

SPIXIANA	25	2	101–129	München, 01. Juli 2002	ISSN 0341–8391
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**New species and new records  
of Australian and Oriental Pseudomorphinae  
4<sup>th</sup> Supplement to the Revisions  
of the Pseudomorphinae of the Australian region**

(Insecta, Coleoptera, Carabidae)

**Martin Baehr**

Baehr, M. (2002). New species and new records of Australian and Oriental Pseudomorphinae. 4<sup>th</sup> Supplement to the Revisions of the Pseudomorphinae of the Australian Region (Insecta, Coleoptera, Carabidae). – Spixiana **25/2**: 101-129

New records of several Australian pseudomorphine species are presented. In addition, the following new species are described: *Sphallomorpha propinqua*, *Adelotopus bilyi*, *A. rugaticollis*, *A. wilochrae*, *A. lucidus*, and *A. laevigatus*, all from Australia; and *Cryptocephalomorpha gigantea* from Brunei, northern Borneo. The new species are inserted in the respective keys of the revision. For the *rubiginosus*-group a completely new key is provided. *Sphallomorpha mastersii proxima* Baehr is raised to full species rank. First records of pseudomorphine species collected in rain forest are presented.

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**Introduction**

During three recent collecting trips through the northern parts of Northern Territory and Western Australia in July-August 1995, to southern Queensland, western New South Wales, north-western Victoria, and southeastern South Australia in December 1998- January 1999, and through eastern and northeastern Queensland in March-April 2001 I collected several pseudomorphine species by means of umbrella sampling and by fogging from tree trunks. These trips revealed many records of yet described species, but also some new species. The new *Adelotopus* species collected in 1995 have been already included in the second part of my revision of the Australian Pseudomorphinae (Baehr 1997), those detected during the more recent

trip to southern central Australia are described herein.

Included is also a new species of *Sphallomorpha* collected by F. Wachtel (München) in southern Queensland, another new species of *Adelotopus*, collected by S. Bily in northern Queensland, and a new species of *Cryptocephalomorpha* from Brunei (Borneo) from the collections of The Natural History Museum, London, that were sent too late to be included in the respective revisions.

Some records of Pseudomorphinae from the Museum and Gallery of the Northern Territory, Darwin, Queensland Museum, Brisbane, Western Australian Museum, Perth, The Museum of Natural History, London, Museum National de l'Histoire Naturelle, Paris, Narodni Museum, Praha, Naturhistorisches Museum,

Basel, Museo Civico di Storia Naturale, Torino, the collection of the Cooperative Research Centre for Tropical Rainforest Ecology and Management, Cairns, and from the Collection of V. Bejsak, Sydney, that I identified recently, are included in this list. New records of altogether 74 Australian pseudomorphine species are given. Most records are from within the known range, even when this range was only estimated from few scattered records. In some species, however, range extensions are recorded and only in these species a note about the extended range is added. The first records of species inobjectionably collected in rain forest somewhat change the opinion expressed in Baehr (1992, 1997) that Pseudomorphinae in Australia are a group of beetles living strictly subcorticolous in open sclerophyll forests.

Format and style of the descriptions correspond to those in my revisions and the supplements (Baehr 1992, 1993a,b, 1994b, 1997).

The species are arranged in the same sequence as in the revisions. For all species only the page number of the revisions are given where additional information about original description, further literature records, and distribution may be found. For further information about phylogenetic relations of the pseudomorphine genera see Baehr (1994a).

Specimens collected by me without further specification of collecting circumstances were collected from under bark of gum-type eucalypts.

#### Abbreviations of collections mentioned in text

BMNH	The Natural History Museum, London
CBM	Working Collection M. Baehr, München
CBS	Collection B. Bejsak, Sydney
CRC	Cooperative Research Centre for Tropical Rainforest Ecology and Management, Cairns
MCST	Museo Civico di Storia Naturale, Torino
MHNN	Museum National de l'Histoire Naturelle, Paris
MNTD	Northern Territory Museum, Darwin
NHMB	Naturhistorisches Museum, Basel
NMP	Narodní Museum, Praha
QMB	Queensland Museum, Brisbane
WAM	Western Australian Museum, Perth
ZSM	Zoologische Staatssammlung, München

#### Genus *Sphallomorpha* Westwood

Baehr 1992, p. 15.

#### *Sphallomorpha froggatti* (Macleay)

Baehr 1992, p. 63.

**New records:** QLD: Laura, 17.1.2000, S. Bily leg. (NMP). – NT: A. Douglas, leg. 13.IX.1964 Adelaide River (WAM 94/871-873); NT 95/44, Victoria River, 5 km w. Victoria River Cr., 24.-25.8.1995, M. Baehr (CBM, ZSM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM).

#### *Sphallomorpha tropicalis* Baehr

Baehr 1992, p. 67.

**New record:** NT: Timber Creek, 30.-31.I.1997, P. M. Giachino leg. (MCST).

**Note.** This is the first record of this rare species from Northern Territory.

#### *Sphallomorpha glabrata* Baehr

Baehr 1992, p. 75.

**New record:** WA: Kathleen Valley, T. Moriarty, leg. 1963 (WAM 94/870).

#### *Sphallomorpha fallax* (Westwood)

Baehr 1992, p. 79.

**New records:** VIC: VIC 98/53, 1 km s. Jeparit, 4.1.1999, M. Baehr (CBM).

#### *Sphallomorpha proxima* Baehr (stat. nov.)

Baehr 1992, p. 86.

Originally, this was described as a subspecies of the eastern *S. mastersii* (Macleay), mainly because of some apparent similarities in external and genitalic characters, and also because of limited knowledge of this taxon (only three specimens recorded). The additional male quoted below, however, corroborates the differences in male genitalic characters: e.g. the more spatulate apex of aedeagus, convex upper margin of left paramere, wider excision of male terminal sternite, as well as in external morphology: e.g. relatively wider elytra, more rugose surface of pronotum, and lesser size.

On these reasons, it is believed that that full species rank matches better the taxonomic status of *proxima* than subspecific rank.

**New records:** NT: 1♂, Tortilla Flats, 22.2.1961, G. S. Li (MNTD).

***Sphallomorpha boops* (Blackburn)**

Baehr 1992, p. 87.

**New records:** NT: NT 95/51, Litchfield NP, 30 km w. Batchelor, 29.8.1995, M. Baehr (CBM); NT 95/48, 30 km n. Edith River Cr., 28.8.1995, M. Baehr (CBM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM, ZSM); NT 95/16, Victoria River Cr., 8.-9.8.1995, M. Baehr (CBM); NT 95/45, Victoria River Cr., 25.8.1995, M. Baehr (CBM); NT 95/44, Victoria River, 5 km w. Victoria River Cr., 24.-25.8.1995, M. Baehr (CBM); NT 95/41, 70 km e. Kununurra, 23.8.1995, M. Baehr (CBM).

***Sphallomorpha communis* Baehr**

Baehr 1992, p. 90.

**New records:** VIC: VIC 48, Lascelles, 1.1.1999, M. Baehr (CBM). – NSW: NSW 29, Darling R. Paramarook L., 15 km nne. Menindee, 25.-26.12.1998, M. Baehr (CBM); NSW 34, Anabranch, 65 km n. Wentworth, 28.12.1998, M. Baehr (CBM).

***Sphallomorpha lata* Baehr**

Baehr 1992, p. 100.

**New record:** NT: Katherine, 18.-27.III./1.IV.1996, P. M. Giachino leg. (MCST).

**Note.** This is the first record of this rare species from Northern Territory. This species, like some others of the *lata*-group, proves to be more widely distributed in tropical northern Australia, as collecting efforts are intensified.

***Sphallomorpha lustrans* Baehr**

Baehr 1992, p. 103.

**New records:** NT: Eldo, 8 ml. S. of Gove Airport, 12-16.I.1971, T. Weir & A. Allwood (MNTD); October Ck. 100 ml E of Daly Waters on Borroloola Rd. 21.III.1972, N. W. Forrester (MNTD); NT 95/55, 4 km e. Humpty Doo, 30.8.1995, M. Baehr (CBM); NT 95/48, 30 km n. Edith River Cr., 28.8.1995, M. Baehr (CBM).

***Sphallomorpha minor* Baehr**

Baehr 1992, p. 105.

**New records:** NT: Timber Creek, 20.XII.1998 (MCST).

**Note.** This is the first record of this species from Northern Territory.

***Sphallomorpha darwini* Baehr**

Baehr 1992, p. 109.

**New records:** NT: NT 95/54, 45 km w. Mary River, 30.8.1995, M. Baehr (CBM); NT 95/55, 4 km e. Humpty Doo, 30.8.1995, M. Baehr (CBM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM).

***Sphallomorpha denisonensis* (Castelnau)**

Baehr 1992, p. 116.

**New records:** NT: NT 95/51, Litchfield NP, 30 km w. Batchelor, 29.8.1995, M. Baehr (CBM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM, ZSM). – WA: WA 95/37, Frog Hollow Creek, 136 km n. Halls Creek, 21.8.1995, M. Baehr (CBM).

***Sphallomorpha difficilis* (Blackburn)**

Baehr 1992, p. 127.

**New record:** QLD: Tambourine Mtn., 27°57'24"S, 153°11'17"E, 10.II.1992, K. J. Lambkin (QMB).

***Sphallomorpha semistriata* (Castelnau)**

Baehr 1992, p. 135.

**New record:** NSW: Landsdowne, 19.IX.87, V. R. Bejsak, lgt. (CBS); Warrumbungle NP nr. Coonabarabran, XII.1997 (CBM). – QLD: Kuranda, 4 km NW. 5.XII.1988 (CBS); Helensvale, 3.XII.1988, V. R. Bejsak (CBS).

**Note.** The specimens from Queensland were collected at UV light.

***Sphallomorpha laevigata* (Castelnau)**

Baehr 1992, p. 138.

**New records:** NSW: Moorebank, Liverpool Rg. 7.-30.IX.1981 (NHMB). – QLD: SEQ: 25°40'S × 151°26'E, Nipping Gully, site4, 9.X.-18.XII.1998, Monteith & Gough (QMB).

**Note.** One specimen caught in flight intercept trap in open forest.

***Sphallomorpha laevis* (Castelnau)**

Baehr 1992, p. 154.



**New records:** NT: NT 95/51, Litchfield NP, 30 km w. Batchelor, 29.8.1995, M. Baehr (CBM); NT 95/2, Mary River, 115 km e. Darwin, 29.-30.7.1995, M. Baehr (CBM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM); NT 95/16, Victoria River Cr., 8.-9.8.1995, M. Baehr (CBM); NT 95/18, Skull Ck., 50 km wsw. Victoria River Cr., 9.8.1995, M. Baehr (CBM).

### *Sphallomorpha polita* (Macleay)

Baehr 1992, p. 157.

**New record:** QLD: QLD 1, Sandy Ck., 10 km w. Gatton, 16.12.1998, M. Baehr (CBM).

### *Sphallomorpha parva* Baehr

Baehr 1992, p. 166.

**New records:** NT: 12.48S, 132.42E, Nourlangie Ck. 8 km N. of Mt. Cahill, 16.VI.1973, T. Weir & T. Angeles (MNTD); NT 95/51, Litchfield NP, 30 km w. Batchelor, 29.8.1995, M. Baehr (CBM); NT 95/48, 30 km n. Edith River Cr., 28.8.1995, M. Baehr (CBM); NT 95/11, Edith River Cr., 60 km n. Katherine, 6.-7.8.1995, M. Baehr (CBM); NT 95/47, 5 km e. Edith River Cr., 60 km n. Katherine, 27.-28.8.1995, M. Baehr (CBM, ZSM); NT 95/41, 70 km e. Kununurra, 23.8.1995, M. Baehr (CBM).

### *Sphallomorpha transversalis* Baehr

Baehr 1992, p. 180.

**New records:** NSW: Maxville, leg. Wachtel 12.94 (CBM); Blue Mountains N.P. Mt. Wilson, m 900, 16.XII.1998, P. M. Giachino leg (MCST).

### *Sphallomorpha discoidalis* (Castelnau)

Baehr 1992, p. 214.

**New record:** NSW: Barrington Tops, Polblue Swamp, 27.2.1999, B. Baehr (CBM).

### *Sphallomorpha thouzeti* (Castelnau)

Baehr 1992, p. 216.

**New record:** QLD: The Lynd Junction, 29.1.-3.2. 2000, S. Bily leg. (NMP).

### *Sphallomorpha propinqua*, spec. nov.

Figs 1, 8, 15

**Types.** Holotype: ♂, Australia, Qld, Brisbane res. Brown Plains 12.97, leg. Wachtel (CBM-ZSM).

**Diagnosis.** Small, egg shaped, convex, dark piceous species with faintly lighter pronotum and narrow, ovalish, yellow sutural stripe. Further distinguished by asymmetrical labrum; presence of preorbital seta though absence of anterior and posterior pronotal setae; presence of a single seta on ♂ abdominal sternum VII; compact, symmetric aedeagus with straight apex; and markedly elongate, straight parameres with straight apex.

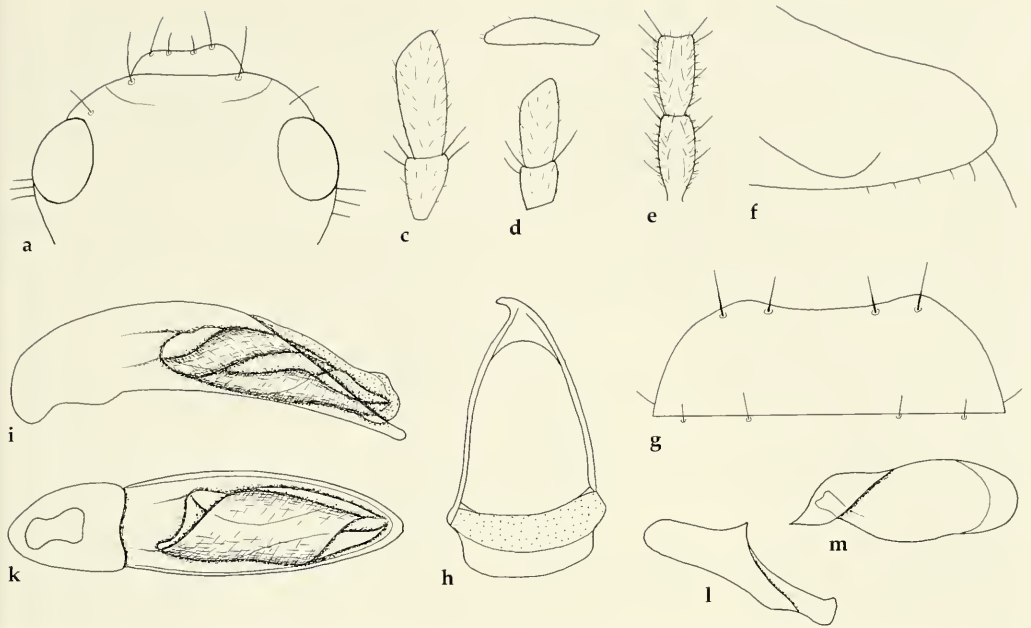
### Description

**Measurements.** Length: 4.6 mm. Ratios: Width pronotum/head: 1.66; width elytra/pronotum: 1.08; width/length of pronotum: 2.36; length/width of elytra: 1.20; length elytra/pronotum: 3.06.

