



First record of the species *Leucospis dorsigera* Fabricius (Hymenoptera: Leucospidae) from India

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Received: 10.08.2018

Abstract

Revised and Accepted:
10.09.2018

The parasitic wasp *Leucospis dorsigera* Fabricius is recorded here for the first time from India. The species *L. histrio* Maindron reported for the first time from Goa and *L. petiolata* Fabricius from Lakshadweep Islands.

Key words: *Leucospidae, species, new record, India.*

1. Introduction

Fabricius (1775) erected the genus *Leucospis* based on the type species *Leucospis dorsigera* Fabricius. This is the genus with the most species among the family Leucospidae with 123 species known worldwide (Noyes, 2018; Sankararaman *et al.*, 2019). 13 species of *Leucospis* are reported from the Indian subcontinent, of which seven are known from India. The Indian species are: *Leucospis darjilingensis* Mani, *L. guzeratensis* Westwood, *L. histrio* Maindron, *L. japonica* Walker, *L. pediculata* Guérin Méneville, *L. petiolata* Fabricius, and *L. pyriformis* (Weld). In this paper, we are reporting the Palearctic species *Leucospis dorsigera* Fabricius for the first time from India. The specimen is collected from Nilnag in Kashmir. Along with this study, we are reporting here some new distributional records of some other

species from various Indian states and union territories. They are: *L. histrio* Maindron from Goa, and *L. petiolata* Fabricius from Lakshadweep Island

2. Materials & Methods

The studied specimens were collected from different parts of India. The specimens were examined under a LEICA M60 stereozoom microscope and the images captured with a LEICA DFC-450 camera. All the studied specimens have been added to the 'National Zoological Collections' of the Western Ghat Regional Centre, Zoological Survey of India, Kozhikode, India (ZSIK). Abbreviations used for the depositories: UZM – Universitetets Zoologiske Museum, Copenhagen, Denmark; ZSIK – Western Ghat Regional Centre, Zoological Survey of India, Kozhikode, India.

3. Results and Discussion

Leucospis dorsigera Fabricius

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(Figs. 1-5)

Leucospis dorsigera Fabricius, 1775: 361,
♀. Lectotype ♀, Italy (UZM).

Diagnosis: ♀. Ovipositor reaching base of gaster; hind femur below with broad basal tooth followed by around 23 smaller teeth, gap between basal teeth not very broad; pronotum with three distinct transverse carinae: discal (anterior) carina, premarginal carina and carina on hind margin, discal carina low, barely lamellate; ovipositorial furrow of first tergite broad and smooth; scutellum at base broadly black; hind coxa punctured, without smooth streak area in upper half of depression; hind margin of dorsellum more or less carinate.

Material examined: INDIA: Jammu & Kashmir, Budgam district, Nilnag, 1♀, 28.vii.2018, Coll. Altaf Hussain Sheikh, Regd. No. ZSI/WGRC/I.R.-INV.11750.

Distribution: India (**new record**): Kashmir. Elsewhere: Afghanistan; Algeria; Austria; Bulgaria; Croatia; Cyprus; Czech Republic; Czechoslovakia; Egypt; France; Germany; Greece; Hungary; Iran; Israel; Italy; Kazakhstan; Macedonia; Moldova; Montenegro; Poland; Romania; Russia; Serbia; Slovakia; Slovenia; Spain; Switzerland; Turkey; Turkmenistan; Ukraine (Noyes, 2018).

Other specimens examined here:

(1). *Leucospis histrio* Maindron

(Figs. 6-10)

Material examined: INDIA: Goa, South Goa district, Bhagwan Mahaveer Wildlife Sanctuary, 1♀, 17.v.2018, Coll. P. Girish Kumar, Regd. No. ZSI/WGRC/I.R.-INV.11751; Kerala, Palakkad district, Nelliampathy, Victoria forest, 1♀, 27.ii.2017, Coll. P.

Girish Kumar, Regd. No. ZSI/WGRC/I.R.-INV.11752.

Distribution: India: Assam, Goa (**new record**), Karnataka, Kerala, Sikkim, Tamil Nadu. Elsewhere: Australia; Bangladesh; China; Indonesia; Malaysia; Myanmar; Papua New Guinea; Philippines; Solomon Islands; Sri Lanka; Thailand (Bouček, 1974; Bouček & Narendran, 1981; Narendran, 1986; Girish Kumar & Sureshan, 2016; Ye et al, 2017; Noyes, 2018).

(2). *Leucospis pediculata* Guérin-Méneville

(Figs. 11-15)

Material examined: INDIA: Kerala, Kannur district, Madayipara, 1♀, 1.ix.2018, Coll. C. Charesh, Regd. No. ZSI/WGRC/I.R.-INV.11753.

