

A NEW SPECIES OF THE GENUS *LEUCOPIS* (DIPTERA : CHAMAEMYIDAE)  
FROM NORTH WEST INDIA

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ABSTRACT

A new species *Leucopis simlai* sp. nov. is described here along with a short biological note.

INTRODUCTION

While determining the insect predators of aphids collected at Simla, we came across a new species of the genus *Leucopis*. The larvae are predators of aphids and the adults were emerged from the reared in the laboratory.

SYSTEMATIC ACCOUNT

Family—CHAMAEMYIDAE

Genus—*Leucopis* Meigen

*Leucopis simlai* sp. nov.

(Figs. 1 A, B & C)

*Description* : Female : Head ash coloured. Body about 2 mm long and 1 mm wide across 3rd and 4th abdominal segments. Wing 2.5 mm long. Two pairs of vertical setae on vertex, inner vertical setae being small, outer longer. Ocelli present, frons and parafacials without any prominent stout seta ; arista elbow shaped, bare, 3rd segment of the antenna semicircular, widened at apex ; frons and epistome ash colour. Thorax grey, dorsum light ash coloured, with two faint longitudinal

narrow darker stripes running parallel to each other. Dorsal thoracic setae black. Pleura dark. Scutellum greyish white. Setae small, sparse and with acute apices.

Abdomen conical, ash coloured, 2nd and 3rd segments with two black dorsomedial spots, narrowing towards tip, covered sparsely with small black setae, Venter ash coloured with a faint dark line ventromedially. Scutellum squarish with two pairs of long marginal setae. Halteres bright white.

Legs ash coloured to light yellow. Coxa, trochanter and basal  $\frac{2}{3}$  of femur ash coloured rest light yellowish ; apical  $\frac{3}{4}$  of tibia greyish, rest light yellowish ; 1st and 2nd segments of tarsi light yellowish rest gradually darker towards tip.

Wings clear and hyaline ; costa not broken, anal and second basal cells complete ; anal vein not reaching wing margin.

*Material* : Holotype 1 ♀, (Regd. No. 6570/H6), India, Himachal Pradesh, Simla, 25.11.1980. Coll. S. C. Poddar, aphid host *Macrosiphum rosaeiformis* ; paratype, 3 ♀, Regd.

No. 6571/H6 collection data same as holotype. Types are deposited in the Zoological Survey of India, Calcutta.

*Remarks* : This species in having yellow fore tarsi approaches to *L. bella* Loew and *L. simplex* Loew. Due to the presence of yellow tarsi and body being more than

2 mm it comes more close to *L. bella* Loew but it differs from *bella* by the following : (i) Presence of ash coloured basal abdominal tergite, (ii) Presence of two dorsal black spots on each of 2nd and 3rd abdominal segments.

From *L. simplex* Loew the species differs

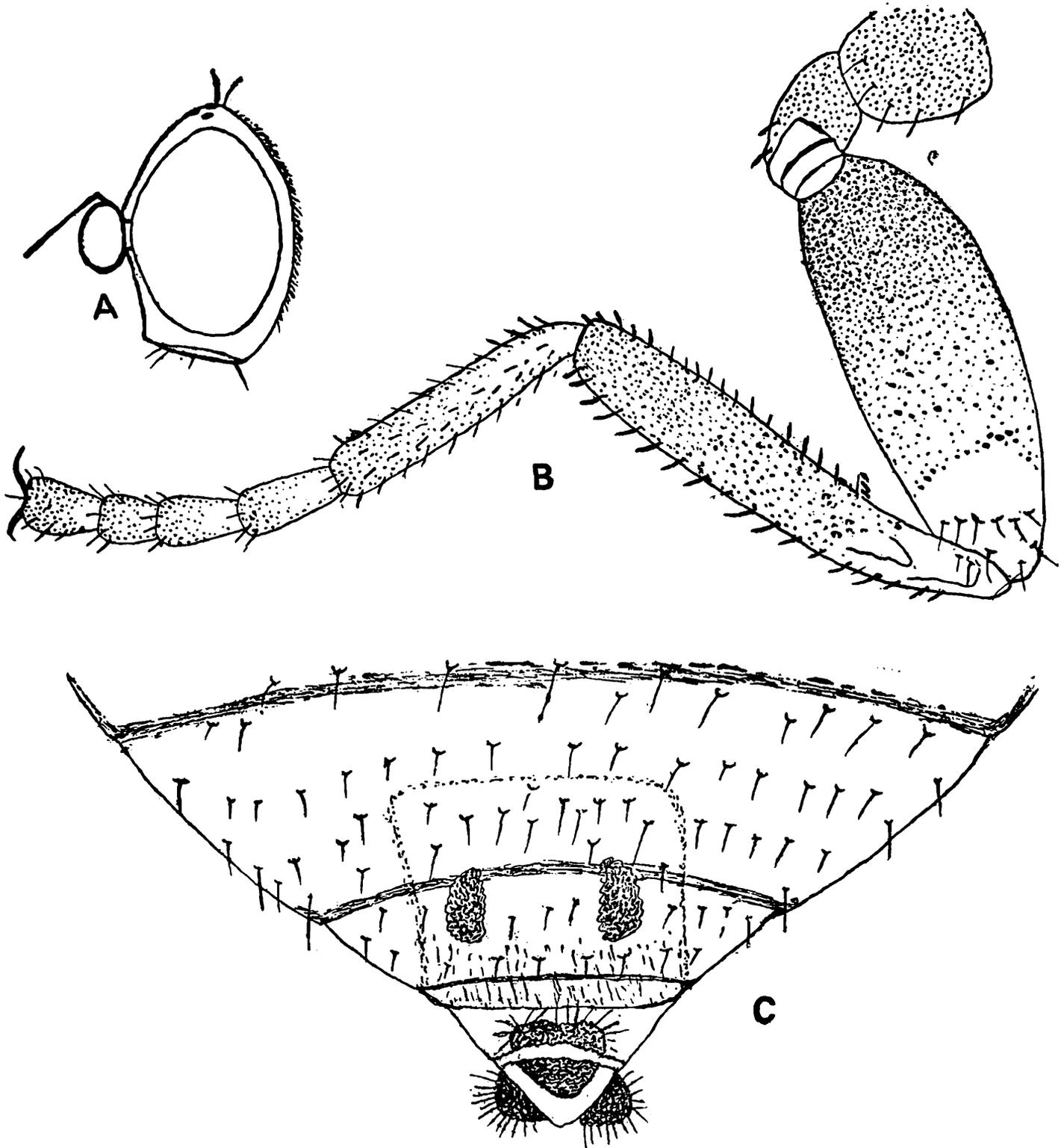


Fig. 1. *Leucopis simlai* sp. nov. A, head ; B, hind leg ; C, abdomen (dorsal).

by the following (i) Presence of two dark brown strips on thorax, (ii) Presence of two dorsomedian black spots on third abdominal segment.

*Biological notes* : Eggs of this species were observed to be attached in maximum number with rose buds and tender shoots but less in number with leaves. But those eggs were not preserved and reared. Only the larvae which were collected in the aphid colony were reared in the laboratory by supplying fresh aphid material as food every day. The larvae were seen to prefer nymphs of the aphids rather than the adults as their food. One larva usually consumed 15 to 20 aphid nymphs of 3rd and 4th instar per day. After 5-6 days the larvae began to pupate. The pupation

period was 8-10 days. After this the adult flies emerged. In the laboratory condition it was observed that the adults remain alive for 2 days without any food.

#### ACKNOWLEDGEMENTS

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#### REFERENCE

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