

A second Species of Amphientomidae (Insecta: Psocoptera) from Western Australia

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Seopsis humphreysi sp. nov. is described from a single female collected from Cape Range, Western Australia.

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INTRODUCTION

The psocopteran family Amphientomidae was recorded from Australia only recently by Smithers (1989), who described two species, *Hemiseopsis alettae* (female, New South Wales) and *Seopsis incisa* (male, Western Australia). Both are known only from single specimens. Another, undescribed, species of *Seopsis* has been collected recently in Victoria (Garcia Aldrete, pers. comm. 1992). Amphientomidae are among the rarest and most elusive Psocoptera in Australia and any additional records and information on their occurrence is significant in assessing the peculiarities of the Australian psocid fauna.

As part of his continuing survey of the invertebrate fauna of caves in north-western Australia Dr W. F. Humphreys (Western Australian Museum) collected a number of Psocoptera, including a single female of a further species of *Seopsis* Enderlein. It is described in this note.

Seopsis humphreysi sp. nov.

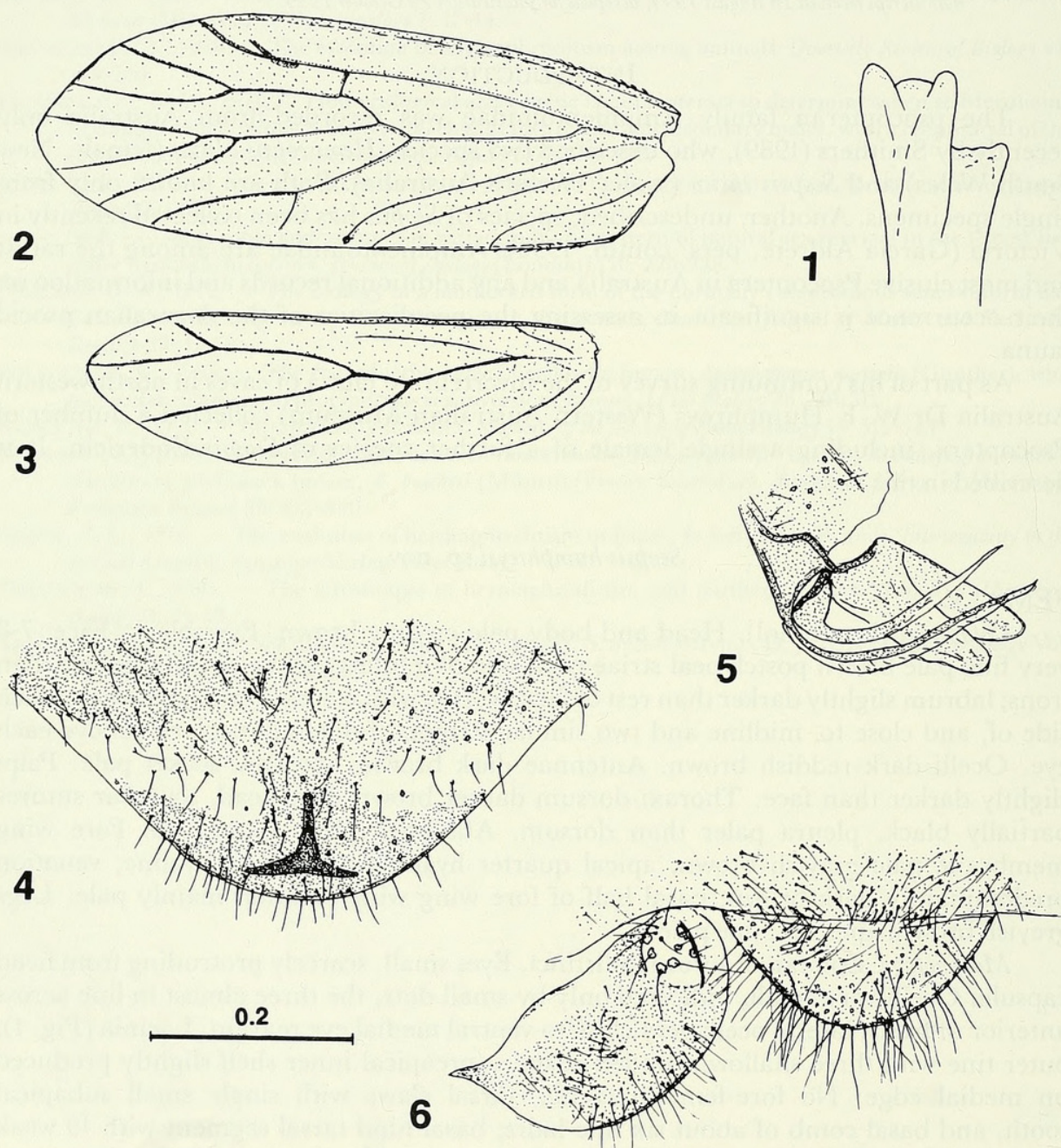
FEMALE

Coloration (in alcohol). Head and body pale creamy brown. Eyes black. Face: 7-8 very fine pale brown postclypeal striae each side of midline; genae slightly darker than frons; labrum slightly darker than rest of face. Vertex with traces of two dark stripes each side of, and close to, midline and two similar stripes, obsolete posteriorly, above each eye. Ocelli dark reddish brown. Antennae dark brown, antennal socket pale. Palpi slightly darker than face. Thorax: dorsum darker brown than head, scutellar sutures partially black, pleura paler than dorsum. Abdomen pale, unmarked. Fore wing membrane pale greyish brown, apical quarter hyaline; hind wing hyaline; venation predominantly dark brown, basal half of fore wing with venation mainly pale. Legs greyish brown, apex of tibiae pale.

Morphology. Epicranial suture indistinct. Eyes small, scarcely protruding from head capsule. Ocelli very small, indicated only by small dots, the three almost in line across anterior of frons, lateral ocelli very close to ventral medial eye margin. Lacinia (Fig. 1): outer tine with three shallow rounded cusps, a preapical inner shelf slightly produced on medial edge. No fore-femoral comb. Tarsal claws with single small subapical tooth, and basal comb of about six fine hairs; basal hind tarsal segment with 19 weak ctenidiobothria. Wing venation (Figs 2, 3): fore wing bluntly tapered, first branch of vein Sc₂ indistinct, radial and medial forks rather short, Cu_{1b} obsolete before wing margin; hind wing veins R₁ and R₂₊₃ not reaching wing margin, Cu₂ evanescent.