Distribution: India: Kerala, Tamil Nadu. Elsewhere: Indonesia; Malaysia; Myanmar; Singapore (Bouček, 1974; Bouček & Narendran, 1981; Narendran, 1986; Noyes, 2018).

(3). *Leucospis petiolata* Fabricius

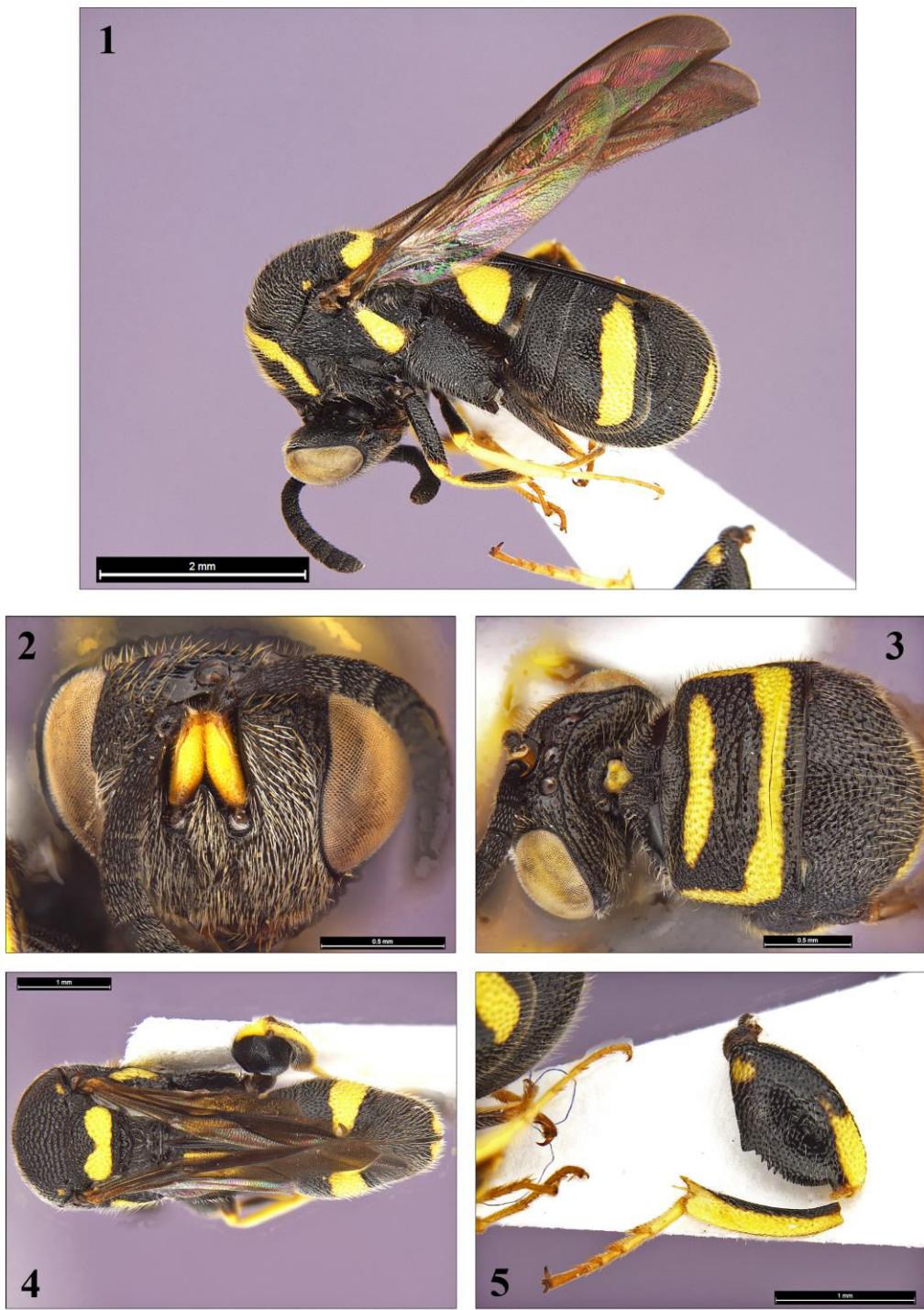
(Figs. 16-20)

Material examined: INDIA: Kerala, Kannur district, Kannapuram, 1♂, 23.vi.2018, Coll. C. Charesh, Regd. No. ZSI/WGRC/I.R.-INV.11754;

Lakshadweep, Kadamat Island, 1♂, 27.iii.2018, Coll. P. Girish Kumar, Regd. No. ZSI/WGRC/I.R.-INV.11365.