**Colour** (Fig. 8). Head and elytra dark piceous, pronotum very faintly lighter, elytra with narrow, elongate, dark yellowish sutural stripe that neither attains base nor apex. Laterally the stripe attains position of 2<sup>nd</sup> stria. Lateral borders of pronotum and elytra very narrowly reddish translucent. Labrum and mouth parts reddish, antenna yellow. Lower surface of head piceous, moderately contrasting to dark reddish rest of ventral surface. Legs reddish, femora yellow.

**Chetotaxy** (Figs 1a,g). Supraorb: –; preorb: 1; clyp: 1; labr: 4; ment.med: 2; ment.lat: 5-6 short; gloss: 5; gul: 2; postorb: 2; suborb: 5-6; pron. ant: –; pron.post: –; proeps: 1+1; marg: 13-14; st VI: 2; ♂ st VII: 1; ♀ st VII: ?.

**Head** (Figs 1a-e). Moderately wide, rather convex, frontal impressions very shallow, inconspicuous. Clypeus very feebly concave, clypeal suture moderately conspicuous, within shallow impression, rather elongate. Lateral border of head oblique, evenly though feebly convex. Labrum wide, rather rectangular, medially feebly excised, slightly asymmetric, right part more projecting than left, both anteriorly straight. Mentum with rather convex prominence. Wings of mentum short, wide, apex rounded, subapically straight, medially moderately oblique. Glossa wide, moderately excised, border not markedly sharp. Dorsal part surpassing ventral, gently sinuate in middle, apparently without hairs. Terminal palpomere of labial palpi rather elongate, little widened, with very oblique apex, of maxillary palpus comparatively large, not attenuate. Galea cylindrical, not attenuate. Median antennomeres



**Fig. 1a-m.** *Spallomorpha propinqua*, spec. nov. Details of head, prosternum, and male genitalia. **a.** Dorsal surface of head. **b.** Galea. **c.** Terminal palpomeres of labial palpus. **d.** Terminal palpomeres of maxillary palpus. **e.** 5<sup>th</sup> and 6<sup>th</sup> antennomeres. **f.** Prosternal process. **g.** ♂ sternum VII. **h.** ♂ genital ring. **i.** Lateral view of aedeagus. **k.** Lower surface of aedeagus. **l.** Right paramere. **m.** Left paramere.

<2 × as long as wide. Microreticulation distinct, rather coarse, though superficial, punctures fairly sparse, minute, rather difficult to see within microreticulation. Surface with some transverse striae laterally of clypeal suture, not pilose, fairly glossy. Palpi with fine, sparse pilosity. Galea with some short hairs on anterior surface and at apex. Ventral surface with few scattered hairs.

**Pronotum.** Moderately wide, rather convex. Apex with deep, straight excision, anterior angles projecting, acute, only the very apex slightly convex. Lateral border feebly convex, widest immediately at posterior angles. Base slightly bisinuate, slightly concave. Lateral margins with very fine border line. Discal impressions absent. Microreticulation rather superficial, puncturation minute, almost invisible, moderately sparse, surface without pilosity, glossy.

**Elytra.** Fairly wide, convex, evenly rounded from base to the fairly wide, convex apex, widest near base. Striae almost absent, only three inner striae near apex recognizable as rows of extremely fine, longitudinal striae. Intervals absolutely flat. Series of marginal pores

almost uninterrupted. Microreticulation fairly distinct, though highly superficial, puncturation rather sparse, irregular, minute, more or less easily visible, surface glossy.

**Lower surface (Figs 1f,g).** Prosternal process moderately elongate, rather wide, apex oblique, straight, ventral surface convex, feebly curved to apex, with a long seta near apex and several short hairs. Metepisternum c. 1.4 × as long as wide.

**Legs.** Moderately elongate. Metatarsus considerably shorter than metatibia. Tarsi sparsely pilose. 1<sup>st</sup> tarsomere of metatarsus c. 0.9 × as long as 2<sup>nd</sup> and 3<sup>rd</sup> tarsomeres together.

**♂ genitalia (Figs 1g-m).** Sternum VII moderately wide, with extremely shallow excision. Genital ring moderately wide, basal border slightly convex, lateral angles rounded, basal plate moderately elongate, anteriorly barely excised, arms gently oblique. Aedeagus compact, not sinuate, symmetric, apex moderately convexly rounded, straight. Orifice short. Internal sac short, inconspicuously microtrichiate, for pattern see figs 1i,k. Both parameres elongate, remarkably straight, with elongate

apex, lower margins barely convex or sinuate.  
♀ genitalia. Unknown.  
Variation. Unknown.

**Habits.** Virtually unknown. Holotype collected in December under bark of eucalypt.

**Distribution** (Fig. 15). Southeastern Queensland. Known only from type locality.

**Material examined** (1). Only the holotype.

**Etymology.** The name refers to the close relationship with other species of the group.

**Relationships.** According to chetotaxy, shape of terminal male sternum and body shape and pattern, this species is most closely related to both *S. thouzetoides* Baehr and *S. carnavona* Baehr.

**Recognition.** With respect to the presence of a narrow sutural stripe in *S. propinqua* the key in the third supplement (Baehr 1994b, pp. 224-226) of my revision (Baehr 1992) can be followed on to caption 156. This caption then must be altered as following (figures of the respective papers are inserted as **B92**, **B93**, **B94** fig.):

- 156 Pronotum not lighter coloured than rest of body. Posterior pronotal seta variable. 17-19 elytral marginal pores present. Elytral spot either parallel and broadly attaining base of elytra (**B92** fig. 284), or elliptical (**B94** fig. 9), in latter case length >5.9 mm, aedeagus with spatulate apex, left paramere strongly bent up, and right paramere without widened lower border (**B94** figs 2i-l) ..... 156a.
- Pronotum more or less distinctly lighter coloured than head and elytra. Posterior pronotal seta always absent. Only 13-16 elytral marginal pores present. Elytral spot either elongately triangular (**B92** fig. 290), or narrow elliptical (**B92** fig. 292; **B93** fig. 7; fig. ), in latter case length <5.4 mm, aedeagus at apex not spatulate, left paramere not strongly bent up, and right paramere with widened lower border (**B92** figs 134k-m; **B93** figs 2k-m; figs 1k,m) ... ..... 157.
- 156a. Elytral spot parallel and broadly attaining base of elytra (**B92** fig. 284). Two elongate gular setae only present. ♂ unknown. Northern Qld ..... *centroplagiata* Baehr

- Elytral spot elliptical or rather circular, not attaining base of elytra (**B94** figs 8, 9). An additional short median gular seta present. Aedeagus with spatulate apex, left paramere markedly bent up (**B94** figs 2i,l). Northeastern Qld ..... *guttifera* (Castelnau)
157. Larger (5.6-7 mm), longer (ratio l/w of elytra 1.26-1.28) species. Sutural spot usually wider (**B92** fig. 290). Vic, ACT, NSW ..... *discoidalis* (Castelnau)
- Smaller (<5.5 mm), shorter (ratio l/w of elytra <1.22) species. Sutural spot narrower (**B92** fig. 292; **B93** fig. 7; fig. 8) ..... 157a.
- 157a. Smaller (4.6 mm). Only 13-14 elytral marginal pores present. Apex of aedeagus not bent down (Fig. 1i), both parameres elongate and rather straight (Figs 1l,m). Southeastern Queensland ..... *propinqua*, spec. nov.
- Larger (>5 mm). 16-17 elytral marginal pores present. Apex of aedeagus bent down (**B92** fig. 134i, **B93** fig. 2i), both parameres elongate and rather straight (**B92** figs 134l,m; **B93** figs 2l,m). Central and northeastern Queensland ..... 157b.
- 157b. Sutural spot wider, attaining base and almost apex. Pronotum wider and shorter (ratio l/w of pronotum 2.52, length ratio elytra/pronotum 3.22-3.26). Microreticulation of elytra distinct, puncturation sparse. Left paramere markedly sinuate near apex, apex distinctly attenuate (**B92** fig. 134m). Northeastern Qld ..... *thouzetoides* Baehr
- Sutural spot narrower, neither attaining base nor apex (**B92** fig. 7). Pronotum narrower and longer (ratio l/w of pronotum 2.28, length ratio elytra/pronotum 3.07). Microreticulation of elytra absent, puncturation distinct, rather dense. Left paramere barely sinuate near apex, apex not markedly attenuate (**B93** fig. 2m). Central Qld ..... *carnavona* Baehr



***Sphallomorpha v-lineata* Baehr**

Baehr 1992, p. 229.

**New records:** QLD: NEQ: 16°05'S × 145°26'E, C. Tribulation transect, Site 8. 17.XI.1998, Monteith & Bouchard, 750 m (QMB); Cape Tribulation, 16.04S 145.28 E 23.I.1991, R. L. Kitching (CRC).

**Note.** As both mentioned specimens were collected in rain forest by fogging moss-covered tree trunks, this is the first definite record of any pseudomorphine species occurring in rain forest. Certainly this way of life is secondary which is corroborated by the phylogenetically rather apotypic position of the *dupla*-group to which *v-lineata* belongs.

***Sphallomorpha maculata* (Newman)**

Baehr 1992, p. 235.

**New records:** SA: SA 69, 15 km nnw. Pt. Augusta, 11.1.1999, M. Baehr (CBM). – VIC: VIC 48, Wyperfeld NP, L. Brambuck, 1.-2.1.1999, M. Baehr (CBM). – NSW: NSW 22, 18 km sw. Wilcannia, 22.12.1998, M. Baehr (CBM).

**Note.** Both the New South Wales and Victoria records are very far inland and considerably extend the range of this species. Most specimens collected by fogging rough-barked eucalypts.

***Sphallomorpha hydroporoides* (Westwood)**

Baehr 1992, p. 243.

**New records:** SA: Adelaide, *Pseudomorpha hydroporoides* Adelaide (NHMB); SA 61, Murray R. 3 km e. Waikerie, 6.1.1999, M. Baehr (CBM); SA 62, 5 km w. Morgan, 7.1.1999, M. Baehr (CBM); SA 66, 6 km n. Wilpena, Flinders Rge., 8.1.1999, M. Baehr (CBM). – NSW: NSW 12, Bulga Ck., 15 km ne. Gilgandra, 19.12.1998, M. Baehr (CBM); NSW 26, Kinchega NP, Darling R., 20 km ssw. Menindee, 23.-24.12.1998, M. Baehr (CBM).

***Sphallomorpha quadrimaculata* (Macleay)**

Baehr 1992, p. 246.

**New record:** NSW: NSW 6, Maynes Lagoon, 20 km s. Goondiwindi, 17.-18.12.1998, M. Baehr (CBM).

**Note.** The new record is just from outside the known range. It is also the first record for New South Wales.

***Sphallomorpha quadriplagiata* Baehr**

Baehr 1992, p. 251.

**New record:** NT: 12.43S 132.54E 14 km S by E of Mudginberry H.S., 11.VI.1973 T. Weir & A. Allwood (CBM, MNTD).

**Note.** This is apparently a species of extreme northern Northern Territory that was known hitherto from two specimens only collected in Kakadu National Park. Additional two specimens slightly extend the recorded range.

***Sphallomorpha versicolor* Baehr**

Baehr 1992, p. 253.

**New record:** NT: NT 95/5, Kakadu NP, Cahills Crossing, 1.-2.8.1995, M. Baehr (CBM).

**Note.** This species was so far recorded only from the holotype. An additional specimen was now collected likewise at Kakadu National Park in the extreme northern part of Northern Territory.

***Sphallomorpha macleayi* (Masters)**

Baehr 1992, p. 255.

**New records:** NT: NT 95/53, 3 km w. Mary River, 30.8.1995, M. Baehr (CBM); NT 95/48, 30 km n. Edith River Cr., 28.8.1995, M. Baehr (CBM, ZSM).

***Sphallomorpha maculigera* (Macleay)**

Baehr 1992, p. 274.

**New record:** NSW: Narabri Mt. Kaputar 1500m 29.11. 1984 leg. W Heinz Muche (NHMB). – QLD: St. Lawrence, Waverley Ck., 27.XI.1987, Vr. R. Bejsak lgt. (CBS).

***Sphallomorpha suturalis* Germar**

Baehr 1992, p. 278.

**New records:** SA: Adelaide, *Sphallomorpha suturalis* Germ. (NHMB); SA 57, 18 km s. Loxton, 5.1.1999, M. Baehr (CBM); SA 61, Murray R. 3 km e. Waikerie, 6.1.1999, M. Baehr (CBM); SA 62, 5 km w. Morgan, 7.1.1999, M. Baehr (CBM); SA 66, 8 km n. Wilpena Pound, Flinders Ranges, 8.1.1999, M. Baehr (CBM). – VIC: VIC 42, 30 km ese. Ouyen, 31.12.1998, M. Baehr (CBM); VIC 45, 8 km e. Lascelles, 1.1.1999, M. Baehr (CBM); VIC 47, Lake Albacutya, 16 km nw. Rainbow, 1.1.1999, M. Baehr (CBM). – NSW: NSW 12, Bulga Ck., 15 km ne. Gilgandra, 19.12.1998, M. Baehr (CBM); NSW 16, 75 km e. Cobar, 20.12.1998,

M. Baehr (CBM); NSW 26, Kinchega NP, Darling R., 20 km ssw. Menindee, 23.-24.12.1998, M. Baehr (CBM); NSW 32, Yarcowinna Ck., 35 km s. Broken Hill, 27.12.1999, M. Baehr (CBM). – **QLD**: QLD 3, L. Broadwater, 35 km ssw. Dalby, 16.-17.12.1998, M. Baehr (CBM); QLD 4, 5 km n. L. Broadwater, 30 km ssw. Dalby, 17.12.1998, M. Baehr (CBM); Bedourie, 7.3.1999, B. Baehr (CBM). – **NT**: N. Terr IV-71 (NHMB).

**Note.** Some specimens collected by fogging from bark of Mallee eucalypts.

### *Sphallomorpha unicolor* Baehr

Baehr 1992, p. 283.

**New records:** **NT**: NT 95/55, 4 km e. Humpty Doo, 30.8.1995, M. Baehr (CBM); NT 95/48, 30 km n. Edith River Cr., 28.8.1995, M. Baehr (CBM); NT 95/41, 70 km e. Kununurra, 23.8.1995, M. Baehr (CBM); Victoria River, 150 km w. di Katherine, 21.III.1991, Brutti leg (MCST). – **WA**: WA 95/24, Durack River, 87 km w. Pentecost River, 11.-12.8.1995, M. Baehr (CBM).

### *Sphallomorpha uptoni* Baehr

Baehr 1992, p. 307.

**New records:** **NT**: Karama, 11.VII.1981 C. Wilson (MNTD); Berrimah 21.XI.1973 R. Fox ex light trap (MNTD); October Ck. 100 ml E of Daly Waters on Borroloola Rd. 21.III.1972 N. WQ. Forrester (MNTD); East Alligator R. 10 ml. S. W. Oenpelli Mission 22.VI. 1971 A. Allwood & T. Angeles, near *rockhamptonensis* (MNTD); NT 95/53, 3 km w. Mary River, 30.8.1995, M. Baehr (CBM, ZSM).

### *Sphallomorpha centralis* (Macleay)

Baehr 1992, p. 309.

**Rew records:** **NT**: NT 95/20, NT 95/42, West Baines River Cr. with Victoria Hwy, 9.-10.8. and 23.-24.8.1995, M. Baehr (CBM, ZSM).

### *Sphallomorpha albopicta* (Newman)

Baehr 1992, p. 318.

