LATUMCEPHALUM (BOOPIDAE: PHTHIRAPTERA: INSECTA)

by

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Manuscript received 2/10/1974 *Published 23/10/1974*

SYNOPSIS

The species of *Latumcephalum* are discussed and a new one from *Wallabia rufogrisus* described.

INTRODUCTION

In Kéler's monograph (1971), this genus was considered and the two known species partly described and figured. Although resembling *Boopia* in the characters of the chaetotaxy, abdomen and male genitalia, the species are separable not only by the horizontal elongation of the head, but in the absence of the trichobothria on segments II-IV and by the characters of the legs. As Kéler (1971) showed, these differ from the legs of all other Boopidae, resembling more closely those of the Ischnocera. This may enable the species to occupy some position on the host, not utilized by other members of the family and which may be less accessible for collecting, explaining their rarity in collections. Or more likely perhaps, these characters make them less able to compete with other genera of Boopidae infesting the same host. Kéler also points out that this genus shares with *Paraboopia*, also rarely collected, the absence of trichobothria on segments II-IV and the reduction of the number of segments in the maxillary palp. In fact, merely the lateral elongation of the head of *P. flava* would give a species similar in appearance to *L. lesouefi*. It is interesting to speculate whether these two genera have lost the form of leg and the trichobothria characteristic of the Boopidae or that these features were never developed and that the species are therefore more similar to the ancestral stock which gave rise to the Boopidae (see Clay, 1970).

The two known species of *Latumcephalum* are distinguished by the shape of the region of the head lying between the preocular and postocular slits, the new species resembling *macropus* in this character. Unfortunately, there is only a single male *macropus* for comparison, in rather poor condition. The new species is distinguished from *macropus* by the size, being nearer to *lesouefi* in this respect, by the shape of the head, the abdominal and femoral chaetotaxy and by the male genitalia. All three species of this genus are parasitic on species of *Wallabia*.

Latumcephalum greeni sp. n.

(Text-figs. 1-8)

Type host: *Wallabia rufogrisus* (Desmarest, 1817).

Male. Outline of head as in Text-fig. 1; chaetotaxy of head and prothorax as figured for *macropus* by Kéler (1971, figs. 130, A. B.), but number of gular setae fewer, 2-3 each side, and the ventral inwardly directed projection on the temple angle smaller.

Meso- and metathorax as figured for female of *macropus* in Werneck & Thompson (1940, fig. 57) except that the marginal setae of the metanotum are now shown: in *macropus* there are 1+1 long setae, with a short fine one on the outer side of each of these; in *greeni* the outer ones are small and sometimes absent and in *lesouefi* the outer ones are almost as long as the inner ones. Second femur without stout spiniform seta as found in males of the other two species (Werneck & Thompson, ibid, fig. 65). In the available material of this species and *macropus* it has not been possible to resolve the exact shapes of all the vesical sclerites in the male genitalia but they seem to be similar in the two species; the elongated, posteriorly bilobed structure characteristic of *greeni* appears to be homologous with the "handle" of the dorsal (anterior) median plate, although it has not been possible to identify its point of attachment (Text-figs. 5-7). The size and shape of the mesosomal arch (sensu Kéler) separates the three species (Text-figs. 2-4).

Abdominal chaetotaxy. It is difficult to give the exact number of setae, as in addition to the main setae there are a number which vary from minute to median in different specimens. Tergum II, 4 central setae; III-IV, 5-6 anterior, 4 posterior (= 5-6/4); VII, 5-6/5-6; VIII, 4-6/4-6; with a varying number of segments with a minute to medium seta each end of the rows; the anterior setae are shorter and more spiniform than in *macropus* (Text-fig. 8). In addition, laterally tergum II with one minute seta; III-VII, one long and two associated setae varying from minute to medium. Post-spiracular complex on the lateral plates: II-IV, 1 long post-spiracular and two short setae near its base; V-VIII, one long post-spiracular and three short near its base. Sternum II, 4; III, 4/5; IV-VI, 5/6; VII, 6/6; VIII, 4/6; IX, 2/2. Latero-ventral: II-III, 0; IV-VI, 1 long with 2 of varying lengths at its base; VII, 1 long; VIII, 0.

Dimensions of 3 males (in mm.): Temple width, 0.51-0.52; head length, 0.23-0.25; head index, 2.08, 2.17, 2.22; pronotum width, 0.26-0.28; abdomen width, 0.54-0.57; total length 1.36, 1.40, 1.41.

MATERIAL EXAMINED. 3 males from *Wallabia rufogrisus*, Australia: Tasmania, Greens Beach. 14.1.1973 (R. H. Green).