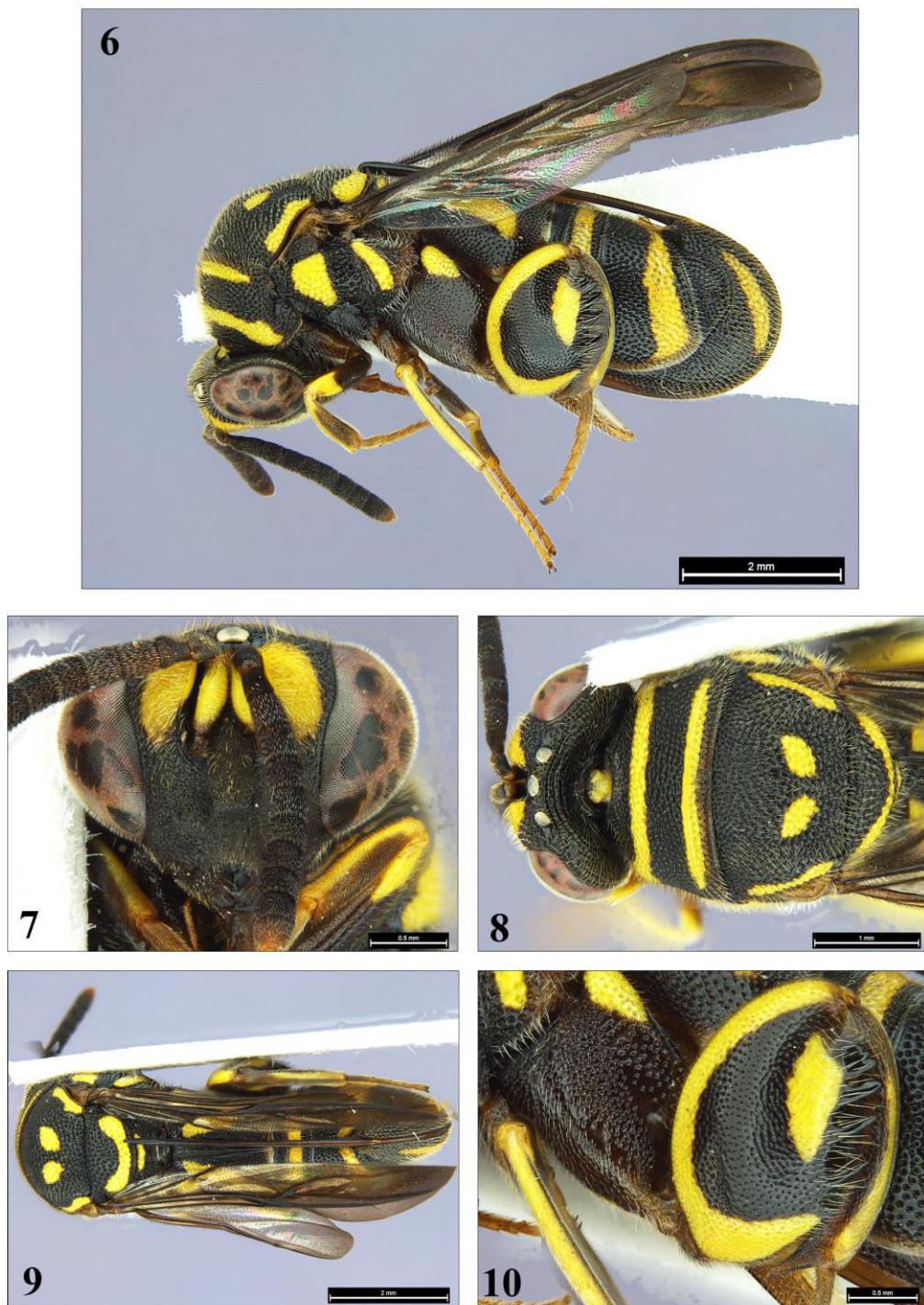
Distribution: India: Bihar, Karnataka, Kerala, Lakshadweep Islands (**new record**), Pondicherry, Tamil Nadu, Telangana: Hyderabad. Elsewhere: Australia; Bangladesh; China; Indonesia; Malaysia; Myanmar; Nepal; Papua New Guinea; Philippines; Sri Lanka; Thailand (Bouček, 1974; Bouček & Narendran, 1981; Narendran, 1986; Ye et al., 2017; Noyes, 2018).