**Rew records:** **SA**: SA 79, 20 km n. Clare, 13.1.1999, M. Baehr (CBM). – **NSW**: Greta N. S. W. 1951 J. Sedlacek (NHMB). – **?**: Australia, *biplagiata*, *Sphallomorpha bimaculata biplagiata* Cast. (NHMB); Australien (NHMB).

### *Sphallomorpha meyeri* Baehr

Baehr 1992, p. 332.

**New record:** **QLD**: Cacoory Ruins, 80 km N. Birdville, w. Qld. 6, V. 1993, Monteith, Janetzki & Sheridan (QMB).

**Note:** An inland species, the mentioned specimen is the first record from Queensland.

### *Sphallomorpha picta* (Castelnau)

Baehr 1992, p. 338.

**New records:** **QLD**: Gunalda 4.XII.82 (NHMB); QLD 1, Sandy Ck., 10 km w. Gatton, 16.12.1998, M. Baehr (CBM); MEQ: 23°12'S × 149°45'E, Boomer Rge, Site2, 28.-30.IX.1999, Monthieith & Cook (QMB).

**Note:** One specimen collected in "open forest in dung pitfall" which certainly is an uncommon record.

### *Sphallomorpha amabilis* (Castelnau)

Baehr 1992, p. 343.

**New records:** **QLD**: Laura, 17.1.2000, S. Bily leg. (NMP). – **NT**: Victoria River, 150 km w. di Katherine, 21.III.1991, Brutti leg (CBM, MCST).

**Note:** The single specimen from Laura shows the *ornata*-pattern (see redescription in Baehr 1992, p. 343). This is the second record for this pattern-type from Queensland.

### *Sphallomorpha flavicollis* (Macleay)

Baehr 1992, p. 347.

**New record:** **NT**: Crystal Falls, Biddlecomb, Nitmiluk NP, 17.-18.III.1995, Monteith & Janetzki (QMB).

**Note:** A specimen with typical pattern from within the recorded range. This seems to be a rather rare species.

### Genus *Pseudomorpha* Kirby

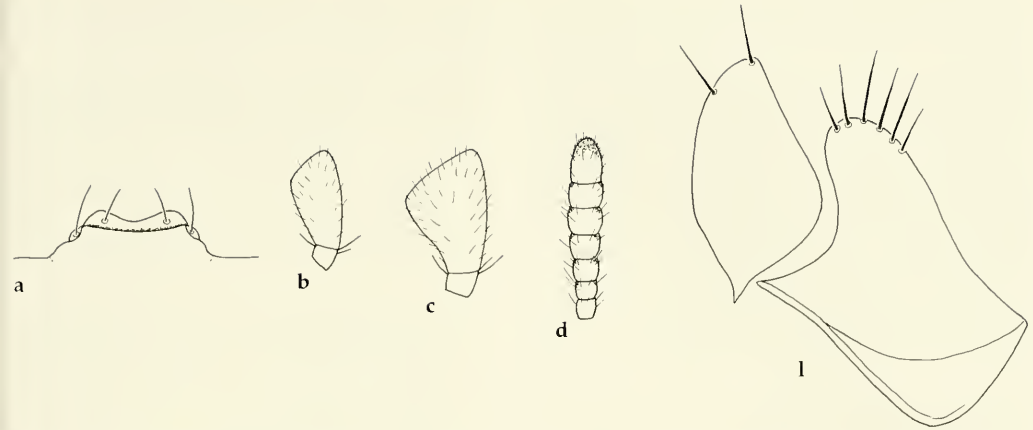
Baehr 1997, p. 41.

**Note.** In Australia only species of the subgenus *Austropseudomorpha* Baehr occur.

### *Pseudomorpha brevis* Baehr

Baehr 1997, p. 49.





**Fig. 2a-d,l.** *Adelotopus bilyi*, spec. nov. Details of head and ♀ genitalia. **a.** Labrum. **b.** Lower surface of terminal palpomeres of maxillary palpus. **c.** Lower surface of terminal palpomeres of labial palpus. **d.** 5<sup>th</sup>-11<sup>th</sup> antennomeres. **l.** ♀ stylomeres and lateral plate.

**New record:** **WA:** 1♂ (partly damaged), Yallingup, Nr Cape Naturaliste, S. W. Australia/ Sep.14-Oct.31, 1913, R. E. Turner, 1914-27. (BMNH).

**Note.** This species was so far known only from three specimens and from the extreme south-western corner of Western Australia. The new record is very close to the locality of two paratypes.

### Genus *Adelotopus* Hope

Baehr 1997, p. 51.

#### *Adelotopus dytiscides* Newman

Baehr 1997, p. 77.

**New records:** **VIC:** Museum Paris, Melbourne (env.), 210-59 (MNHN); Museum Paris, Australie, Deyrolle 1854 (MNHN).

#### *Adelotopus apicalis* Macleay

Baehr 1997, p. 86.

**New record:** **QLD:** QLD01/38, Burdekin River, 6 km e. Clarke River, 15.4.2001, M. Baehr (CBM).

#### *Adelotopus bilyi*, spec. nov. (Figs 2, 9, 15)

**Types.** Holotype: ♀, N. Queensland, 28.1.2000, Porcupine Gorge, Sv. Bily leg. (CBM-ZSM).

**Diagnosis.** Medium-sized, rather wide, dull,

completely reddish species with explanate, rectangular margin of pronotum. Distinguished from most closely related *A. rufescens* Baehr, by more convex pronotum with less explanate margins, and by longer elytra.

### Description

**Measurements.** Length: 6.6 mm. Ratios. Width/length of pronotum: 1.87; width base/apex of pronotum: 1.79; width pronotum/head: 1.89; length/width of elytra: 1.40; length elytra/pronotum: 2.59.

**Colour** (Fig. 9). Upper and lower surface including mouth parts, antennae, and legs reddish, head piceous, centre of pronotum reddish-piceous.

**Head** (Figs 2a-d). Short and wide, rather depressed. Anterior border convex, lateral angle rounded, angle laterally slightly projecting, lateral borders oblique. Clypeal suture semicircular, in middle interrupted. Labrum narrow, apex concave. Antennal groove laterally sharply bordered, latero-posteriorly with carinate area. Mental tooth triangular, short, apex acute. Wings of mentum wide, laterally rounded, apex rectangular. Glossa wide, tongue-like, apically widely rounded, ventrally with distinct keel, at border with c. 12 elongate setae and additional pilosity on upper and lower surface and along border. Terminal palpomere of maxillary palpus rather narrow, barely securiform. Terminal palpomere of labial palpus rather wide, securiform. Antenna moderately short, 8<sup>th</sup> and 9<sup>th</sup>

antennomeres slightly  $<1.5 \times$  as wide as long. Microreticulation fine, isodiametric, rather distinct, puncturation very fine, rather dense, fairly difficult to see, surface with a shallow sulcus medially of eyes, rather sparsely and extremely shortly pilose, fairly dull. Ventrolaterally of eyes with a row of short setae. Suborbital field at least laterally punctate and setose. Both palpi rather sparsely setose, gula almost asetose.

Pronotum (Fig. 9). Wide, in middle rather convex, base wide, apex rather narrow. Apical angles produced, acute, attaining posterior half of eyes. Apex deeply, rectangularly excised, faintly convex in excision, faintly bordered. Margins anteriorly strongly curved, posteriorly feebly though distinctly curved, widest slightly in front of base. Sides faintly bordered, explanate, but not channeled. Basal angles almost rectangular, slightly produced backwards, apex obtuse. Base laterally concave, in middle produced, indistinctly bordered. Surface near base without distinct transverse impression. Microreticulation fine, though distinct, isodiametric to somewhat irregular, puncturation dense and moderately fine, surface with faint network of irregular striae, rather coriaceous, rather dense but very shortly pilose, dull.

Elytra (Fig. 9). Rather elongate, depressed, in basal two thirds parallel, then gently narrowed near apex. Apex rather wide, faintly oblique, truncature feebly convex, apical angles shortly rounded. Shoulders rather distinct, basal margin slightly oblique, without setae behind shoulders. Marginal channel rather narrow, completely visible from above. Basal border incomplete, reaching only to middle of base, ending abruptly. Lateral border asetose. Series of umbilical pores consisting of 6 pores behind shoulder. Setae very short. Striae including sutural stria absent. Microreticulation fine, though distinct, isodiametric, not coriaceous, puncturation fine, moderately dense, much finer and sparser than on pronotum, punctures in apical half somewhat rasp-like. Surface pilose, though pilosity extremely short and difficult to detect, surface rather dull.

Lower surface. Prosternal process rather elongate, narrow, straight, depressed, apex narrow, straight, faintly rounded off, shortly setose. Metepisternum moderately elongate, almost  $2 \times$  as long as wide, posteriorly not constricted nor hollowed. Abdominal sterna including sternum VI apparently without setae

at apical border. Lower surface densely punctate and pilose.

Legs. Elongate, 1<sup>st</sup> tarsomere of protarsus slightly longer than wide, tibial groove of profemur moderately deep, anterior plate only at apex distinctly overlapping the groove, posterior border of groove sharp. Femur comparatively narrow. Metatibia narrow and elongate, c.  $6 \times$  as long as wide, 1<sup>st</sup> tarsomere of metatarsus  $>2.5 \times$  as long as wide. ♂ protarsus unknown.

♂ genitalia. Unknown.

♀ genitalia (Fig. 21). Stylomere triangular, wide, apex rather wide, obliquely rounded off, with 2 subapical setae. Lateral plate rather elongate, with 5-6 apical setae.

Variation. Unknown.

Vivipary. Not confirmed.

**Habits.** Unknown.

**Distribution** (Fig. 15). Central northern Queensland. Known only from type locality.

**Material examined** (1). Only the holotype.

**Etymology.** The name is an acronym in honour of the collector.

**Relationships.** Certainly most closely related to the northwestern *A. rufescens* Baehr.

**Recognition.** For recognition the key in my revision (Baehr 1997) can be easily followed on to caption 96. This caption then must be altered as following (figures of the revision are inserted as **B97** fig.):

- 96. Generally larger, length 6.5-6.9 mm, with very wide pronotum with wide base, ratios w/l of pronotum  $>1.84$ , base/apex  $>1.74$ , width pronotum/head  $>1.84$ . Apical angles of pronotum remarkably elongate (**B97** fig. 113; fig. 9) ..... 96a.
- Generally smaller, length  $<6.55$  mm, with narrower pronotum and narrower base, ratio w/l of pronotum usually  $<1.83$ , commonly  $<1.8$ , base/apex  $<1.63$ , width pronotum/head  $<1.74$ . Apical angles of pronotum less elongate (**B97** figs 114, 298, 302-307) ..... 97.
- 96a. Body wide, markedly depressed (**B97** fig. 113), elytra shorter, ratio l/w of elytra  $<1.33$ . Colour uniformly light reddish. Aedeagus see **B97** figs 112g,h. n. WA .....  
..... *rufescens* Baehr

- Body narrower, less depressed (Fig. 9), elytra longer, ratio l/ w of elytra 1.40. Colour reddish, head and centre of pronotum piceous. Aedeagus unknown. n. QLD ..... *bilyi*, spec. nov.

*Adelotopus longus longus* Baehr

Baehr 1997, p. 110.

**New record:** QLD: QLD01/4, Gayndah, Burnett River, 26.-27.3.2001, M. Baehr (CBM).

*Adelotopus longus tropicus* Baehr

Baehr 1997, p. 112.

**New record:** QLD: Davis Creek, 15.1.2000, S. Bily leg. (NMP).

*Adelotopus politus* Castelnau

Baehr 1997, p. 131.

**New records:** QLD: SEQ: 26°12'S × 151°44'E, Key-  
sland, 29.X.1994-26.I.1995, G. Monteith (QMB);  
SEQ: 25°27'S × 151°23'S, Gurgeena Plat., 18.XII.  
1998-27.I. 1999, G. Monteith & Gough (QMB); SEQ:  
25°33'S × 151°28'E, Binjour, Redvale Road, 20.XII.  
1997-26.IV. 1998, G. Monteith (QMB); Nipping Gul-  
ly, site4, 26.I.-2.VI.1999, Monteith & Thompson  
(QMB).

**Note.** All specimens collected by flight inter-  
cept trap in open forest.

*Adelotopus sparsepunctatus* Baehr

Baehr 1997, p. 152.

**New records:** QLD: CQ: 19°44'S × 147°45'E, C. Up-  
start, Shark Bay, 24.IV.1998, G. Monteith (QMB);  
CEQ: 22°22'S × 149°34'E, St. Lawrence, 4 km ESE,  
2.VI.2000, GB Monteith (QMB); MEQ: 21° 37'S ×  
148°58'E, Blue Mt., 1 km S, 680m, 17.XII.1999-  
22.3.2000, Monteith (QMB); SEQ: 25°27'S × 151°23'S,  
Gurgeena Plat., 8.VI. 1999, GB Monteith (QMB);  
SEQ: 25°36'S × 149°46'E, Taroom, 6 km N, 21.IX.-  
17.X.1997, G. Monteith (QMB).

**Note.** The recorded specimens were captured  
by pyrethrum fogging “on trees” and “in vine  
scrub”, and in flight intercept trap in “wet scler-  
ophyll forest” and “brigalow” (*Acacia harpo-  
phylla*).

*Adelotopus bimaculatus bimaculatus* Baehr

Baehr 1997, p. 157.

**New record:** QLD: QLD01/9, Cania Gorge, 35 km  
n. Monto, 27.-29.3.2001, M. Baehr (CBM).

**Note.** The single specimen belongs to the “in-  
termediate population” sensu Baehr (1997: 159)  
which combines characters of both, the north-  
ern nominate subspecies and the southern sub-  
species *bimaculatus angustior* Baehr. This inter-  
mediate population is distributed in the Rock-  
hampton area from about Monto in the south  
to about Isaac River in the north.

*Adelotopus bimaculatus angustior* Baehr

Baehr 1997, p. 160.

**New record:** QLD: SEQ: 26°12'S × 151°44'E, Keys-  
land, 5.XII.1994-16.I.1995, G. Monteith (QMB); QLD  
01/4, Gayndah, Burnett River, 26.-27.3.2001, M.  
Baehr (CBM).

**Note.** One specimen was captured in flight in-  
tercept trap in open forest.

*Adelotopus languidus* Baehr

Baehr 1997, p. 161.

**New record:** QLD: Davis Creek, 15.1.2000, S.  
Bily leg. (NMP); The Lynd Junction, 29.1.-  
3.2.2000, S. Bily leg. (NMP).

*Adelotopus obsoletus* Baehr

Baehr 1997, p. 187.

**New records:** QLD: SEQ: 25°33'S × 151°28'E, Bin-  
jour, Redvale Road, 20.XII.1997-26.IV.1998, G. Mon-  
teith (QMB); SEQ: 25°40'S × 151°26'E, Nipping Gul-  
ly, site4, 26.I.-2.VI.1999, Monteith & Thompson  
(QMB).

**Note.** All specimens were captured in flight  
intercept trap.

*Adelotopus puncticollis puncticollis* Notman

Baehr 1997, p. 206.

**New records:** VIC: VIC 39, Hattah NP, 5 km n. L.  
Hattah, 30.12.1998, M. Baehr (CBM); VIC 44, Sea  
Lake, 1.1.1999, M. Baehr (CBM); VIC 45, 8 km e.  
Lascelles, 1.1.1999, M. Baehr (CBM). – NSW: NSW  
17, 145 km e. Wilcannia, 20.-21.12.1998, M. Baehr  
(CBM); NSW 24, Bonley Ck., 52 km sw. Wilcannia,  
22.12.1998, M. Baehr (CBM); NSW 27, Kinchega NP,



Emu L. 20 km sse. Menindee, 24.-25.12.1998, M. Baehr (CBM); NSW 32, Yarcowinna Ck., 35 km s. Broken Hill, 27.12.1999, M. Baehr (CBM).

