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NOTES ON SOME DERMAPTERA FROM AUSTRALIA PRESERVED IN THE ZOOLOGISCH MUSEUM, AMSTERDAM

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ABSTRACT

Description of *Brindlensia jeekeli* gen. et sp. nov., which is referred to the new subfamily Brindlensiinae, related most closely to the Esphalmeninae. *Euborellia jeekeli* nov. sp. is described; it is nearly related to *E. brunneri* (Dohrn).

The present paper is based on a small collection of Dermaptera from Australia. A new subfamily viz. Brindlensiinae is erected for *Brindlensia jeekeli* gen. and sp. nov. Besides, a new species, *Euborellia jeekeli*, is also described. In addition a ♀ is referred to *Titanolabis* Burr, but could not be identified to specific level in the absence of a ♂.

The types are deposited in the Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam, the Netherlands.

Family PYGIDICRANIDAE

Subfamily BRINDLENSIINAE nov.

Diagnosis.-

Head convex, frons and occiput differentiated. Antennae with segments long and slender, 4th and 5th longer than broad, remaining gradu-

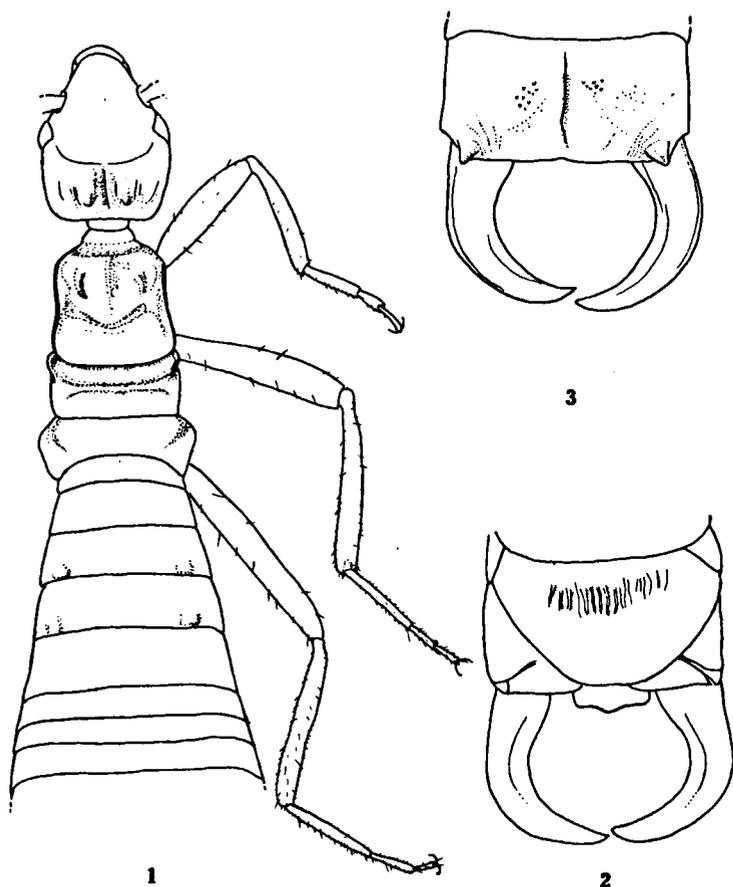
ally increasing in length. Apterous. Thoracic sternites with prosternum twice as long as broad, oblong, anteriorly convex and posteriorly only feebly narrowed with hind margin truncate. Legs long and slender, tibiae and tarsi almost equal in length, 2nd tarsal segment of forelegs slightly shorter than 3rd and that of middle and hind legs slightly and distinctly longer, respectively; claws with an arolium. Genitalia with parameres apically provided with a lateral process; virga stout, apically bifurcate into finer branches.

Distribution.-

Australia.

Remarks.-

This subfamily is erected for the reception of *Brindlensia jeekeli* gen. and sp. nov. and is named after Mr. A. Brindle of the Manchester



Figs. 1-3. *Brindlensia jeekeli* gen. and sp. nov., Holotype ♂. 1: Dorsal view except antennae, legs of left side and ultimate tergite; 2: Penultimate sternite and forceps; 3: Ultimate tergite and forceps.

Museum whose contributions on Dermaptera are well known. It can be easily separated from its nearest ally, the subfamily Esphalmininae, distributed in the Neotropical and Ethiopian regions, in having the prosternum oblong, very feebly narrowed posteriorly (vs. triangular, acutely narrowed posteriorly in Esphalmininae); parameres with an additional lateral process (vs. lacking such process).

While erecting this subfamily I am reminded of Hincks' (1959: 16) remarks: "They represent, so to speak, the terminal twigs of an evolutionary tree, the branches of which have disappeared".

Brindlensia gen. nov.

