Krombein, 1984). This paper discusses on the range extension of *S. blandinus* with two new distributional records.

2. Materials and Methods

The present study is based on the collections present in the Zoological Survey of India (ZSI), Western Ghat Regional Centre (WGRC), Kozhikode, Kerala. The specimens are properly preserved, added and registered to the National Zoological Collections (NZC) of ZSI, WGRC Kozhikode. The specimens were studied under LEICA® M205A stereomicroscopes and imaged using LEICA®DFC 500 digital cameras attached, female profile view was taken using Canon Powershot SX 540camera. Synonyms and distributional records for the species were adopted from Pulawski, 2021.

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3. Results

Taxonomic accounts

Stizoides blandinus (F. Smith, 1856)

Larra blandina; F. Smith, 1856: 340, India.

Stizus blandinus; Cameron, 1890: 244.

Stizoides blandinus; Gillaspay, 1963: 378.

Diagnosis

Female: Body length - 17 mm. Body black in color. Head, mesosoma and metasoma finely and closely punctured. Clypeus, labrum, pronotum, scutum, scutellum, metanotum and propodeum black; mandibles edentate and brown, darker to apex; silvery pile on frons, clypeus and legs (Fig. 1). Legs black, antenna black but beneath with tinge of brown, coarsely punctured mesopleuron with silvery hairs on posterior half; propodeum slightly pubescent, most of the parts of tergum 1 black, with posterior margin red, low basomedian sulcus on tergum 1 (Fig. 2), sternum 2 with basomedial dense pubescent patch (Fig. 3), forewing distally hyaline but base infumated, nebulous apical veinlet of media not projecting into hyaline area (Fig. 4), mid-tibia with only one apical spur.

Male: Body length - 14 mm, slightly smaller than female. Coloration similar to female, and pubescence more. Silvery pile on frons, clypeus and legs more in male than that of female (Fig. 6), metasomal tergites as in female but with one or two terminal segments basally black, brassy gold pubescence on metasomal segments (Fig.7); pubescence on propodeum silvery.

Variation: In specimens examined here both male and female, are similar as description of Ohl (1999) except the posterior margin of tergum 1 red, where it is full black as description of Ohl (1999).

Materials examined: INDIA: Uttarakhand, Dehradun district, Asan Barrage Bird Sanctuary, 1♂, 18.vii.2019, Coll. P. Girish Kumar, NZC Regd. No. ZSIK-Inv. 20868. **New Delhi**, Delhi

University Campus, 1♀, 28.x.1978, Coll. Bindu, NZC Regd. No. ZSIK-Inv. 20869.

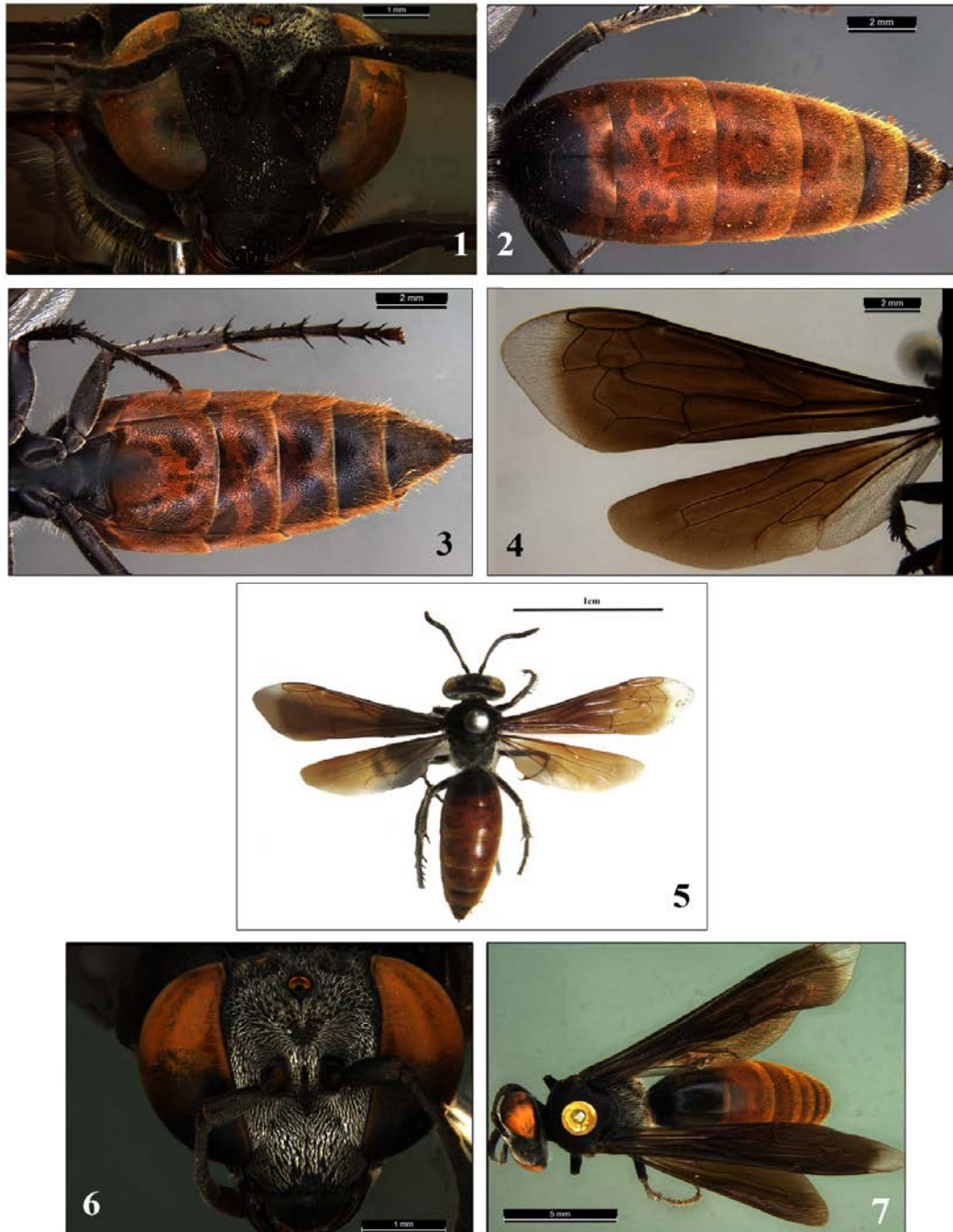
Distribution: Uttar Pradesh, West Bengal, Uttarakhand (**new record**), New Delhi (**new record**).

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Figs 1-7. *Stizoides blandimus* (F. Smith). Female, Figs 1-5. 1. Head Frontal View; 2. Metasoma Dorsal View; 3. Metasoma Ventral View; 4. Wings; 5. Profile View; Male, Figs 6-7. 6. Head Frontal View; 7. Profile View.