**Note.** This seems to be an inland species that is quite common in rather dry environments. Some specimens were fogged from rough-barked eucalypts.

*Adelotopus rubiginosus* Newman

Baehr 1997, p. 210

**New records:** SA: SA 64, Wilochra Ck. 30 km s. Hawker, 7.-8.1.1999, M. Baehr (CBM). – VIC: VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM); VIC 56, 10 km w. Murrayville, 5.1.1999, M. Baehr (CBM). – NSW: NSW 6, Maynes Lagoon, 20 km s. Goondiwindi, 17.-18.12. 1998, M. Baehr (CBM); NSW 32, Yarcowinna Ck., 35 km s. Broken Hill, 27.12.1999, M. Baehr (CBM).

*Adelotopus foliaceus* Baehr

Baehr 1997, p. 216.

**New records:** NSW: NSW 6, Maynes Lagoon, 20 km s. Goondiwindi, 17.-18.12.1998, M. Baehr (CBM); NSW 9, Mt. Kaputar, 1500 m, 18.-19.12.1998, M. Baehr (CBM); NSW 13, Warren Weir, 3 km e. Warren, Macquarie R., 19.-20.12.1998, M. Baehr (CBM).

*Adelotopus laticollis* Baehr

Baehr 1997, p. 218.

**New records:** SA: SA 74, Mt. Remarkable NP, 6 km n. Melrose, 12.-13.1.1999, M. Baehr (CBM). – VIC: VIC 47, Lake Albacutya, 16 km nw. Rainbow, 1.1.1999, M. Baehr (CBM). – NSW: NSW 16, 75 km e. Cobar, 20.12.1998, M. Baehr (CBM); NSW 17, 145 km e. Wilcannia, 20.-21.12.1998, M. Baehr (CBM); NSW 21, L. Wytchugga, 6 km w. Wilcannia, 21.-22.12.1998, M. Baehr (CBM); NSW 22, 18 km sw. Wilcannia, 22.12. 1998, M. Baehr (CBM); NSW 26, Kinchega NP, Darling River, 20 km ssw. Menindee, 23.-24.12.1998, M. Baehr (CBM); NSW 28, Talyawalka Anabranch, 12 km e. Menindee, 25.12.1998, M. Baehr (CBM); NSW 31, Joes Hole Ck., 10 km ne. Acacia Downs, 26.12.1998, M. Baehr (CBM); NSW 32, Yarcowinna Ck., 35 km s. Broken Hill, 27.12. 1998, M. Baehr (CBM).

**Note.** The New South Wales records considerably extend the range inland, where this species apparently is rather common. Some specimens were fogged from rough-barked eucalypts, others caught from under bark of river gums.

*Adelotopus cribricollis* Baehr

Baehr 1997, p. 220.

**New records:** NSW: NSW 16, 75 km e. Cobar, 20.12. 1998, M. Baehr (CBM); NSW 17, 145 km e. Wilcannia, 20.-21.12.1998, M. Baehr (CBM).

**Note.** Both New South Wales records are far inland and they extend the range of this species considerably to the west.

*Adelotopus rugaticollis*, spec. nov.

Figs 3, 10, 16

**Types.** Holotype: ♀, Australia, NSW 28, Talyawalka Anabranch, 12 km e. Menindee, 25.12.1998, M. Baehr (ANIC).

**Diagnosis.** Medium-sized, completely reddish species, distinguished by rather narrow pronotum, convex body, rather dense, fine puncturation of head and elytra, coarser punctures and in particular coarse wrinkles on pronotum, and wide, apically rather narrowed stylomere. Further distinguished from the most closely related species *A. cribricollis* Baehr by pronotum with wider base and by presence of traces of microreticulation on elytra.

**Description**

**Measurements.** Length: 5.6 mm. Ratios. Width/length of pronotum: 1.53; width base/apex of pronotum: 1.48; width pronotum/head: 1.51; length/width of elytra: 1.50; length elytra/pronotum: 2.36.

**Colour** (Fig. 10). Upper and lower surface including mouth parts, antennae, and legs reddish, forebody faintly darker.

**Head** (Figs 3a-d). Rather short, fairly wide, rather depressed. Anterior border gently convex, lateral angle rounded, laterally faintly projecting, lateral borders slightly narrowed behind eyes. Clypeal suture only at base distinct, in middle widely interrupted. Labrum rather wide and short, moderately overlapped by the clypeus, apex fairly concave. Antennal groove laterally sharply bordered, latero-posteriorly with slightly convex area. Mental tooth triangular, rather short, apex acute. Wings of mentum wide, laterally rounded, apex obtuse. Glosa fairly wide, tongue-like, apically convex, ventrally with distinct keel, at border with c. 10-12 elongate setae. Terminal palpomere of maxillary palpus moderately widened, faintly se-

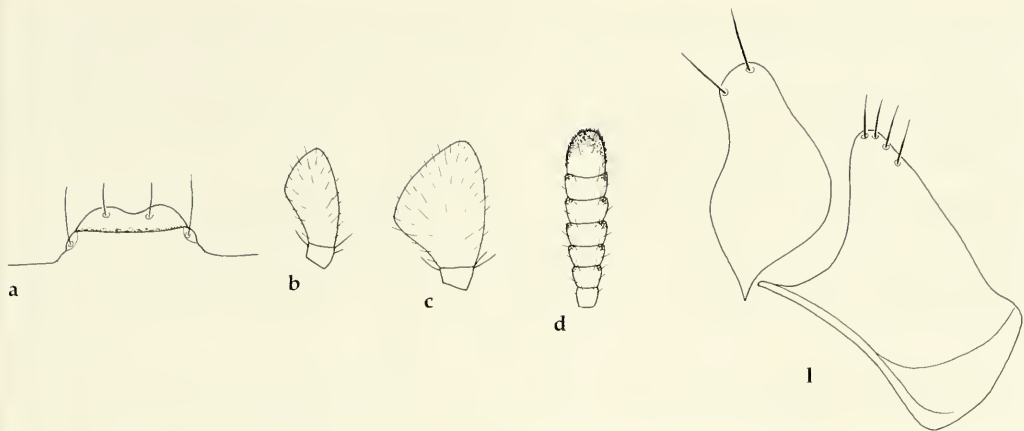


Fig. 3a-d, 1. *Adelotopus rugaticollis*, spec. nov. Details of head and ♀ genitalia. For legends see fig. 2.

curiform. Terminal palpomere of labial palpus very wide, markedly securiform. Antenna rather elongate, 8<sup>th</sup>-9<sup>th</sup> antennomeres slightly  $>1.5 \times$  as wide as long. Microreticulation fine though distinct, puncturation very fine, fairly dense. Surface with weak sulcus medially of eyes, with some oblique wrinkles, impilose, rather glossy. Ventrolaterally of eyes with a row of short setae. Suborbital field punctate and shortly setose. Gula impilose.

Pronotum (Fig. 10). Comparatively narrow, markedly convex, base distinctly wider than apex, lateral margins evenly curved, slightly incurved towards base, hence widest diameter situated at basal third. Apical angles moderately produced, at apex obtusely rounded, fairly oblique, surpassing posterior border of eyes. Apex fairly excised, markedly convex in excision, bordered. Margins moderately wide, rather channelled, finely bordered. Basal angles very widely rounded off. Base almost straight, laterally bordered, in middle almost unbordered. Surface near base with very shallow transverse impression. Microreticulation much reduced, highly superficial, on disk only faint traces visible, puncturation in middle rather coarse, laterally even coarser, moderately dense. Surface with many coarse wrinkles, rugose, impilose, highly glossy.

Elytra (Fig. 10). Rather wide, highly convex, barely depressed on disk, rather parallel, faintly narrowed in basal third. Lateral borders almost straight. Apex wide, slightly oblique, truncature barely convex, apical angles widely rounded off.

Shoulders rounded, basal margin slightly oblique, without setae behind shoulders. Marginal channel moderately wide, partly concealed. Basal border incomplete, attaining outer third of base. Lateral margin asetose. Series of umbilical pores consisting of 6 rather spaced pores behind shoulder. Setae fairly elongate. Striae including sutural stria absent. Microreticulation visible though highly superficial, puncturation fine, moderately sparse, punctures slightly rasp-like, surface impilose, moderately glossy.

Lower surface. Prosternal process rather short, narrow, convex, apex very short, narrow, compressed, passing over in an almost right angle from ventral surface, shortly setose. Metepisternum elongate, c.  $1.8 \times$  as long as wide, in posterior third not hollowed. Abdominal sternum with 1 elongate seta each side. Lower surface rather densely punctate and shortly setose.

Legs. Elongate, 1<sup>st</sup> tarsomere of protarsus slightly longer than wide, tibial groove of profemur moderately deep, anterior plate overlapping the groove for about apical third, posterior border of groove sharp. Femur wide. Metatibia elongate, c.  $6.5 \times$  as long as wide, 1<sup>st</sup> tarsomere of metatarsus almost  $2.5 \times$  as long as wide.

♂ genitalia. Unknown.

♀ genitalia (Fig. 3l). Stylomere moderately wide, narrowed to apex, apex rounded off, both lateral and median margins concave, with 2 elongate apical setae. Lateral plate elongate, with 4-5 elongate apical setae.

Variation. Unknown.

Vivipary. Not confirmed.

**Habits.** Holotype collected under bark of river eucalypt in December.

**Distribution** (Fig. 16). Far western New South Wales. Known only from type locality.

**Material examined** (1). Only the holotype.

**Etymology.** The name refers to the markedly rugose surface of pronotum.

**Relationships.** Closely related to the species of the *laticollis-cribricollis*-group.

*Adelotopus wilochrae*, spec. nov.

Figs 4, 11, 16

**Types.** Holotype: ♂, Australia, SA 64, Wilochra Ck. 30 km s. Hawker, 7.-8.1.1999, M. Baehr (ANIC). – Paratypes: 1♂, 9♀♀, same data (CBM, SAMA, ZSM).

**Diagnosis.** Medium-sized, completely reddish species, distinguished by wide, moderately convex pronotum, rather dense, moderately fine puncturation of head and pronotum, symmetric ♂ genital ring, moderately widened, on lower surface barely striate aedeagus with wide, rounded apex, elongate, apically rounded left paramere, and wide, apically rather narrowed stylomere. Further distinguished from the most closely related species *A. laticollis* Baehr and *A. cribricollis* Baehr by pronotum with more evenly curved lateral margins, which is not widest at base, and by sparse puncturation of elytra.

**Description**

**Measurements.** Length: 4.95-5.5 mm. Ratios. Width/length of pronotum: 1.56-1.62; width base/apex of pronotum: 1.41-1.45; width pronotum/head: 1.47-1.51; length/width of elytra: 1.47-1.49; length elytra/pronotum: 2.33-2.41.

**Colour.** Upper and lower surface including mouth parts, antennae, and legs reddish, forebody faintly darker.

**Head** (Figs 4a-d). Rather short, fairly wide, rather depressed. Anterior border gently convex, lateral angle rounded, laterally faintly projecting, lateral borders slightly narrowed behind eyes. Clypeal suture only at base distinct, in middle widely interrupted. Labrum rather wide and short, moderately overlapped by the clypeus, apex fairly concave. Antennal groove laterally sharply bordered, latero-posteriorly with slightly convex area. Mental tooth trian-

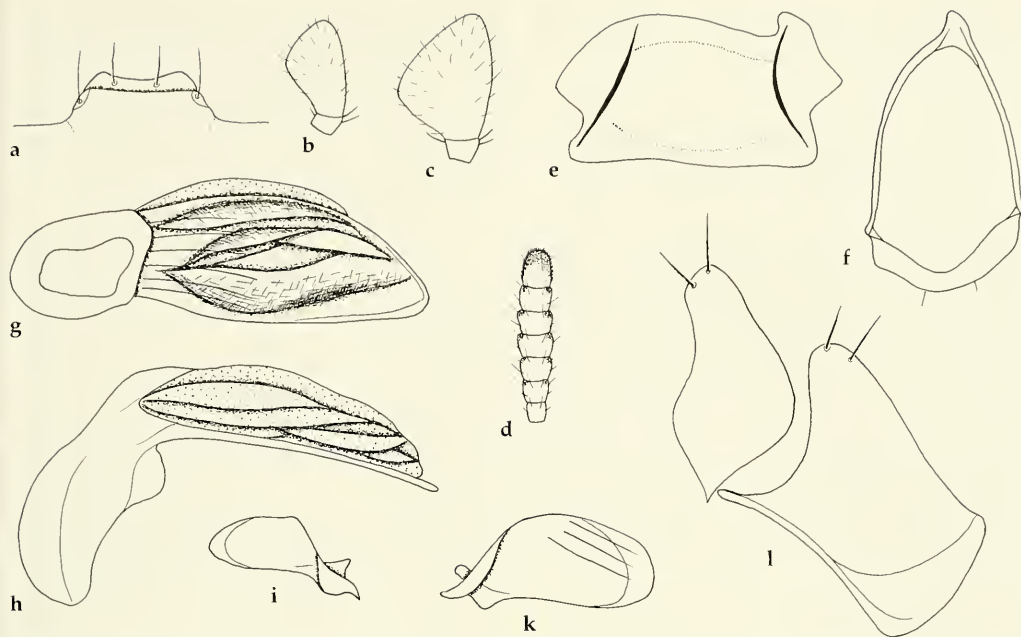
gular, rather short, apex acute. Wings of mentum wide, laterally rounded, apex obtuse. Glosa fairly wide, tongue-like, apically convex, ventrally with distinct keel, at border with c. 10-12 elongate setae. Terminal palpomere of maxillary palpus moderately widened, fairly securiform. Terminal palpomere of labial palpus very wide, markedly securiform. Antenna rather elongate, 8<sup>th</sup>-9<sup>th</sup> antennomeres c. 1.5 × as wide as long. Microreticulation fine, superficial, puncturation very fine, fairly dense. Surface with weak sulcus medially of eyes, without wrinkles, impilose, rather glossy. Ventrolaterally of eyes with a row of short setae. Suborbital field punctate and shortly setose. Gula impilose.

**Pronotum** (Fig. 11). Wide, markedly convex, base distinctly wider than apex, lateral margins evenly curved, rather incurved towards base, hence widest diameter usually situated slightly behind middle or at basal third. Apical angles moderately produced, at apex obtusely rounded, fairly oblique, surpassing posterior border of eyes. Apex fairly excised, markedly convex in excision, feebly bordered. Margins moderately wide, rather channelled, finely bordered. Basal angles very widely rounded off. Base almost straight, finely and rather irregularly bordered. Surface near base without transverse impression. Microreticulation much reduced, highly superficial, sometimes only faint traces visible, puncturation in middle moderately fine, laterally coarser, moderately dense, though in middle relatively sparse, not rugose. Surface impilose, highly glossy.

**Elytra** (Fig. 11). Rather wide, moderately convex, slightly depressed on disk, rather parallel, though usually faintly narrowed in basal third. Lateral borders almost straight. Apex wide, slightly oblique, truncature barely convex, apical angles widely rounded off. Shoulders rounded, basal margin slightly oblique, without setae behind shoulders. Marginal channel moderately wide, partly concealed. Basal border incomplete, attaining outer third of base. Lateral margin asetose. Series of umbilical pores consisting of 6 rather spaced pores behind shoulder. Setae fairly elongate. Striae including sutural stria absent. Microreticulation absent, puncturation fine, rather sparse, surface impilose, markedly glossy.