Subgenital plate (Fig. 4) broad, rounded; sclerotised pattern deeply incised laterally near apex of plate; a well defined T-sclerite near apex. Gonapophyses (Fig. 5): ventral and dorsal valves long, slender, tapered at apex; external valve broad, bluntly rounded, with strong rounded dorsal lobe; no setae. Epiproct (Fig. 6) simple, rounded, with dense marginal and premarginal setae. Paraproct (Fig. 6) broad, a small field of seven trichobothria with weakly defined basal rosettes and four simple hairs; marginal and premarginal setae shorter than on epiproct.

Dimensions (mm). Body length 1.80; fore wing length 1.95; hind wing length 1.52; first and second flagellar segment lengths 0.300, 0.285, ratio 1.05; hind leg femur length 0.540, tibia length 0.960, basal, second and third tarsal segment lengths 0.495, 0.075, 0.090, ratio t1:t2:t3 6.6:1:1.2. IO/D (Badonnel) 1.79, PO 2.11.



Figs 1-6. *Seopsis humphreysi* sp. nov., female. 1, lacinia. 2, fore wing. 3, hind wing. 4, subgenital plate. 5, gonapophyses. 6, epiproct and paraproct. (Scale in mm to figs 4-6).

MATERIAL EXAMINED. Holotype, female, Western Australia, Cape Range, pitfall trap on surface adjacent to doline of cave C-118 (22°09' S, 113°59' E), 12 August 1989, B. Jones. Holotype in Western Australian Museum, Perth. This species is named after Dr W. F. Humphreys, in appreciation of his efforts in collecting Psocoptera from remote localities in Western Australia.

DISCUSSION. The male of *S. incisa* Smithers is rather similar in form to this new species and parsimony could suggest that this should be allocated as the unknown female of *incisa*. This is unlikely because of differences in body coloration, especially of the head. The legs of the two species also apparently differ: the fore and middle tibiae of *S. incisa* were described as pale on the basal half and the hind tibia as pale. All legs of the female have the tibial apex noticeably paler than the basal region and the tarsi wholly dark. The smaller ocelli of the female could merely be sexual dimorphism and the relatively shorter fore wing apex be associated with slight brachyptery. The differences in hind wing venation are more striking, especially the greater length of the radial fork stem, which is more than twice the length of vein R_{2+3} in *S. humphreysi* and about equal to it in *S. incisa*. The balance of characters implies strongly that the two individuals are indeed of different species.

This is the eleventh described species of *Seopsis*. The genus is predominantly Oriental, and species are known from Sri Lanka, Singapore, the Philippines and Nepal in addition to two species from Angola. Most are known from very few specimens, and all differ in body pattern from the Australian species.

ACKNOWLEDGMENT

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Reference

SMITHERS, C. N., 1989. — Two new species of Amphientomidae (Insecta: Psocoptera), the first record of the family from Australia. *Proc. Linn. Soc. N.S.W.* 111 (1): 31-35.



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