Holotype: male in the Queen Victoria Museum and Art Gallery, Launceston, Tasmania.

Paratype: 2 males with same data as holotype.

ACKNOWLEDGEMENTS

I am grateful to Mr. R. H. Green, after whom the new species is named, for an opportunity to see this material and other material from Tasmanian animals.

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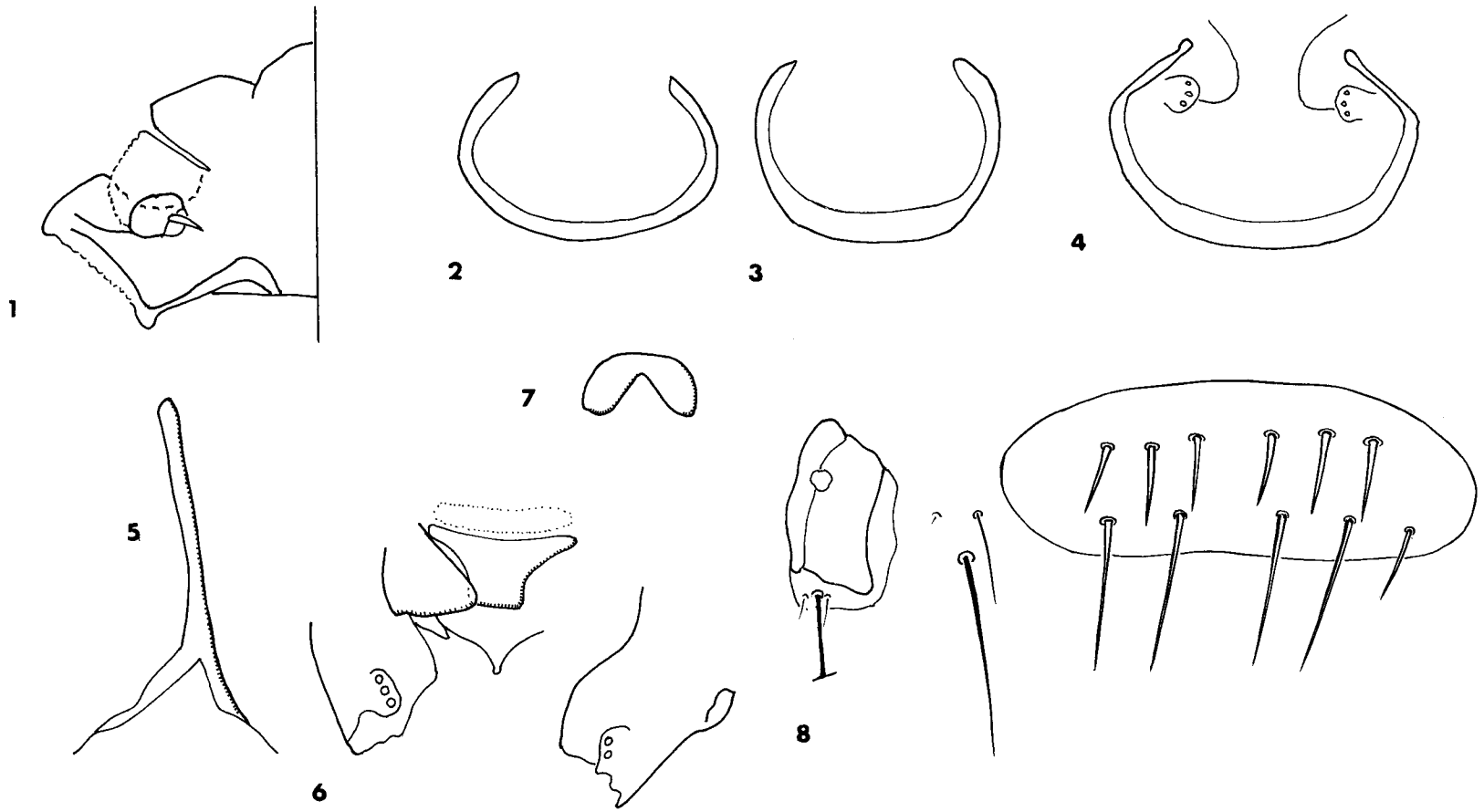

TEXT-FIGURES 1-8

Text-figs. 1, 4-8. *Latumcephalum greeni* sp. n. 1. Outline of half head. 2-4. Mesosome arch (sens. Kéler, 1971). 2. *L. lesouefi* Harrison & Johnston. 3. *L. macropus* Le Souef. 4. *L. greeni*. 5 Handle of dorsal median plate (detached). 6. Central and lateral vasical plates (lateral plates on right detached). 7. Ventral median plate. 8 Lateral and tergal plates of tergum V.

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