**Lower surface.** Prosternal process rather short, narrow, convex, apex very short, narrow, compressed, passing over in an almost





**Fig. 4a-l.** *Adelotopus wilochrae*, spec. nov. Details of head and ♂ and ♀ genitalia. **a.** Labrum. **b.** Lower surface of terminal palpomeres of maxillary palpus. **c.** Lower surface of terminal palpomeres of labial palpus. **d.** 5<sup>th</sup>-11<sup>th</sup> antennomeres. **e.** ♂ sternum VII. **f.** ♂ genital ring. **g.** Lower surface of aedeagus. **h.** Lateral view of aedeagus. **i.** Right paramere. **k.** Left paramere. **l.** ♀ stylomeres and lateral plate.

right angle from ventral surface, shortly setose. Metepisternum elongate, c. 1.8 × as long as wide, in posterior third not hollowed. Abdominal sternum with 1 elongate seta each side. Lower surface rather densely punctate and shortly setose.

Legs. Elongate, 1<sup>st</sup> tarsomere of protarsus slightly longer than wide, tibial groove of profemur moderately deep, anterior plate overlapping the groove for about apical third, posterior border of groove sharp. Femur wide. Metatibia elongate, c. 6.5 × as long as wide, 1<sup>st</sup> tarsomere of metatarsus almost 2.5 × as long as wide.

♂ genitalia (Figs 4e-k). Genital ring rather wide, convex, barely asymmetric, with rather short apex, with slightly asymmetric, rather small, fairly excised base. Sternum VII rather wide, apically evenly convex, with moderately deep excision, base gently bisinuate, basal angles obtusely rounded, lateral parts fairly elongate. Aedeagus rather short, fairly depressed, in middle comparatively little widened, moderately asymmetric, left side convex, right side almost straight. Basal part rather long, moderately bent. Lower surface almost straight, only at base inconspicuously striate. Apex rather

wide, evenly rounded off, rather symmetric. Orifice elongate, internal sac complex, with a distinct oblique fold near apex. Both parameres large, elongate, right square, with widely rounded apex, left paramere considerably larger than right, rather square, apex widely rounded.

♀ genitalia (Fig. 4l). Stylomere rather wide, narrowed to apex, apex rounded off, both lateral and median margins concave, with 2 elongate apical setae. Lateral plate elongate, with 2 elongate apical setae.

Variation. Very little variation noted.

**Vivipary.** Confirmed by discovery of larvae in the ♀ oviducts.

**Habits.** A subcorticolous species, collected under bark of river eucalypts. So far captured in January.

**Distribution.** (Fig. 16). Eastern inland South Australia. Known only from type locality. Probably an inland species.

**Material examined** (11). Only the type series.

**Etymology.** The name refers to the type locality.

**Relationships.** Closely related to the species of the *laticollis-cribricollis*-group.

*Adelotopus lucidus*, spec. nov.

Figs 5, 12, 15

**Types.** Holotype: ♀, Australia, VIC 42, 30 km ese. Ouyen, 31.12.1998, M. Baehr (ANIC). – Paratypes: 1♀, same data (CBM); 2♀♀, Australia, VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM, NMV); 1♀, Australia, VIC 45, 8 km e. Lascelles, 1.1.1999, M. Baehr (CBM); 1♀, Australia, NSW 28, Talyawalka Ana-branch, 12 km e. Menindee, 29.12.1998, M. Baehr (CBM).

**Diagnosis.** Comparatively small, completely reddish species, distinguished by wide, moderately convex pronotum and apically rather narrow stylomere. Further distinguished from the most closely related species *A. wilchorae* spec. nov. by absence of microreticulation on pronotum and rather coarse puncturation of elytra.

**Description**

**Measurements.** Length: 4.25–4.8 mm. Ratios. Width/length of pronotum: 1.62–1.67; width base/apex of pronotum: 1.42–1.48; width pronotum/head: 1.50–1.55; length/width of elytra: 1.45–1.51; length elytra/pronotum: 2.46–2.50.

**Colour.** Upper and lower surface including mouth parts, antennae, and legs reddish, forebody faintly darker.

**Head** (Figs 5a–d). Rather short, fairly wide, rather depressed. Anterior border gently convex, lateral angle rounded, laterally faintly projecting, lateral borders slightly narrowed behind eyes. Clypeal suture only at base distinct, in middle widely interrupted. Labrum rather wide and short, moderately overlapped by the clypeus, apex fairly concave. Antennal groove laterally sharply bordered, latero-posteriorly with slightly convex area. Mental tooth triangular, rather short, apex acute. Wings of mentum wide, laterally rounded, apex obtuse. Glosa fairly wide, tongue-like, apically convex, ventrally with distinct keel, at border with c. 10–12 elongate setae. Terminal palpomere of maxillary palpus moderately widened, fairly securiform. Terminal palpomere of labial palpus very wide, markedly securiform. Antenna rather elongate, 8<sup>th</sup>–9<sup>th</sup> antennomeres <1.5 × as wide as

long. Microreticulation fine, extremely superficial, difficult to detect, puncturation very fine, dense. Surface with weak sulcus medially of eyes, without wrinkles, impilose, glossy. Ventrolaterally of eyes with a row of short setae. Suborbital field punctate and shortly setose. Gula impilose.

**Pronotum** (Fig. 12). Wide, markedly convex, base distinctly wider than apex, lateral margins evenly curved, rather incurved towards base, hence widest diameter situated slightly in front of basal third. Apical angles moderately produced, at apex obtusely rounded, fairly oblique, surpassing posterior border of eyes. Apex fairly excised, markedly convex in excision, feebly bordered. Margins moderately wide, rather channelled, finely bordered. Basal angles very widely rounded off. Base almost straight, finely and rather irregularly bordered. Surface near base with very shallow transverse impression. Microreticulation absent, puncturation in middle moderately fine, laterally coarser, rather dense, though in middle sparser, not rugose. Surface impilose, highly glossy.

**Elytra** (Fig. 12). Rather wide, moderately convex, slightly depressed on disk, rather parallel, though usually faintly narrowed in basal third. Lateral borders almost straight. Apex wide, slightly oblique, truncature barely convex, apical angles widely rounded off. Shoulders rounded, basal margin slightly oblique, without setae behind shoulders. Marginal channel moderately wide, partly concealed. Basal border incomplete, attaining outer third of base. Lateral margin asetose. Series of umbilical pores consisting of 6 rather spaced pores behind shoulder. Setae fairly elongate. Striae including sutural stria absent. Microreticulation absent, puncturation near base in middle fairly coarse, towards apex and lateral margin much finer, fine, rather sparse, surface impilose, markedly glossy.

**Lower surface.** Prosternal process rather short, narrow, convex, apex very short, narrow, compressed, passing over in an almost right angle from ventral surface, shortly setose. Metepisternum elongate, c. 1.8 × as long as wide, in posterior third not hollowed. Abdominal sternum with 1 elongate seta each side. Lower surface rather densely punctate and shortly setose.

**Legs.** Elongate, 1<sup>st</sup> tarsomere of protarsus slightly longer than wide, tibial groove of profemur moderately deep, anterior plate overlap-

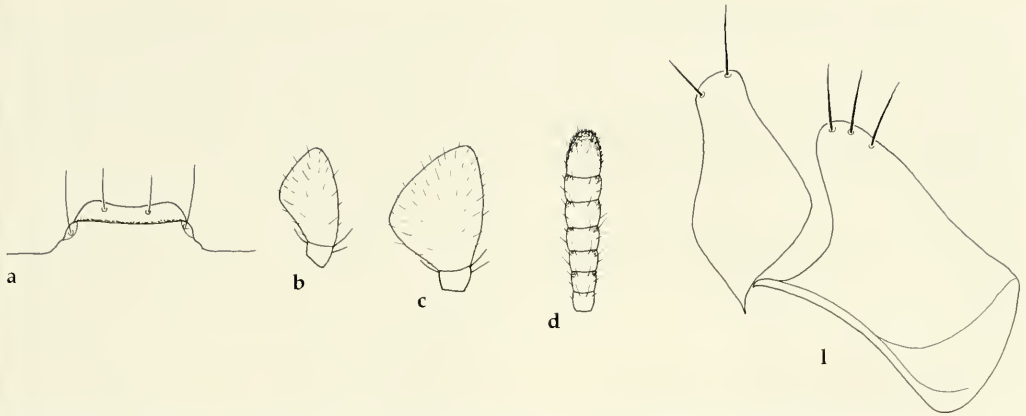


Fig. 5a-d, 1. *Adelotopus lucidus*, spec. nov. Details of head and ♀ genitalia. For legends see fig. 2.

ping the groove for about apical third, posterior border of groove sharp. Femur wide. Metatibia elongate, c.  $7 \times$  as long as wide, 1<sup>st</sup> tarsomere of metatarsus almost  $3 \times$  as long as wide.

♂ genitalia. Unknown.

♀ genitalia (Fig. 5l). Stylomere rather wide, narrowed to apex, apex rounded off, both lateral and median margins concave, with 2 elongate apical setae. Lateral plate elongate, with 3-4 elongate apical setae.

Variation. Little variation noted.

Vivipary. Confirmed by discovery of larvae in the ♀ oviducts.

**Habits.** Specimens were captured from under bark of river eucalypts and by fogging from the rough bark of Mallee eucalypts. So far collected during the period from end of December to beginning of January.

**Distribution** (Fig. 15). Northwestern Victoria, western New South Wales. This is apparently an inland species.

**Material examined** (6). Only the type series.

**Etymology.** The name refers to the glossy surface of the elytra.

**Relationships.** Closely related to the species of the *laticollis-cribricollis*-group.

### *Adelotopus virgatus* Baehr

Baehr 1997, p. 225.

**New records:** SA: SA 57, 18 km s. Loxton, 5.1.1999, M. Baehr (CBM). – VIC: VIC 42, 30 km ese. Ouyen, 31.12.1998, M. Baehr (CBM); VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM); VIC 45, 8 km e. Lascelles, 1.1.1999, M. Baehr (CBM); VIC 53, 1 km s. Jeparit, 4.1.1999, M. Baehr (CBM); VIC 56, 10 km w. Murra-ville, 5.1.1999, M. Baehr (CBM).

**Note.** Most specimens collected by fogging from the rough bark of Mallee eucalypts.

### *Adelotopus adustus* Baehr

Baehr 1997, p. 229.

**New records:** VIC: VIC 42, 30 km ese. Ouyen, 31.12.1998, M. Baehr (CBM); VIC 43, Lake Tyrell, 6 km n. Sea Lake, 1.1.1999, M. Baehr (CBM); VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM).

**Note.** The species had been known exclusively from old material. There was only one record from western Victoria. The new records corroborate the occurrence in northwestern Victoria. One specimen was captured on the salt-crusted surface of Lake Tyrell far away from any tree growth, others were fogged from the rough bark of Mallee eucalypts.

### *Adelotopus queenslandicus* Baehr

Baehr 1997, p. 233.

**New records:** QLD: QLD01/9, Cania Gorge, 35 km n. Monto, 27.-29.3.2001, M. Baehr (CBM).



*Adelotopus flavescens* Baehr

Baehr 1997, p. 240.

**New records:** SA: SA 64, Wilochra Ck., 30 km s. Hawker, 7.-8.1.1999, M. Baehr (CBM); SA 66, 8 km n. Wilpena Pound, Flinders Ranges, 8.1.1999, M. Baehr (CBM). – VIC: VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM).

**Note.** The new records enlarge the range of this species into southern central South Australia.

*Adelotopus laevigatus*, spec. nov.

Figs 6, 13, 16

**Types.** Holotype: ♀, Australia, SA 63, 20 km s. Orroroo, 7.1.1999, M. Baehr (ANIC).

**Diagnosis.** Medium-sized, completely reddish species, distinguished by fairly wide, moderately convex pronotum, extremely glossy surface with very fine though rather dense puncturation, and wide, apically rather narrowed stylomere. Further distinguished by absolute lack of wrinkles on head and pronotum.

**Description**

**Measurements.** Length: 5.5 mm. Ratios. Width/length of pronotum: 1.57; width base/apex of pronotum: 1.49; width pronotum/head: 1.51; length/width of elytra: 1.47; length elytra/pronotum: 2.49.

**Colour.** Upper and lower surface including mouth parts, antennae, and legs reddish, forebody faintly darker.

**Head** (Figs 6a-d). Rather short, fairly wide, rather depressed. Anterior border gently convex, lateral angle rounded, laterally faintly projecting, lateral borders slightly narrowed behind eyes. Clypeal suture only at base distinct, in middle widely interrupted. Labrum rather wide and short, moderately overlapped by the clypeus, apex moderately concave. Antennal groove laterally sharply bordered, latero-posteriorly with slightly convex area. Mental tooth triangular, rather short, apex acute. Wings of mentum wide, laterally rounded, apex obtuse. Glossa fairly wide, tongue-like, apically convex, ventrally with distinct keel, at border with c. 10-12 elongate setae. Terminal palpomere of maxillary palpus moderately widened, fairly securiform. Terminal palpomere of labial palpus very wide, markedly securiform. Antenna

rather elongate, 8<sup>th</sup>-9<sup>th</sup> antennomeres c. 1.5 × as wide as long. Microreticulation absent, puncturation very fine, dense. Surface with weak sulcus medially of eyes, without distinct wrinkles, impilose, highly glossy. Ventrolaterally of eyes with a row of short setae. Suborbital field punctate and shortly setose. Gula impilose.

**Pronotum** (Fig. 13). Rather wide, rather convex, base distinctly wider than apex, widest near base. Apical angles moderately produced, at apex obtusely rounded, fairly oblique, surpassing posterior border of eyes. Apex fairly excised, markedly convex in excision, feebly bordered. Sides gently convex, rather oblique. Margins rather wide, rather channelled, finely bordered. Basal angles widely rounded off. Base almost straight, rather irregularly bordered. Surface near base with very shallow transverse impression. Microreticulation absent, puncturation extremely fine, dense, surface without any wrinkles or rugosities, impilose, remarkably glossy.

**Elytra** (Fig. 13). Rather wide, moderately convex, slightly depressed on disk, rather parallel, though faintly narrowed in basal third. Lateral borders almost straight. Apex wide, slightly oblique, truncature barely convex, apical angles widely rounded off. Shoulders rounded, basal margin slightly oblique, without setae behind shoulders. Marginal channel moderately wide, partly concealed. Basal border incomplete, attaining outer third of base. Lateral margin asetose. Series of umbilical pores consisting of 6 rather spaced pores behind shoulder. Setae fairly elongate. Striae including sutural stria absent. Microreticulation absent, puncturation very fine, irregular, rather dense, surface impilose, markedly glossy.

**Lower surface.** Prosternal process rather short, narrow, convex, apex very short, narrow, compressed, passing over in an almost right angle from ventral surface, shortly setose. Metepisternum elongate, c. 1.8 × as long as wide, in posterior third not hollowed. Abdominal sternite with 1 elongate seta each side. Lower surface rather densely punctate and shortly setose.

**Legs.** Elongate, 1<sup>st</sup> tarsomere of protarsus slightly longer than wide, tibial groove of profemur moderately deep, anterior plate overlapping the groove for about apical third, posterior border of groove sharp. Femur wide. Metatibia elongate, c. 7 × as long as wide, 1<sup>st</sup> tarsomere of metatarsus almost 3 × as long as wide.