Plate I



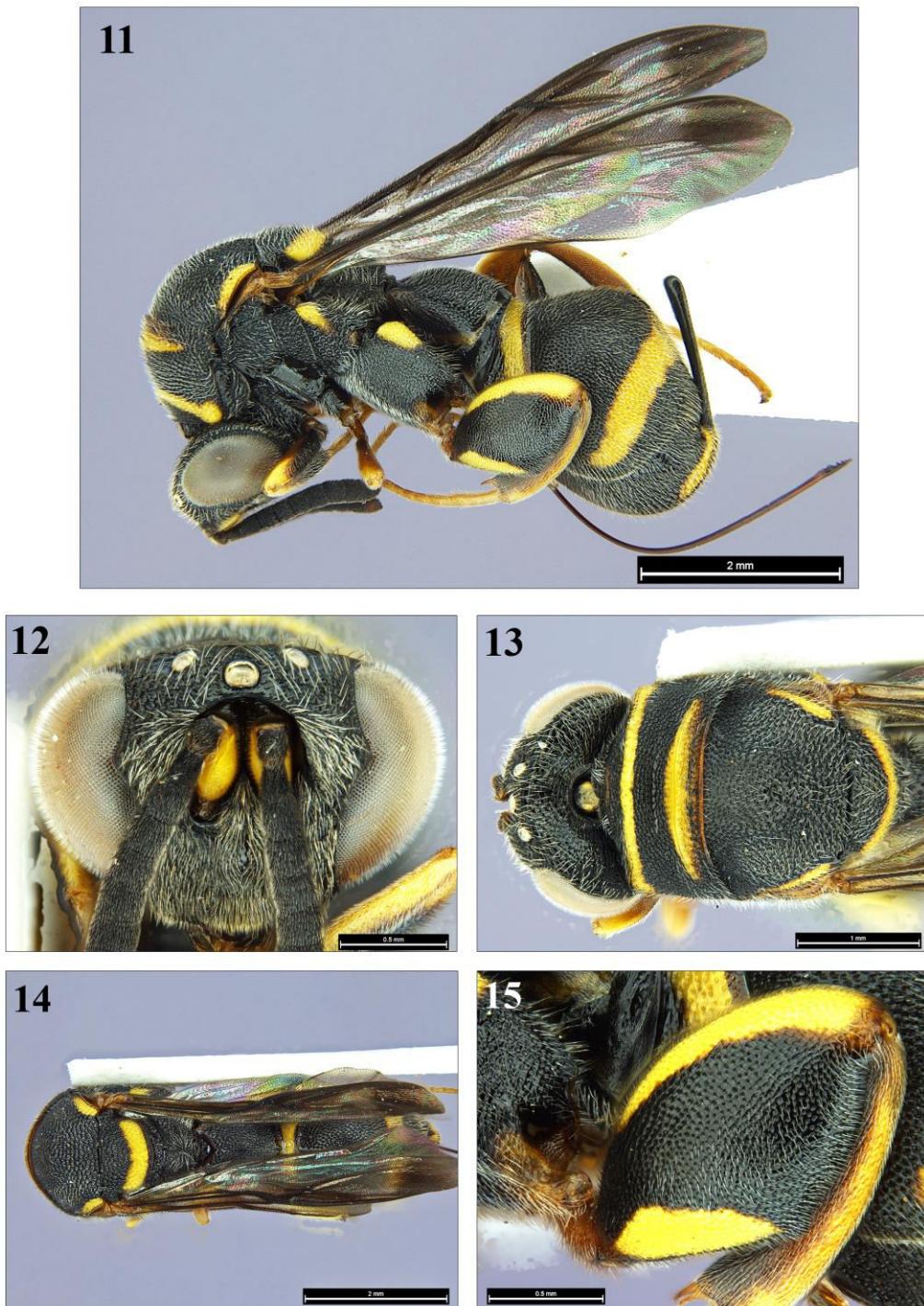
Figs 1-5 *Leucospis dorsigera* Fabricius, female. 1: Body, in profile view.
2: Head, in frontal view. 3: Head and mesosoma, in dorsal view.
4: Mesosoma and metasoma, in dorsal view. 5: Hind leg showing femora.

