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**Three new species of the genus *Lebia* LATREILLE  
from the Australian-Papuan Region**  
4<sup>th</sup> supplement to “The genus *Lebia* LATREILLE in the Australian-Papuan Region”

**With nomenclatorial notes on *Lebia trivittata* BAEHR, 2004  
and on the genus *Pseudoplatia* BAEHR, 2006**

**(Coleoptera, Carabidae, Lebiini)**

**Martin BAEHR**

### Abstract

Three new species of the carabid genus *Lebia* LATREILLE are described from the Australian-Papuan region: *Lebia eylandti* from Groote Eylandt off the north coast of Australia, *Lebia gregoryi* from north-western Queensland, Australia, and *Lebia keiana* from the Kei Islands. The new species are introduced into the most recent key to the species of the genus *Lebia* of the Australian-Papuan Region.

The preoccupied names *Lebia trivittata* BAEHR, 2004 and *Pseudoplatia* BAEHR, 2006 are replaced by the names *Lebia trivittoides* nom. nov. and *Pseudoplatiella* nom. nov.

### Introduction

As a further supplement to the revision of the species of the lebiine genus *Lebia* LATREILLE, 1802 in the Australian and Papuan Regions (BAEHR 2004, 2005, 2007, 2010) three new species are described from Groote Eylandt off the east coast of Arnhem Land in far Northern Territory of Australia, from north-western Queensland, Australia, and from the Kei Islands south-west of the west coast of New Guinea. The specimens either were kindly sent for identification by M. HÄCKER, A. SKALE, and A. WEIGEL, either were found in the rich unidentified material of South Australian Museum, Adelaide, which I recently had the opportunity to examine.

The new species belong to two characteristic subgroups within the Australian-Papuan *Lebia* which are not only very similar in their external morphology, but, more important, also in shape and structure of their male genitalia. Two of the new species only differ in colouration and pattern of the elytra and in minor features of body shape and shape of their male genitalia from described species, the third one is a rather unique species without close relatives in the Australian-Papuan region.

### Methods

The genitalia were removed from specimens relaxed for a night in a jar under moist atmosphere, then cleaned for a short while in hot 10% KOH. The habitus photographs were obtained by a digital camera using ProgRes CapturePro 2.6 and AutoMontage and subsequently were worked with Corel Photo Paint X4.

Measurements were taken using a stereo microscope with an ocular micrometer. Length has been measured from apex of labrum to apex of elytra. Length of pronotum was measured from the most advanced part of the base to the most advanced part of the apex. Length of elytra was taken from the most advanced part of the humerus to the very apex of the elytra.

Types are stored in the working collection of the author in Zoologische Staatssammlung, München (CBM), Naturkundemuseum Erfurt (NME), Queensland Museum (QM), and South Australian Museum, Adelaide (SAMA).

Data of examined material are given in full length and the exact labelling was used; also original spelling of date of collecting is used. A / with a blank before and after it denotes a new label, two blanks mark a new line on the same label.

***Lebia eylandti* sp. n.** (Figs 1, 4)

**Examined types:** Holotype: ♂, "Groote Eylandt N. B. Tindale / SAMA Database No. 25-033871" (SAMA).

**Etymology:** The name refers to the type locality of this species, Groote Eylandt off the east coast of Arnhem Land, Northern Territory of Australia.

**Diagnosis:** Easily distinguished from all described species of the Australian-Papuan Region by the characteristic elytral pattern. Further distinguished from *L. cordifer* DARLINGTON, 1968

and *L. insularum* DARLINGTON, 1968 which possess a similarly shaped and structured aedeagus, by the differently shaped denticulate sclerite in the internal sac; also from *L. cordifer* by slightly asymmetric, less lancet-shaped, and more suddenly down-curved apex of the aedeagus; and from *L. insularum* by lesser body size, narrower prothorax, and in middle narrower aedeagus with longer, differently shaped apex.

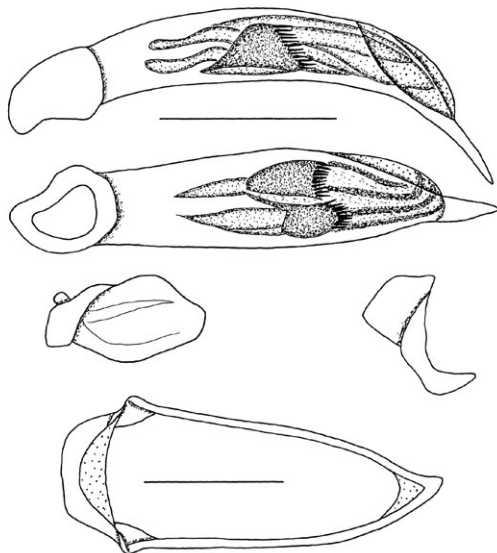
**Description:** Measurements and ratios: Body length: 6.0 mm; width: 2.85 mm. width/length of pronotum: 1.57; width pronotum/head: 1.16; length/width of elytra: 1.39; width elytra/pronotum: 1.84.

Colour (Fig. 4): Head dark reddish, centre of pronotum brown, laterad paler, margins dirty yellow; elytra brown, the narrow lateral margins and a narrow, elongate basal spot on 5<sup>th</sup> and 6<sup>th</sup> intervals dirty yellow; this spot attains the base and on the 5<sup>th</sup> interval surpasses slightly the basal third of the elytra, on the 6<sup>th</sup> interval it is shorter. Antenna and palpi pale reddish; femora yellow, tibiae and tarsi pale reddish. Lower surface reddish-brown.