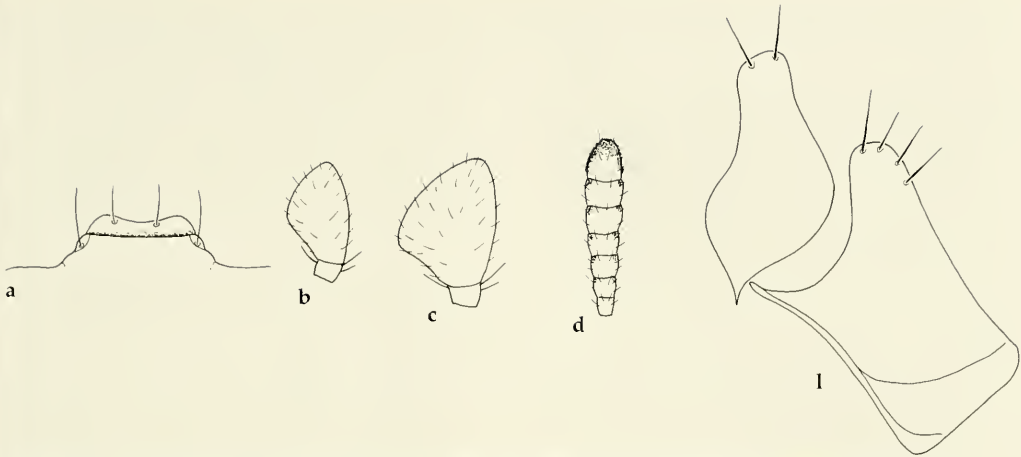


Fig. 6a-d, 1. *Adelotopus laevigatus*, spec. nov. Details of head and ♀ genitalia. For legends see fig. 2.

♂ genitalia. Unknown.  
♀ genitalia (Fig. 6l). Stylomere moderately wide, strongly narrowed to apex, apex rounded off, both lateral and median margins concave, with 2 elongate apical setae. Lateral plate elongate, with 4 elongate apical setae.  
Variation. Unknown.  
Vivipary. Not confirmed.

**Habits.** Holotype sampled by fogging from rough-barked eucalypt in January.

**Distribution** (Fig. 16). Eastern inland South Australia. Known only from type locality.

**Material examined** (1). Only the holotype.

**Etymology.** The name refers to the laevigate surface of pronotum and elytra.

**Relationships.** Probably most closely related to *S. ooldeae* Baehr.

**Recognition.** For identification of *A. rugaticollis*, *A. wilochrae*, *A. lucidus*, and *A. laevigatus* the key in my revision (Baehr 1997, pp. 60-76) should be replaced from caption 112 by the following revised key. The figures of the revision are inserted as **B97** fig.:

112. Head at 64x with distinct traces of microreticulation ..... 113.  
– Head at 64x without any traces of microreticulation ..... 133.

113. ♂♂ ..... 114.  
– ♀♀ ..... 122.
114. Aedeagus on ventral and lateral surfaces **distinctly** striate (**B97** figs 177g-180g) ....  
..... 115.  
– Aedeagus on ventral and lateral surfaces not **distinctly** striate ..... 118.
115. Surface mostly piceous, rarely reddish. Pronotum and elytra remarkably densely and coarsely punctate. Pronotum wide, with wide base, ratios w/l of pronotum 1.69-1.78, base/apex 1.52-1.58. Aedeagus moderately asymmetric with acute apex, lower surface almost straight (**B97** figs 179g,h), parameres rather elongate, not markedly triangular (**B97** figs 179i,k). nw. Vic., WA ..... *adustus* Baehr  
– Surface reddish. Pronotum and elytra less densely and coarsely punctate. Pronotum less wide, with slightly narrower base, ratios w/l of pronotum <1.68, base/apex <1.48. Aedeagus variable (**B97** figs 177g,h, 178g,h, 180g,h), parameres less elongate, apex variable (**B97** figs 177i,k, 178i,k, 180i,k) ..... 116.
116. Aedeagus very asymmetric, more convex towards apex, laterally slightly impressed (**B97** fig. 177g). Left paramere large, somewhat triangular (**B97** fig. 177k). Puncturation on pronotum rather dense and fairly coarse, on elytra fine and sparse. Elytra

- longer at the average, ratio l/w 1.46-1.58. SA, Vic, w. NSW. c. NT ..... *virgatus* Baehr
- Aedeagus less asymmetric, less convex towards apex, laterally not impressed (**B97** figs 178g, 180g). Left paramere see **B97** figs 178k, 180k. Puncturation either dense and moderately coarse or sparse and very fine on both, pronotum and elytra. Elytra shorter at the average, ratio l/w <1.45... 117.
117. Puncturation of surface sparse and remarkably fine (**B97** fig. 517). Aedeagus slightly narrower, faintly convex towards apex, lower surface convex (**B97** figs 178g,h). Left paramere convex at apex (**B97** fig. 178k). ♀ unknown. c. NT ..... *brittoni* Baehr
- Puncturation of surface very dense and fairly coarse (**B97** fig. 519). Aedeagus slightly wider, faintly concave towards apex, lower surface straight (**B97** figs 180g,h). Left paramere triangular, with acute apex (**B97** fig. 180k). ♀ unknown. NT ..... *punctatissimus* Baehr
118. Wide, remarkably depressed, yellowish species with wide pronotum, ratio w/l >1.7, and with widely channeled lateral margins (**B97** fig. 363). Aedeagus symmetric, with shortly rounded apex (**B97** fig. 175g). ne. Qld ..... *luteus* Baehr
- Less wide and depressed, reddish species with narrower pronotum, ratio w/l <1.7, with narrower, less channeled lateral margins. Aedeagus see **B97** figs 173g,h, 174g,h, 182g,h; fig. 4g,h ..... 119.
119. Aedeagus rather elongate, with almost straight lateral border and gently rounded apex (**B97** fig. 173g). Left paramere rather narrow with acute apex (**B97** fig. 173k). On the average rather large species with wide pronotum, wide base of pronotum and short elytra, ratios w/l of pronotum 1.58-1.70, base/apex 1.40-1.51, l/w of elytra 1.47-1.51. e. SA, w. Vic, w. NSW, w. Qld, c. NT ..... *laticollis* Baehr
- Aedeagus shorter, generally with more acute apex (**B97** figs 174g,h, 182g,h; fig. 4g,h). Left paramere wider with widely rounded or oblique apex (**B97** figs 174k, 182k; fig. 4k). On the average smaller species with less wide pronotum, narrower base of pronotum and longer elytra, ratios w/l of pronotum 1.47-1.62, base/apex 1.35-1.45, l/w of elytra 1.49-1.60 ..... 120.
120. Apical part of aedeagus slightly concave (**B97** fig. 182g). At the average pronotum narrower with narrower base, ratios w/l 1.47-1.58, base/apex 1.35-1.39. Puncturation of pronotum usually less rugose, puncturation of elytra usually sparser. ce. and ne. Qld ..... *aequus* Baehr
- Apical part of aedeagus straight or slightly convex (**B97** fig. 174g; fig. 4g). At the average pronotum wider with wider base, ratios w/l 1.52-1.62, base/apex 1.36-1.45. Puncturation of pronotum usually rugose, puncturation of elytra usually denser .... 121.
121. Aedeagus wider (**B97** fig. 174g), left paramere with oblique apex (**B97** fig 174k). At the average pronotum with narrower base, ratio base/apex 1.36-1.41, elytra longer, ratio l/w of elytra 1.49-1.57. NSW, e. Qld ..... *cribricollis* Baehr
- Aedeagus narrower (Fig. 4g), left paramere with convex apex (Fig 4k). At the average pronotum with wider base, ratio base/apex 1.41-1.45, elytra shorter, ratio l/w of elytra 1.47-1.49. c. SA ..... *wilochrae*, spec. nov.
122. Surface usually piceous, rarely reddish, pronotum and elytra remarkably densely and coarsely punctate (**B97** fig. 518). Pronotum with wide base, ratio base/apex 1.52-1.58. Stylomere with rather elongate, parallel apex (**B97** fig. 179l). nw. Vic., WA ..... *adustus* Baehr
- Surface reddish or yellowish, pronotum and elytra usally less densely and coarsely punctate. Pronotum commonly with narrower base, then ratio base/apex <1.51. When base wide, puncturation sparse and rather fine and stylomere polysetose (**B97** fig. 189l) ..... 123.
123. Large, length 6.65 mm, with wide base of pronotum, ratio base/apex 1.6. Puncturation of elytra rather sparse and fine (**B97** fig. 528). Stylomere narrow, in middle barely sinuate, polysetose (**B97** fig. 189l). ♂ unknown. n. WA ..... *crassus* Baehr



- Smaller, length <6.1 mm, with narrower base of pronotum, ratio base/apex <1.52. Punctuation of elytra variable, though commonly less fine on elytra. Stylomere commonly wider, in middle more or less distinctly sinuate, rarely with more than 4 setae (B97 figs 173l-177l, 182l, 190l; figs 3l-5l)..... 124.
- 124. Maxillary palpus rather narrow, apex of terminal palpomere as long as median border (B97 figs 174b, 182b; fig. 3b). Pronotum rather narrow, ratio w/l 1.47-1.60 ..... 125.
- Maxillary palpus rather wide, apex of terminal palpomere distinctly wider than median border (B97 figs 173b, 175b-177b, 190b; figs 4b, 5b). Pronotum rather wide, with wider base, ratios w/l 1.56-1.75 ..... 127.
- 125. At the average pronotum narrower with narrower base, ratios w/l 1.47-1.58, base/apex 1.35-1.39. Punctuation of pronotum usually less rugose, punctuation of elytra usually sparser. ce. and ne. Qld; ? NT ... ..... *aequus* Baehr
- At the average pronotum wider with wider base, ratios w/l 1.52-1.60, base/apex 1.36-1.48. Punctuation of pronotum usually rugose, punctuation of elytra usually denser ..... 126.
- 126. Base of pronotum narrower, ratio base/apex <1.41. Elytra without traces of microreticulation. NSW, e. Qld ..... *cribricollis* Baehr
- Base of pronotum wider, ratio base/apex 1.48. Elytra with fine microreticulation. ♂ unknown. sw. NSW ..... *rugaticollis*, spec. nov. Baehr
- 127. Pronotum very wide, with wide, distinctly explanate lateral margins, ratio w/l >1.72. Punctuation of surface fine and rather sparse (B97 figs 514, 515). Stylomere wide, almost regularly rhomboidal, with convex apex (B97 figs 175l, 176l) ..... 128.
- Pronotum narrower, with less explanate lateral margins, ratio w/l <1.7. Punctuation of surface coarser and denser (B97 figs 512, 516, 529; figs 11, 12). Stylomere not rhomboidal (B97 figs 173l, 177l, 190l; figs 4l, 5l) ..... 129.
- 128. Base of pronotum narrower, ratio base/apex 1.42. Antenna narrow and elongate, barely widened, ratio w/l of median antennomeres c. 1.5 (B97 fig. 176d). Punctuation of surface generally slightly coarser. Lateral plate of stylomere longer, basal margin not markedly concave (B97 fig. 176l). ♂ unknown. c. WA ..... *houstoni* Baehr
- Base of pronotum wider, ratio base/apex >1.52. Antenna short and wide, distinctly widened, ratio w/l of median antennomeres >2 (B97 fig. 175d). Punctuation of surface generally finer. Lateral plate of stylomere shorter, basal margin markedly concave (B97 fig. 175l). ne. Qld ..... *luteus* Baehr
- 129. Palpi very wide, terminal palpomere of maxillary palpus c. 2 × as long as wide (B97 fig. 190b). Stylomere see B97 fig. 190l. ♂ unknown. n. NT . *latipalpis* Baehr
- Palpi less wide, terminal palpomere of maxillary palpus <1.5 × as long as wide (B97 figs 173b, 177b; figs 4b, 5b). Stylomeres see B97 figs 173l, 177l; 4l, 5l ..... 130.
- 130. Stylomere narrower, not as markedly narrowed towards apex (B97 fig. 177l). On the average base of pronotum narrower, ratio 1.36-1.48. SA, Vic, w. NSW, c. NT . ..... *virgatus* Baehr
- Stylomere wider, markedly narrowed towards apex (B97 fig. 173l; figs 4l, 5l). On the average base of pronotum wider, ratio 1.40-1.51 ..... 131.
- 131. Stylomere basally much wider (B97 fig. 173l). e. SA, w. Vic, w. NSW, w. Qld, c. NT ..... *laticollis* Baehr
- Stylomere basally less wide (Figs 4l, 5l) ..... 132.
- 132. Larger species, length >4.95 mm, with narrower pronotum, ratio w/l of pronotum 1.56-1.62. Pronotum with traces of microreticulation. c. SA ..... *wilochrae*, spec. nov.
- Smaller species, length <4.8 mm, with wider pronotum, ratio w/l of pronotum 1.62-1.67. Pronotum without microreticulation. ♂ unknown. nw. VIC, sw. NSW . ..... *lucidus*, spec. nov.

133. ♂♂ ..... 134.  
– ♀♀ ..... 141.
134. Aedeagus irregularly shaped, bisinuate on both lateral margins, apex somewhat knob-like (B97 fig. 181g). e. Qld ..... *queenslandicus* Baehr  
– Aedeagus not irregularly shaped, not bisinuate on both lateral margins, apex shortly rounded or acute (B97 figs 170g, 171g, 172g, 183g, 185g, 186g, 188g) ..... 135.
135. Aedeagus on lower and lateral surfaces distinctly striate, lower surface straight, apex acute (B97 figs 183g,h). Left paramere convex at apex (B97 fig. 183k). Genital ring slightly asymmetric, lateral arms not markedly convex (B97 fig. 183f). Pronotum generally wider, with wide base, ratios w/l of pronotum 1.55-1.62, base/apex 1.47-1.53. ne. Qld ..... *pallumae* Baehr  
– Aedeagus on lower and lateral surfaces not distinctly striate, lower surface varied, apex commonly convex (B97 figs 170g,h, 171g,h, 172g,h, 185g,h, 186g,h, 188g,h), though when apex rather acute, then lower surface convex, then left paramere at apex transverse, arms of genital ring markedly convex, and pronotum narrower with narrower base, ratios w/l <1.51, base/apex <1.42 ..... 136.
136. Aedeagus wide, highly asymmetric, apex rather acute, lower surface slightly convex (B97 figs 172g,h). NSW. Qld ..... *foliaceus* Baehr  
– Aedeagus usually narrower, less asymmetric, apex rounded, lower surface straight or concave (B97 figs 170g,h, 171g,h, 185g,h, 186g,h, 188g,h). When aedeagus rather wide, then far less asymmetric and apex widely convex ..... 137.
137. Aedeagus wide, in middle markedly widened, lateral margins near apex straight or even slightly concave, apex widely convex (B97 fig. 171g). sw. WA ..... *distinguendus* Baehr  
– Aedeagus unusually less wide, when wide, then lateral margins near apex evenly convex (B97 figs 170g, 185g, 186g, 188g) ..... 138.
138. Apex of aedeagus widely rounded off (B97 figs 185g, 188g) ..... 139.  
– Apex of aedeagus shortly rounded off (B97 figs 170g, 186g) ..... 140.
139. Smaller, length <4.3 mm, body more convex, pronotum narrower with narrower base, ratios w/l of pronotum <1.5, base/apex <1.41. Aedeagus shorter and wider (B97 fig. 185g), left paramere at apex convex (B97 fig. 185k). s. SA, n. Vic, sw. Qld ..... *flavescens*  
– Larger, length 5.5 mm, body more depressed species, pronotum wider with wider base, ratios w/l of pronotum >1.52, base/apex >1.48. Aedeagus longer and narrower (B97 fig. 188g), left paramere at apex straight (B97 fig. 188k). s. WA ..... *crucis* Baehr
140. Aedeagus narrower, lateral margin near apex faintly concave (B97 fig. 170g). Genital ring markedly asymmetric (B97 fig. 170f). Punctuation of elytra less coarse and dense, on the average 3 punctures pro interval. e. SA, Vic, ACT, NSW, Qld, c. NT, s. WA ..... *rubiginosus* Newman  
– Aedeagus wider, lateral margin near apex convex (B97 fig. 186g). Genital ring less asymmetric (B97 fig. 186f). Punctuation of elytra coarser and denser, on the average 4 punctures pro interval. ♀ unknown n. WA ..... *grossepunctatus* Baehr
141. Tergum VIII with additional lateral setae. Apical setae of stylomere markedly elongate. Apex of stylomere wide, rather obliquely transverse, the latero-apical angles rounded (B97 fig. 172l). NSW. Qld .  
..... *foliaceus* Baehr  
– Tergum VIII without additional lateral setae. Apical setae of stylomere not markedly elongate. Stylomere variable, though when wide and obliquely transverse, the latero-apical angles pronounced (B97 figs 170l, 171l, 181l, 183l-185l, 187l, 188l; fig 6l) ..... 142.
142. Apex of stylomere wide, obliquely transverse, the latero-apical angle pronounced, lateral plate elongate (B97 fig. 170l). Punctuation of pronotum dense and rather coarse. SA, Vic, ACT, NSW, Qld, c. NT, s. WA ..... *rubiginosus* Newman