The characters for the subfamily hold good for the genus as well.

Type-species.-

Brindlensia jeekeli sp. nov.

Brindlensia jeekeli sp. nov.

Figs. 1-9

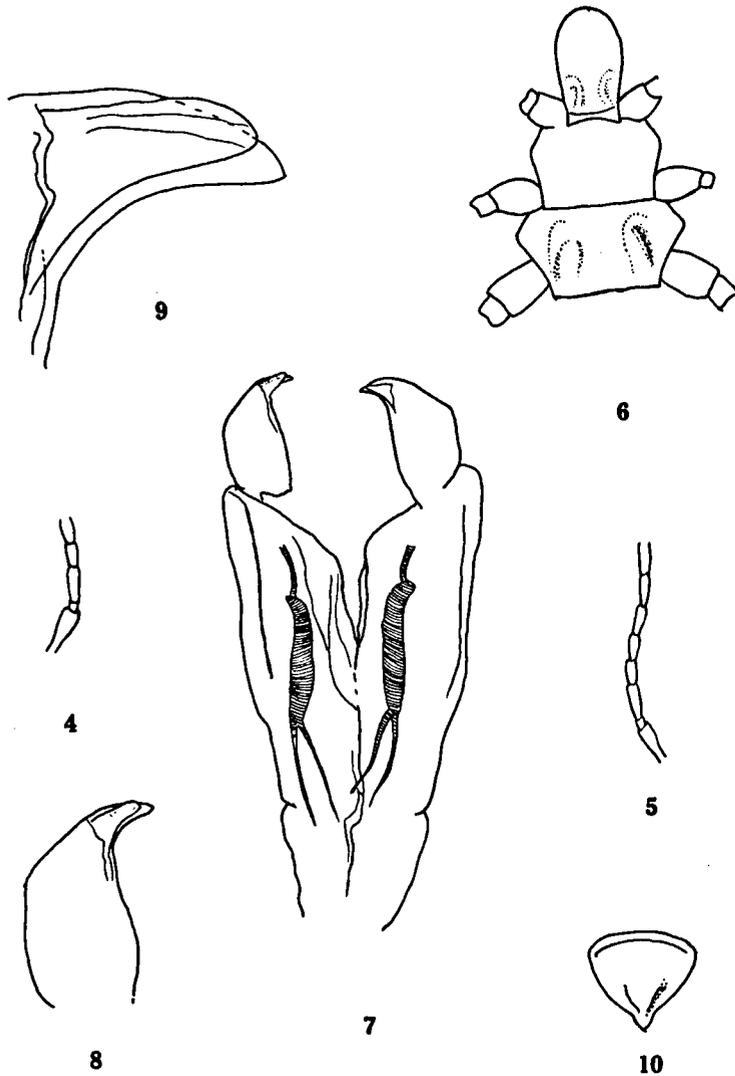
Material examined.-

Australia: Victoria, Mt. Taylor, 11 km NNW Bairnsdale, Sta. Nr. 87, fragment of Eucalyptus forest, along roadside between grassland, under logs and litter (Australia Exped. 1980), 14.XI.1980, leg. C.A.W. and A.M. Jeekel. Holotype ♂ (genitalia mounted between two coverslips and pinned with the specimen).

Description.-

♂: General colour brownish black, ultimate tergite darker and forceps somewhat reddish. Legs brownish yellow but femora brownish black except at extreme base where brownish yellow. Body covered with fine yellow pubescence interspersed with a few long hairs especially on hind margin of abdominal tergites and posterior half of ultimate tergite and underside.

Head longer than broad, occiput and posterior half of frons with fine granulations, frons weakly convex, sutures distinct, occiput



Figs. 4-9. *Brindlensia jeekeli* gen. and sp. nov., Holotype ♂. 4 and 5: A few basal antennal segments of left and right side, respectively; 6: Sternal plates; 7: Genitalia; 8: Paramere enlarged; 9: Tip of paramere further enlarged; Fig. 10. *Esphalmenus* sp. ♂, prosternum.

distinctly raised with a pair of linear depressions on either side of median suture, hind margin feebly emarginate. Eyes small, about half as long as the post-ocular length. Antennae partly broken (5 basal segments on the left and 8 on the right present); 1st stout, expanded apically, shorter than the distance between antennal bases; 2nd transverse; 3rd long and slender, almost equal to the combined length of 4th and 5th; 4th slightly longer than broad; 5th slightly longer than preceding, remaining gradually increasing in length. Pronotum slightly longer than broad, granulated, but granulation finer than that on the head, anteriorly as wide as head, posteriorly gently widened with lateral angles well rounded, rather lobed, prozona moderately convex, with a faint linear depression laterally, well differentiated from moderately depressed metazona by a transverse suture, hind margin subtruncate, median sulcus