Plate II



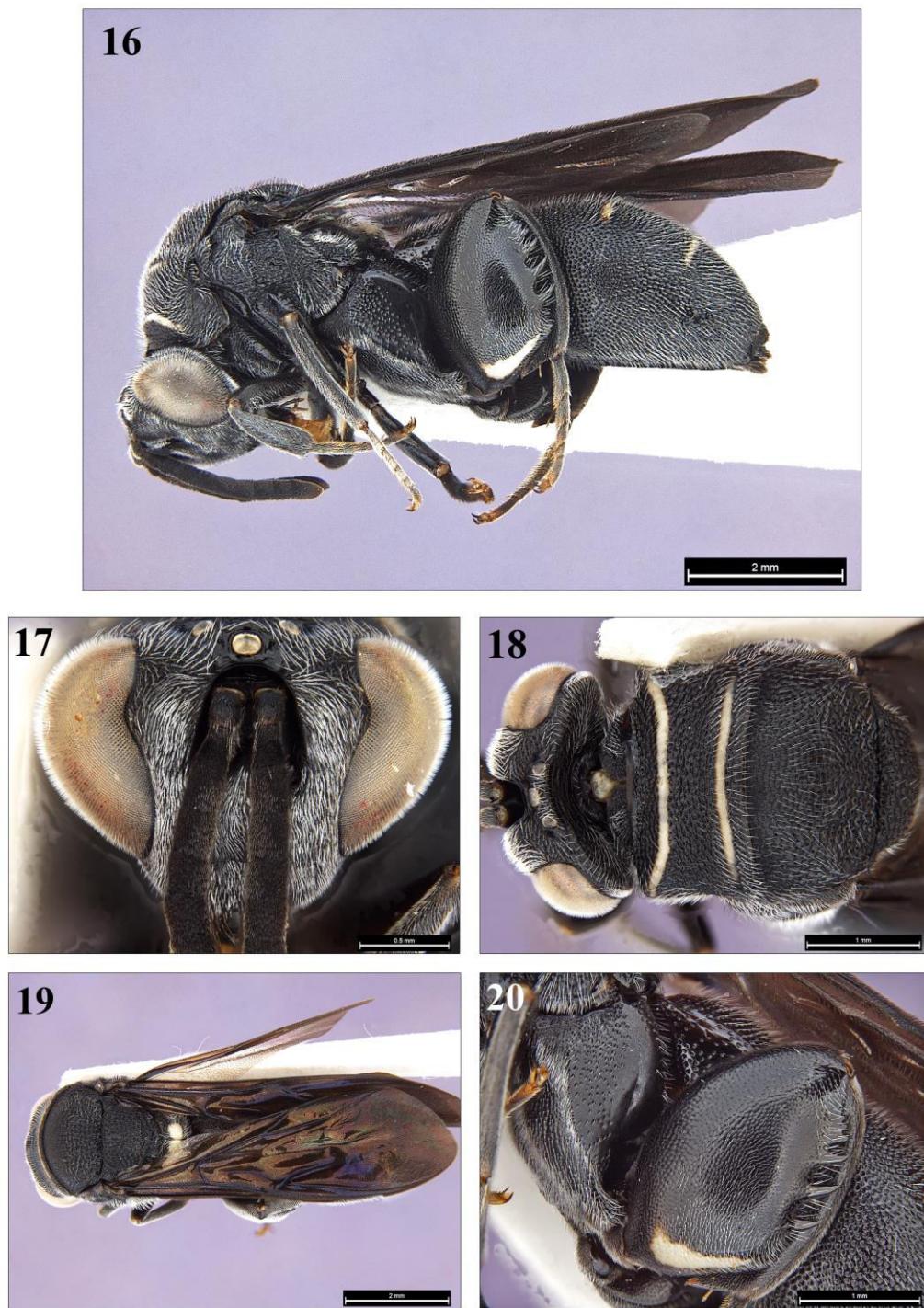
Figs 6-10 *Leucospis histrio* Maindron, female. 6: Body, in profile view.
7: Head, in frontal view. 8: Head and mesosoma, in dorsal view.
9: Mesosoma and metasoma, in dorsal view. 10: Hind leg showing femora.

Plate III



Figs 11-15 *Leucospis pediculata* Guérin-Méneville, female. 11: Body, in profile view. 12: Head, in frontal view. 13: Head and mesosoma, in dorsal view. 14: Mesosoma and metasoma, in dorsal view. 15: Hind leg showing femora.

Plate IV



Figs 16-20 *Leucospis petiolata* Fabricius, male. 16: Body, in profile view.
17: Head, in frontal view. 18: Head and mesosoma, in dorsal view.
19: Mesosoma and metasoma, in dorsal view. 20: Hind leg showing femora.



4. Conclusion

The parasitic wasp *Leucospis dorsigera* Fabricius (Hymenoptera: Chalcidoidea: Leucospidae) is recorded here for the first time from India. The species *L. histrio* Maindron reported for the first time from Goa, and *L. petiolata* Fabricius from Lakshadweep Islands.

5. Acknowledgements

The authors are grateful to Dr. Kailash Chandra, Director, Zoological Survey of India, Kolkata, for providing facilities and encouragement.

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