- Apex of stylomere different, when rather obliquely transverse, then either lateral plate shorter and pronotum wider, or puncturation of pronotum sparser and much finer ..... 143.
- 143. Apex of stylomere markedly convex on median side (B97 figs 181l, 183l, 188l). Puncturation of surface always rather coarse and dense. Pronotum rather wide, ratio w/l usually >1.55, when <1.55, then surface with markedly coarse and dense puncturation ..... 144.
- Apex of stylomere straight or oblique (B97 figs 171l, 184l, 185l, 187l; fig 6l). Puncturation of surface varied. Pronotum rather narrow, ratio w/l <1.55, when >1.5, then surface with less coarse and dense puncturation ..... 146.
- 144. Stylomere narrow, apex acute (B97 fig. 188l). Larger, length 5.5 mm. s. WA .....  
..... *crucis* Baehr
- Stylomere wider, apex convex (B97 figs 181l, 183l). Smaller, length <5.3 mm. Qld ..... 145.
- 145. Base of pronotum narrower, elytra generally longer, ratios w/l of pronotum 1.41-1.46, l/w of elytra 1.51-1.57. e. Qld .....  
..... *queenslandicus* Baehr
- Base of pronotum wider, elytra generally shorter, ratios w/l of pronotum 1.47-1.53, l/w of elytra 1.48-1.54. ne. Qld .....  
..... *palumae* Baehr
- 146. Smaller species, length <4.9 mm, colour yellowish to light reddish ..... 147.
- Larger species, length >5.4 mm, colour reddish ..... 148.
- 147. Pronotum narrower with narrower base, ratios w/l 1.40-1.51, base/apex 1.38-1.41. Puncturation of elytra very coarse (B97 fig. 524). Stylomere see B97 fig. 185l. s. SA, n. Vic, sw. Qld ..... *flavescens* Baehr
- Pronotum wider with wider base, ratios w/l 1.51-1.55, base/apex 1.44-1.48. Puncturation of elytra less coarse (B97 fig. 510). Stylomere see B97 fig. 171l. sw. WA .....  
..... *distinguendus* Baehr
- 148. Puncturation coarser, on elytra also denser (B97 fig. 523). Pronotum narrower with narrower base, ratios w/l 1.47, base/apex

- 1.43. Stylomere see B97 fig. 184l. ♂ unknown. ce. Qld ..... *angustatus* Baehr
- Puncturation finer, on elytra also sparser (B97 fig. 526; fig. 13). Pronotum wider with wider base, ratios w/l 1.55-1.57, base/apex 1.49-1.50. Stylomeres see B97 fig. 187l, fig. 6l ..... 149.
- 149. Elytra longer, ratio l/w 1.64. Puncturation of pronotum and elytra less fine (B97 fig. 526). Stylomere see B97 fig. 187l. ♂ unknown. w. SA ..... *ooldae* Baehr
- Elytra shorter, ratio l/w 1.47. Puncturation of pronotum and elytra extremely fine (Fig. 13). Stylomere see fig. 6l. ♂ unknown. e. SA ..... *laevigatus*, spec. nov.

*Adelotopus linearis* Macleay

Baehr 1997: 260.

**New record:** QLD: QLD01/9, Cania Gorge, 35 km n. Monto, 27.-29.3.2001, M. Baehr (CBM).

**Note.** A rare eastern and northern species, distributed from southern central Queensland to northwestern Australia.

*Adelotopus montorum* Baehr

Baehr 1977, p. 279.

**New record:** NSW: Clarence, Blue Mts., 15.IV.1985, Vr. R. Bejsak, lgt. (CBS).

*Adelotopus macilentus* Baehr

Baehr 1977, p. 305.

**New record:** QLD: QLD01/4, Gayndah, Burnett River, 26.-27.3.2001, M. Baehr (CBM).

*Adelotopus analis* Macleay

Baehr 1997, p. 310.

**New record:** QLD: SEQ: 27°20'S × 152°48'E, Stony Ck. via Samford, 22.X.1994-2.II.1995, H. Janetzki & G. Monteith (QMB).

**Note.** Three specimens were collected by intercept trap in (temperate) rain forest. The new record enlarges the hitherto very restricted range considerably to the south. The capture in temperate rain forest also is worth noting, because verified records from any sort of rain forest for pseudomorphine species are remarkably uncommon.



***Adelotopus paroensis* Castelnau**

Baehr 1997, p. 312.

**New records:** SA: SA 61, Murray R. 3 km e. Wai-kerie, 6.1.1999, M. Baehr (CBM); SA 63, 20 km s. Orooro, 7.1.1999, M. Baehr (CBM); SA 64, Wilochra Ck., 30 km s. Hawker, 8.1.1999, M. Baehr (CBM); SA 66, 8 km n. Wilpena Pound, Flinders Ranges, 8.1.1999, M. Baehr (CBM). – **VIC:** VIC 42, 30 km ese. Ouyen, 31.12.1998, M. Baehr (CBM); VIC 44, Sea Lake, 1.1.1999, M. Baehr (CBM); VIC 48, Wyperfeld NP, L. Brambuck, 1.-2.1.1999, M. Baehr (CBM); VIC 53, 1 km s. Jeparit, 4.1.1999, M. Baehr (CBM); VIC 56, 10 km w. Murrayville, 5.1.1999, M. Baehr (CBM). – **NSW:** NSW 13, Warren Weir, 3 km e. Warren, Macquarie R., 19.-20.12.1998, M. Baehr (CBM); NSW 24, Bonley Ck., 52 km sw. Wilcannia, 22.12.1998, M. Baehr (CBM); NSW 25, Malta L., 110 km sw. Wilcannia, 22.-23.12.1998, M. Baehr (CBM). – **QLD:** QLD01/9, Cania Gorge, 35 km n. Monto, 27.-29.3.2001, M. Baehr (CBM); QLD01/7, Cera-todus, 10 km n. Eidsvold, Burnett River, 27.3. 2001, M. Baehr (CBM).

**Note.** Although this is a species widespread in southern and eastern Australia, no records from central western New South Wales were known so far. Some specimens were collected by fog-ging from the rough bark of various eucalypts.

***Adelotopus cuneatus* Baehr**

Baehr 1997, p. 326.

**New records:** SA: SA 59, Yatco Lagoon, 5 km s. Mooroooh, 5.-6.1.1999, M. Baehr (CBM). – **VIC:** VIC 48, Wyperfeld NP, L. Brambuck, 1.-2.1.1999, M. Baehr (CBM); VIC 52, 30 km s. Horsham, 4.1.1999, M. Baehr (CBM). – **NSW:** NSW 12, Bulga Ck., 15 km ne. Gilgandra, 19.12.1998, M. Baehr (CBM); NSW 24, Bonley Ck., 52 km sw. Wilcannia, 22.12.1998, M. Baehr (CBM).

**Genus *Cainogenion* Notman**

Baehr 1997, p. 328.

***Cainogenion ephippiatum* (Newman)**

Baehr 1997, p. 336.

**New records:** QLD: SEQ: 25°37'S × 151°34'E, Mt. Debatable, 1.5 km NE, 11.X.-19.XII.1998, Monteith & Gough (QMB).

**Note.** Both specimens were collected in pitfall trap in open forest.

***Cainogenion ipsoides ipsoides* Westwood**

Baehr 1997, p. 340.

**New records:** SA: SA 64, Wilochra Ck., 30 km s. Hawker, 8.1.1999, M. Baehr (CBM). – **VIC:** Museum Paris, Melbourne (env.), 210-59 (MNHN).

***Cainogenion creberrimum gnaltae* Baehr**

Baehr 1997, p. 348.

**New record:** NSW: NSW 24, Bonley Ck., 52 km sw. Wilcannia, 22.12.1998, M. Baehr (CBM).

**Note.** The new record extends the range of this subspecies somewhat to the south.

**Genus *Paussotropus* Waterhouse**

Baehr 1997, p. 370

***Paussotropus cylindricus* Chaudoir**

Baehr 1997, p. 370

**New records:** QLD: East Leichhardt Dam. 30 km w. Mt. Isa, NWQld, 1.-3.V.1993, Monteith, Janetzki & Sheridan (QMB); CQ: 22°02'S × 148°03'E, Moran-bah, 5 km S, 20.XII.1997-25.IV.1998, G. Monteith (QMB).

**Note.** One specimen of this strangely looking, rare species was caught by flight intercept trap on "gravel ridge". Thus far, there are no reliable records of the actual habits of this species, and it is not even known, whether it lives under bark or not.

**Genus *Cryptocephalomorpha* Ritsema**

Baehr 1997, p. 374.

***Cryptocephalomorpha gaverei* Ritsema**

Baehr 1997, p. 378.

**New records:** Indonesia, Java, Batavia, P. Serre 1904 (MNHN); Sumatra Dohrn (MNHN).

***Cryptocephalomorpha gigantea*, spec. nov.  
Figs 7, 14**

**Types.** Holotype: ♀, BRUNEI: Temburong, N4°26' E115°15', Mxt. dipt. forest, B.M.1983-39 300 m/ Light trap 3, 9 m above ground, 4x78, S. L. Sutton (BMNH).

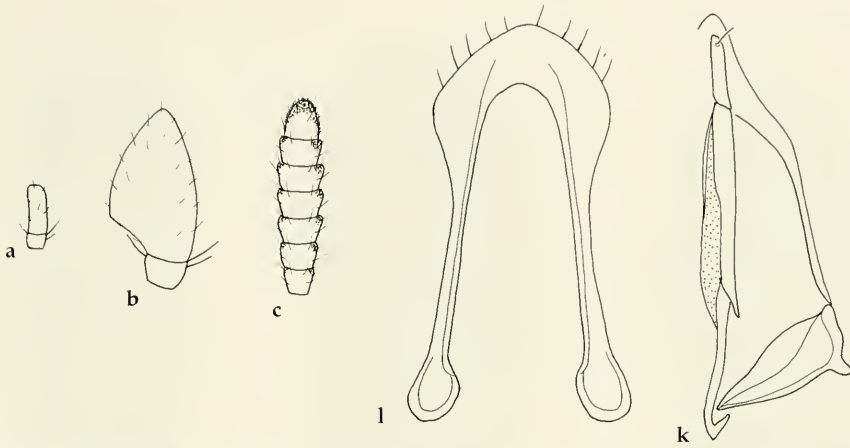


Fig. 7a-c,k,l. *Cryptocephalomorpha gigantea*, spec. nov. Details of head and ♀ genitalia. a. Lower surface of terminal palpomeres of maxillary palpus. b. Lower surface of terminal palpomeres of labial palpus. c. 5<sup>th</sup>-11<sup>th</sup> antennomeres. k. ♀ stylomeres and lateral plate. l. ♀ sternum VIII.

**Diagnosis.** Distinguished from all other species by combination of very large size, circular elytral spots and dark pronotum.

### Description

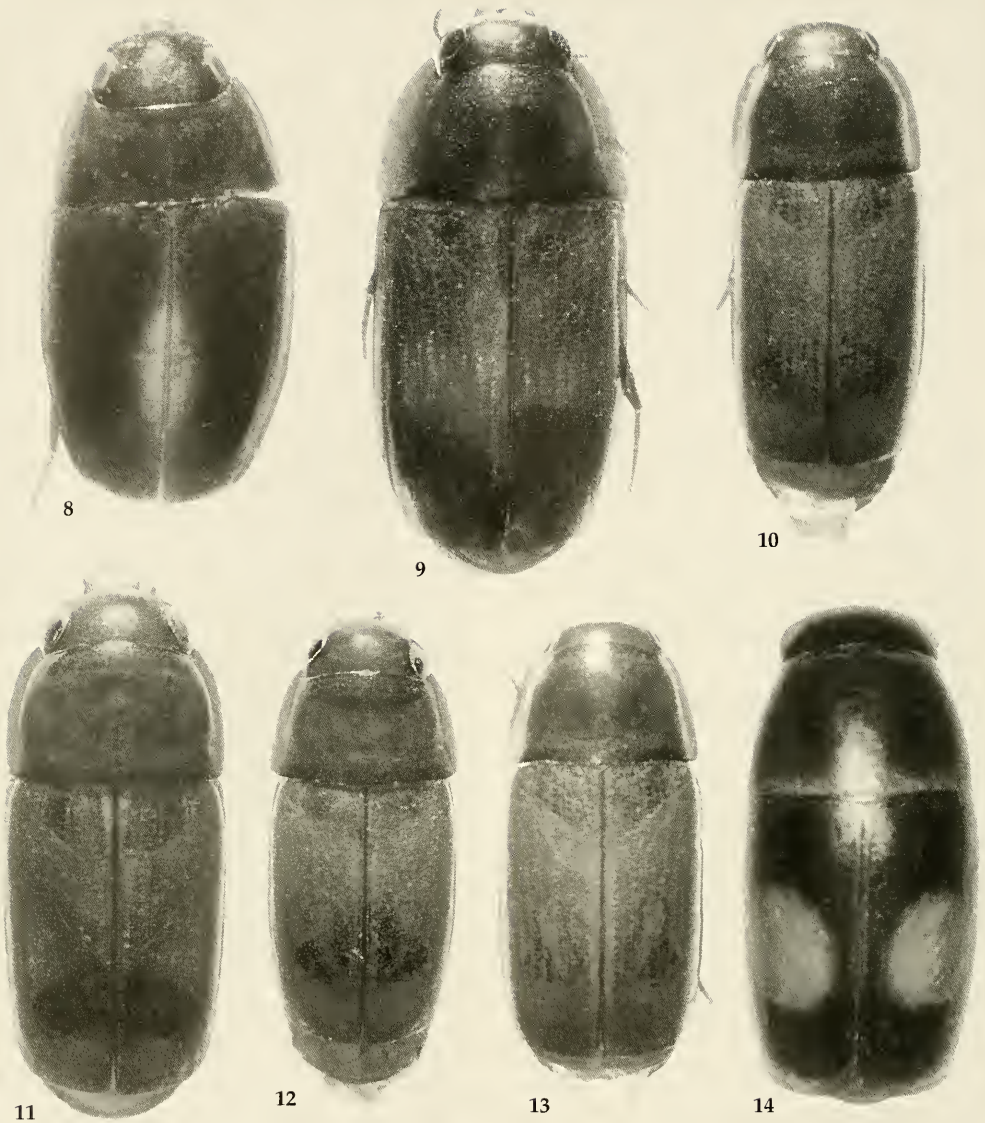
**Measurements.** Length: 6.05 mm. Ratios. Width/length of pronotum: 1.53; width pronotum/head: 1.44; length/width of elytra: 1.30; length elytra/pronotum: 1.98.