distinct. Mesonotum transverse, finely granulated, shoulder with a distinct curved blunt fold, in middle with a transverse depression, hind margin straight. Metanotum with same texture, transverse, sides convex, posterior margin emarginate. Prosternum about twice as long as broad, oblong, anterior margin convex, only gradually narrowing posteriorly, hind margin truncate. Meso- and metasternum transverse, hind margin of both truncate but latter posteriorly narrowed between hind coxae. Legs long and slender, femora and tibiae compressed, ecarinate, tarsi about as long as tibiae; hind tarsi with 1st segment almost equal to the combined length of 2nd and 3rd segment and 2nd distinctly longer than 3rd; 2nd tarsal segment of fore-legs slightly shorter than 3rd and that of middle leg slightly longer; claws without arolium.

Abdomen finely punctulate, rather coarse and comparatively sparse in posterior half of each

tergite; convex, greatly enlarged posteriorly, lateral tubercles on 3rd and 4th tergites feebly marked, sides of segments obtusely convex. Penultimate sternite with posterior margin subtruncate, finely punctulate, near base with a series of linear stripes. Ultimate tergite transverse, small sparsely placed granulations present, moderately convex, sloping backwards in middle, hind margin straight, postero-lateral angles produced into spiniform lobe. Forceps stout, remote, depressed, strongly bowed, tapering apically, inner margin unarmed, at base with fine granulations. Pygidium vertical, transverse, narrowed apically with a convexity in middle. Genitalia with paramere short, oblong, tip with an outer hooked process and with another inner obtuse process; virga stout, apically with two orifices.

♀: Unknown.

Measurements.-

Holotype ♂: length of body: 12.0 mm; length of forceps: 2.1 mm.

Remarks.-

This unique species shows close affinity to members of the Esphalmeninae but it can easily be separated on the basis of the subfamily characters.

Family CARCINOPHORIDAE

Subfamily TITANOLABINAE

Titanolabis sp.

Material examined.-

Australia: Victoria, Drummer State Forest, 15 km E Cann River, Sta. Nr. 84, Eucalyptus forest along Princes Highway, under logs (Australia Exped. 1980), 13.XI.1980, leg. C.A.W. and A.M. Jeekel, 1 ♀.

Remarks.-

In the absence of a male it is not possible to identify it to specific level.

Subfamily CARCINOPHORINAE

Euborellia jeekeli sp. nov.