**Colour** (Figs 14). Surface piceous-black, anterior margin of head, all margins of pronotum and elytra, and elytral spots, light reddish. Reddish lateral margins of pronotum and elytra wide, on pronotum the reddish margin sinuate. Apical reddish margin of elytra narrow. Also suture narrowly reddish. Elytra with a well delimited, circular to slightly elongate light reddish spot. Lower surface reddish. Mouth parts, antenna and legs more dark reddish to piceous, femora reddish, tibiae and tarsi dark piceous. Whole surface rather glossy.

**Head** (Figs 7a-c). Short and wide, deeply imbedded in prothorax, anterior margin of head moderately convex, border rather convex, far protruding over mouth parts that are completely concealed from above. Frons convex. Clypeus faintly marked by the very superficial clypeal suture. Labrum very small, invisible from above. Mandibles very small, invisible from above, outer margin very gently angulate. Eye oval-shaped, on lower surface of head triangular. Orbit obtusely angulate, partly visible from above. Behind eye with a group of c. 5-6 short

setae. Antennal groove moderately deep, comparatively short, medially and laterally bordered. Mental tooth moderately wide, rather elongate, obtusely acute, not pointed down. Wings of mentum wide, laminate, apex obtusely angulate. Glossa large, apparently completely fused with paraglossae to a moderately wide, tongue-like, far protruding plate with convex apex that is ventrally keeled and is rather pointed down. Glossa at apical margin with c. 12 fairly elongate setae, dorsal surface apparently without hairs. Lacinia inconspicuous, almost invisible. Galea narrow and fairly elongate, fusiform. Terminal palpomere of maxillary palpus rather elongate, slightly curved, slightly narrowed towards apex. Terminal palpomere of labial palpus very large and wide, markedly securiform, apical margin shorter than lateral margin,  $>2 \times$  as long as inner margin. Both palpi rather densely pilose. Lateral plate of maxilla inconspicuous. Ventral surface of head rather short. Antenna short and wide, depressed, 7<sup>th</sup>-8<sup>th</sup> antennomeres  $>2.5 \times$  as wide as long. Microreticulation present, though extremely fine and somewhat superficial, isodiametric, puncturation virtually invisible, surface impilose, moderately glossy. Gula almost impilose.

**Pronotum** (Fig. 14). Rather wide, highly convex, dorsal surface on disk somewhat depressed, lateral parts almost perpendicular, therefore lateral margin barely visible from above. Base clearly wider than apex. Apex bare-



**Figs 8-14.** Habitus. 8. *Sphallomorpha propinqua*, spec. nov. 9. *Adelotopus bilyi*, spec. nov. 10. *A. rugaticollis*, spec. nov. 11. *A. wilochrae*, spec. nov. 12. *A. lucidus*, spec. nov. 13. *A. laevigatus*, spec. nov. 14. *Cryptocephalomorpha gigantea*, spec. nov. Lengths: 4.6 mm; 6.6 mm; 5.6 mm; 5.4 mm; 4.6 mm; 5.5 mm; 6.05 mm.

ly convex, apical angles barely produced, widely rounded. Apex extremely finely and superficially margined. Lateral margins gently but evenly convex, finely margined, lateral channel absent, margins not at all explanate. Basal angles evenly rounded off, base very gently convex, irregularly margined. Surface without

median line. Microreticulation present, distinct, extremely fine, isodiametric, surface without puncturation, though with some irregular fine wrinkles, impilose, moderately glossy.

Elytra (Fig. 14). Moderately short, wide, parallel, highly convex, though slightly depressed on disk. Lateral parts distinctly in-





**Figs 15-16.** Distributions. **15.** *Sphallomorpha propinqua*, spec. nov.: ■; *Adelotopus bilyi*, spec. nov.: ◆; *A. lucidus*, spec. nov.: ●. **16.** *Adelotopus rugaticollis*, spec. nov.: ■; *A. laevigatus*, spec. nov.: ◆; *A. wilochrae*, spec. nov.: ●.

curved ventro-medially. Apex wide, truncature evenly convex, markedly incurved towards suture, not dehiscent, lateral apical angles very widely rounded off. Base wide, obliquely convex, basal angles rounded. Basal margin attaining half of distance to suture, whole base including scutellum usually concealed by base of pronotum. Basal border laterally with several delicate setae. Marginal channel very narrow, completely concealed. Marginal pores absent. Scutellar pore absent. Striae including sutural stria absent. Microreticulation present, very fine, slightly more superficial than on pronotum, isodiametric. Punctuation absent. Surface moderately glossy. Wings full.

Lower surface. Anterior border of prosternum in middle with rather convex, anteriorly glandular and pilose boss. Prosternal process rather elongate, far surpassing procoxae, very narrow, surface in front of coxae impressed, margined inside of procoxae, between coxae very narrow, high, laminate, apex straight, extremely narrow, markedly laminate, surface shortly pilose. Metepisternum elongate, slightly  $<2\times$  as long as wide, posteriorly not hol-

lowed nor bent. Abdominal sterna without elongate setae, but with coarse, fairly dense punctuation and pilosity. Terminal sternum in female without elongate setae, impunctate and impilose, without glandular, densely pilose area. Male terminal sternum unknown.

Legs. Short, 1<sup>st</sup> tarsomere of protarsus much wider than long, tibial groove of profemur deep, symmetric, anterior border almost straight. Femora rather wide, tibiae rather short, widened. Metatibia comparatively short, c.  $3.5\times$  as long as wide, 1<sup>st</sup> tarsomere of metatarsus distinctly wider than long. ♂ protarsus not widened. Male tarsomeres unknown.

♂ genitalia. Unknown.

♀ genitalia (Figs 7k,l). Comparatively small, wide. Sternum VIII elongate, apex rather short and wide, convex, laterally gently angulate, basal process narrow and elongate. Both stylomeres very narrow and elongate, stylomere 1 at apex not widened, stylomere 2 spine-shaped, at apex with 1 short seta. Latero-basal angle of basal plate of tergum VIII posteriorly markedly protruding.

Variation. Unknown.

**Vivipary.** Not confirmed in the examined material.

**Habits.** Largely unknown. Holotype captured in light trap in September, according to label in lowland mixed dipterocarp forest.

**Distribution.** Brunei, northern Borneo. Known only from type locality.

**Material examined** (1). Only the holotype.

**Etymology.** The name refers to the very large size of this species.

**Relationships.** Closely related to the species of the *collaris*-lineage.

**Recognition.** According to presence of an elytral spot in *C. gigantea* the key in my revision (Baehr 1997, pp. 377-378) can be followed on to caption 2. This caption then must be altered as following:

- 2. Size very large, >6 mm **and** elytral spot about circular **and** pronotum not contrastingly red. Brunei, Borneo .....  
..... *gigantea*, spec. nov.
- Size smaller, <5 mm, **either** elytral spot clearly oblique **or** pronotum contrastingly red 2a.
- 2a. = 2ff of key

Appendix

Summary of measurements and ratios of the *rubiginosus*-group of the genus *Adelotopus*.

For better recognition of the many closely related species the measurements and ratios for all species of the *rubiginosus*-group are compiled in the following table. The species are arranged as in the revision (Baehr 1997). Species described as new in the present paper are inserted at their appropriate position.

	body length (mm)	ratio width/length pronotum	ratio width base/apex pronotum	ratio width pronotum/head	ratio length/width elytra	ratio length elytra/pronotum
<i>rubiginosus</i>	3.7-5.5	1.40-1.51	1.37-1.48	1.47-1.61	1.54-1.65	2.20-2.48
<i>distinguendus</i>	3.8-4.9	1.51-1.55	1.44-1.48	1.56-1.62	1.45-1.55	2.35-2.50
<i>foliaceus</i>	4.3-4.9	1.44-1.51	1.37-1.42	1.45-1.51	1.56-1.60	2.35-2.42
<i>laticollis</i>	4.7-6.1	1.58-1.70	1.40-1.51	1.54-1.65	1.47-1.51	2.35-2.52
<i>cribricollis</i>	4.0-5.5	1.52-1.60	1.36-1.41	1.49-1.54	1.49-1.57	2.39-2.47
<i>rugaticollis</i>	5.6	1.53	1.48	1.51	1.50	2.36
<i>wilochrae</i>	4.95-5.5	1.56-1.62	1.41-1.45	1.47-1.51	1.47-1.49	2.33-2.41
<i>lucidus</i>	4.25-4.8	1.62-1.67	1.42-1.48	1.50-1.55	1.45-1.51	2.46-2.50
<i>luteus</i>	4.85-4.95	1.73-1.75	1.52-1.56	1.67-1.70	1.45	2.45-2.52
<i>houstoni</i>	4.65	1.75	1.42	1.54	1.48	2.50
<i>virgatus</i>	4.9-5.7	1.62-1.68	1.36-1.48	1.47-1.58	1.46-1.58	2.42-2.58
<i>brittoni</i>	5.8	1.65	1.44	1.65	1.45	2.43
<i>adustus</i>	5.9-6.8	1.69-1.78	1.52-1.58	1.65-1.70	1.45-1.55	2.43-2.56
<i>punctatissimus</i>	5.6	1.65	1.40	1.52	1.44	2.51
<i>queenslandicus</i>	4.1-5.3	1.56-1.60	1.41-1.46	1.52-1.58	1.51-1.57	2.41-2.50
<i>aequus</i>	4.3-5.6	1.47-1.58	1.35-1.39	1.43-1.50	1.51-1.60	2.33-2.50
<i>palumae</i>	4.45-5.15	1.55-1.62	1.47-1.53	1.59-1.66	1.48-1.54	2.35-2.50
<i>laevigatus</i>	5.5	1.57	1.49	1.51	1.47	2.49
<i>angustatus</i>	5.6	1.47	1.43	1.55	1.65	2.41
<i>flavescens</i>	3.9-4.3	1.44-1.50	1.38-1.41	1.50-1.52	1.52-1.55	2.29-2.34
<i>grossepunctatus</i>	5.0	1.47	1.44	1.49	1.57	2.36
<i>ooldeae</i>	5.4	1.55	1.50	1.56	1.64	2.53
<i>crucis</i>	5.5	1.52-1.57	1.49-1.50	1.58-1.62	1.49-1.50	2.35-2.36
<i>crassus</i>	6.65	1.71	1.60	1.73	1.46	2.50
<i>latipalpis</i>	5.7	1.66	1.43	1.55	1.50	2.49

## Remarks

In spite of the recent comprehensive revisions of the Australian-Oriental Pseudomorphinae this supplement again includes the description of seven new species, among these a conspicuous one from South Asia. It follows, then, that careful sampling efforts in more remote areas of the North and the Interior of Australia probably will be rewarded by the detection of additional new species.

Apart from the capture of new species, intensified sampling in Northern Territory revealed that several species that were known hitherto only from tropical Queensland, actually have a wider range over much of northern tropical Australia. In the light of these observations, the pseudomorphine fauna of the wet tropics of northern Australia seems to be more homogenous and wider ranging than it was believed so far.

The first definitive record of an Australian pseudomorphine species (*Sphallomorpha v-lineata*) from tropical rain forest would call the attention to this habitat. Intensified fogging actions in (lowland) rain forests probably will demonstrate that moss-covered trees in this environment have been colonized by additional pseudomorphine species.

Of special interest is also the very large number of externally highly similar, uniformly reddish species of the *rubiginosus*-group of the genus *Adelotopus* that occur in the dry areas of interior New South Wales, northwestern Victoria and southern central South Australia. This highly uniform group at present includes 25 species, of which nearly 20 species are distributed in the dry country belt from southern central Western Australia through South Australia to central New South Wales and southern central Queensland.

Again, as in other groups, the question arises how so many related species were able to evolve in an apparently rather uniform environment known for the large number of species possessing vast ranges. Indeed, especially in this species-group, the number of species being sympatric and in many localities even syntopic – which means that they commonly are being sampled from the same tree – is large und the mechanisms that prevent interbreeding of related species are still unknown.

## Acknowledgements

I am indebted to Mr. R. Bejsak, Sydney, Dr. S. Bily, Praha, Dr. R. Brancucci, Basel, Dr. R. Brown, Darwin, Dr. T. Deuve, Paris, Dr. P. M. Giachino, Torino, Dr. S. Grove, Cairns, Mr. S. Hine, London, Dr. T. Houston, Perth, Dr. G. Monteith, Brisbane, and Mr. F. Wachtel, München, for kindly forwarding specimens.

## References

- Baehr, M. 1992. Revision of the Pseudomorphinae of the Australian Region 1. The previous genera *Sphallomorpha* Westwood and *Silphomorpha* Westwood. Taxonomy, phylogeny, zoogeography (Insecta, Coleoptera, Carabidae). – *Spixiana* Suppl. 18: 1-440
- 1993a. New species and new records of the genus *Sphallomorpha* Westwood from Australia. Supplement to the "Revision of the Pseudomorphinae of the Australian Region 1." (Insecta, Coleoptera, Carabidae). – *Spixiana* 16: 25-42
- 1993b. A remarkable new species of the genus *Sphallomorpha* Westwood from Irian Jaya (New Guinea). 2. Supplement to the "Revision of the Pseudomorphinae of the Australian Region 1." (Insecta, Coleoptera, Carabidae). – *Spixiana* 16: 207-211
- 1994a. Phylogenetic relations and biogeography of the genera of Pseudomorphinae (Coleoptera, Carabidae). In: Desender, K., M. Dufréne, M. Loreau, M. L. Luff & J.-P. Malfait (eds): Carabid Beetles: Ecology and Evolution. – Series Entomologica 51: 11-17. Kluwer, Dordrecht, Boston, London
- 1994b. New species and new records of the genus *Sphallomorpha* Westwood from Australia and New Guinea. 3rd Supplement to the "Revision of the Pseudomorphinae of the Australian Region 1." (Insecta, Coleoptera, Carabidae). – *Spixiana* 17: 215-235
- 1997. Revision of the Pseudomorphinae of the Australian Region 2. The genera *Adelotopus* Hope, *Cainogenion* Notman, *Pausotropus* Waterhouse, *Pseudomorpha* Kirby, and *Cryptcephalomorpha* Ritsema. Taxonomy, phylogeny, zoogeography (Insecta, Coleoptera, Carabidae). – *Spixiana* Suppl. 23: 1-510



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Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 2002

Band/Volume: [025](#)

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Artikel/Article: [New species and new records of Australian and Oriental Pseudomorphinae 4th Supplement to the Revisions of the Pseudomorphinae of the Australian region \(Insecta, Coleoptera, Carabidae\) 101-129](#)