Figs. 11-18

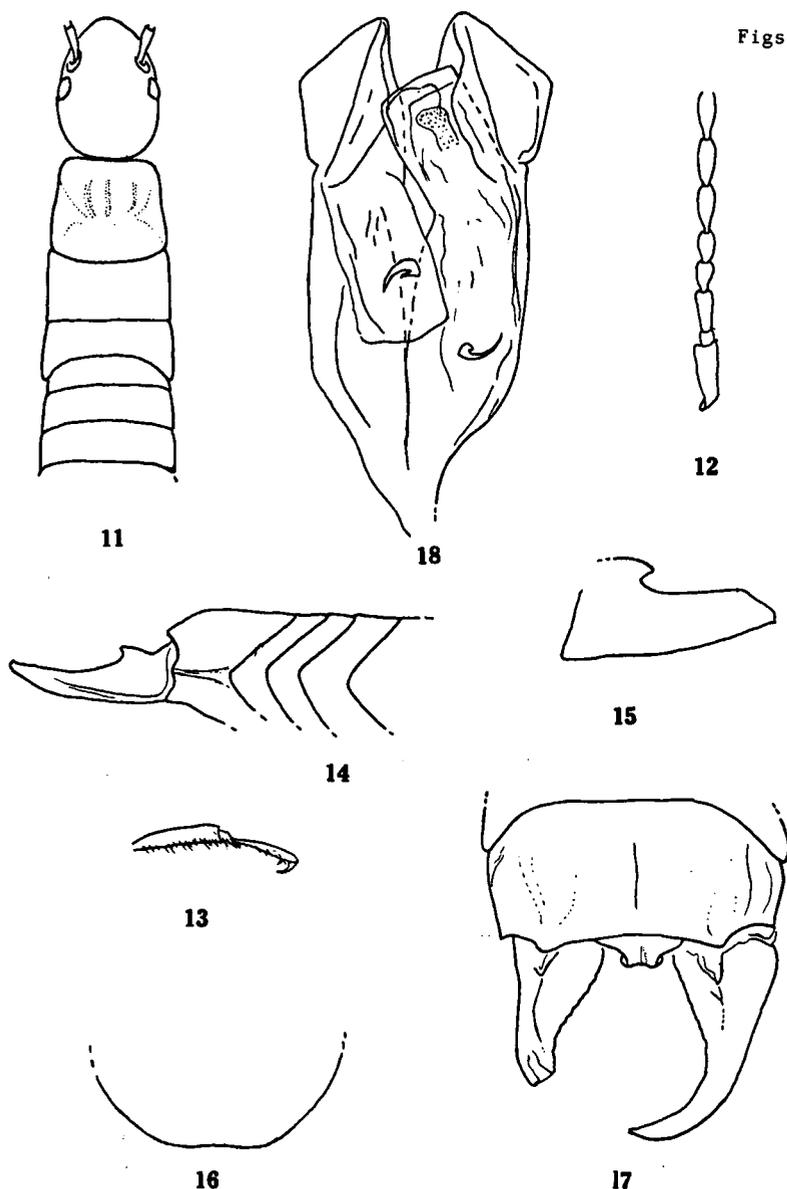
Material examined.-

Australia: Victoria, Toongabbie, 18 km NNE Traralgon, Sta. No. 89, margin of Eucalyptus forest, with grassland, under logs, (Australia Exped. 1980), 15.XI.1980, leg. C.A.W. and A.M. Jeekel, Holotype ♂ (genitalia mounted between two coverslips and pinned with the specimen).

Description.-

♂: General colour shining dark brownish black, somewhat lighter on pro- and mesonotum and antennae; legs light uniform brown.

Head oval, smooth, frons and occiput not differentiated, convex, sutures fine and feebly marked. Eyes small, about half as long as the post-ocular length, laterally placed. Antennae partly broken (12 segments on the left side and 10 on the right side remaining), 1st stout, narrowed basally, shorter than the antennal bases; 2nd short, about as long as broad; 3rd long, cylindrical, equal to 4th and 5th together; 4th subclavate; 5th a trifle longer than preceding, subclavate, remaining increasing in length but each narrowed at base and expanded apically. Pronotum smooth, slightly broader than long, anteriorly as broad as head, widened posteriorly, sides straight, feebly reflexed, hind margin subtruncate, median suture weakly marked; prozona poorly raised and not well differentiated from depressed metazona. Prosternum elongated, constricted between fore-coxae, afterwards expanded; mesosternum quadrate, sides and hind margin slightly convex with two faint depressions in middle; metasternum transverse, narrowed between hind coxae, hind margin faintly concave. Legs short, typical for the genus. Apterous. Abdomen enlarging gradually up to last tergite, weakly convex, punctulations obscurely marked, sides of segments 7th to 9th obtuse angled posteriorly, rugose except 7th one. Penultimate sternite transverse, finely pubescent, a few long hairs also present, hind margin rounded. Ultimate tergite transverse, smooth, weakly depressed in



Figs. 11-18. *Euborellia jeekeli* sp. nov., Holotype ♂. 11: Anterior portion of body, excluding legs and antennae; 12: A few basal antennal segments; 13: Hind tarsi; 14: Hind portion of abdomen and forceps in profile; 15: Base of forceps enlarged showing basal dorsal tooth in profile; 16: Posterior margin of penultimate sternite; 17: Ultimate tergite and forceps, apical portion of left arm of forceps broken off; 18: Genitalia.

middle posteriorly and laterally, faintly raised above the base of foreceps, laterally with a rugose fold, hind margin between base of forceps straight and above the branches oblique and concave. Pygidium vertical, transverse, narrowed apically in a weakly swollen lobe with faint median suture. Genitalia with parameres slightly longer than broad, apical margin oblique, forming an obtuse angle with external margin, distal lobes with short hooked virga.

♀: Unknown.

Measurements.-

Holotype ♂: length of body: 8.7 mm; length of forceps: 1.6 mm.

Remarks.-

This species comes very close to *Euborellia brunneri* (Dohrn) from Australia (S. Australia and Queensland) and Tasmania in having almost identical forceps and genitalia in the male; but the former differs in being smaller in size, pronotum transverse and sides of abdominal segments 7th to 9th ecarinate, rugose except 7th one which is obscurely punctulate.

Euborellia brunneri (Dohrn, 1864) was based on a ♂ from Australia, Adelaide. Burr (1910), who examined the holotype of this species, synonymised *Gonolabis verhoeffi* Burr, 1905, based on a ♂ from South Australia. Perhaps Burr's (1915: pl. 12, fig. 11) figure of the ♂ genitalia

lia of *G. brunneri* might have been taken from the holotype ♂ of *Gonolabis verhoeffi* Burr. In the original description of the latter it is mentioned that on the sides of the penultimate dorsal segment there is a sharp carina, reflexed posteriorly like in the genus *Ancistrogastris*.

On the strength of this structure, which is very distinctive, besides other minor differences, I wish to separate the described species from *Euborellia brunneri* (Dohrn).

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