Head (Fig. 4): Of average size and shape, slightly narrower than pronotum. Eye very large, semicircular, orbit very short. Antenna of moderate size, surpassing the basal angle of the pronotum by about 2 antennomeres. Labrum with a shallow, oblique impression on either side. Frons with short, oblique impressions close to the clypeal suture, centre of frons rather uneven. Labrum with distinct, clypeus and frons in middle with very superficial isodiametric microreticulation, posterior part of head glossy. Frons with scattered, moderately coarse punctures, surface glossy.

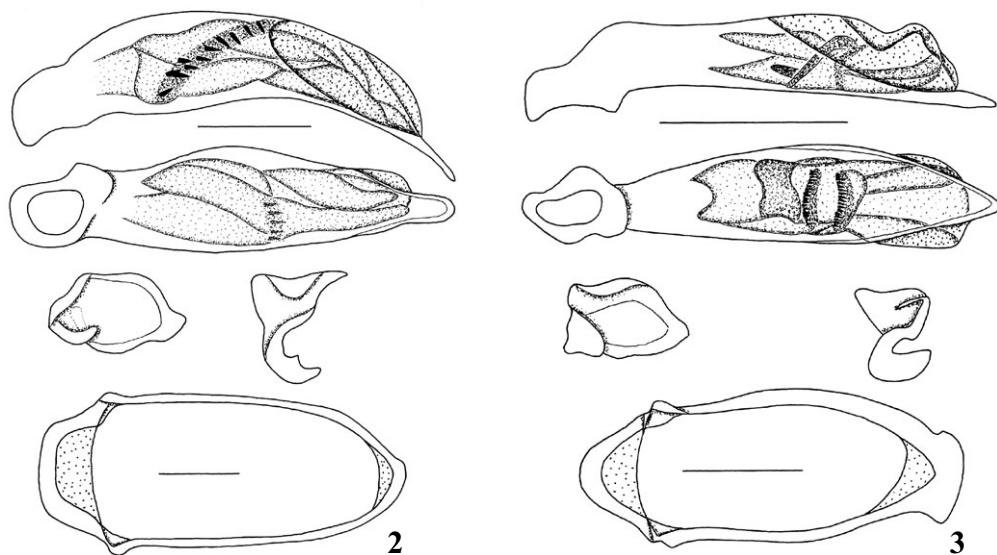
Pronotum (Fig. 4): Rather wide, slightly wider than the head, widest slightly in front of middle, slightly narrowed towards base. Apex slightly excised, apical angles widely rounded off, lateral margin anteriorly very convex, from middle gently convex, slightly sinuate in front of the rectangular basal angles. Base in middle much produced, lateral excision deep, lateral parts of base transversal, gently convex. Apex margined except in middle, base distinctly margined. Lateral margin widely explanate throughout, explanation even widened towards base, marginal channel fairly deep. Surface with a distinct prebasal transverse sulcus. Disk with superficial, about isodiametric to slightly transverse microreticulation, with dense, in middle rather deep, more or less irregular wrinkles, and with very scattered punctures, surface moderately glossy.

Elytra (Fig. 4): Rather elongate (in group), oval-shaped, markedly widened towards apex, widest well behind middle. Upper surface rather convex. Humerus rounded, lateral margin obliquely convex, barely incised at basal third, apical angles widely rounded, apex gently sinuate, apical margin slightly incurved at suture. Striae complete, deep, at bottom very finely crenulate. Intervals convex throughout. 3<sup>rd</sup> interval



**Fig. 1:** *Lebia eylandti* sp. n.

Aedeagus, left side and lower surface, left and right parameres, genital ring. Scale bars: 0.5 mm.



**Figs 2-3:** *L. gregoryi* sp. n. (left) and *L. keiana* sp. n. (right): Aedeagus, left side and lower surface, left and right parameres, genital ring. Scale bars: 0.5 mm.

bipunctate, punctures situated at 3<sup>rd</sup> stria. Series of marginal punctures composed of 14-15 punctures, the penultimate one removed from margin; series not interrupted in middle. Intervals with distinct, almost isodiametric to gently transverse microreticulation and with very scattered, barely recognizable punctures, rather dull. Metathoracic wings fully developed.

Lower surface: Metepisternum elongate, almost 2 x as long as wide. Prosteronum with a few elongate hairs in middle; abdominal sternites sparsely pilose, pilosity elongate and slightly denser on terminal sternite. Male terminal sternite 4-setose. In the male the 1<sup>st</sup>-3<sup>rd</sup> tarsomeres biserially and sparsely squamose.

Legs: Of moderate size. 4<sup>th</sup> tarsomeres deeply excised. Tarsal claws with 4 large teeth. 1<sup>st</sup>-3<sup>rd</sup> male tarsomeres sparsely, biserially squamose.

Male genitalia (Fig. 1): Genitalia rather similar to those of *L. cordifer* DARLINGTON. Genital ring large, narrow and elongate, triangular, rather symmetric, with narrow, angulate apex and narrow, elongate basis. Aedeagus moderately elongate, slightly widened in middle, barely sinuate, lower surface gently concave, in apical third considerably curved down. Apex elongate, depressed, straight, slightly asymmetrically triangular, situated asymmetrically on the right side. Orificium moderately elongate. Folding of internal sac complex, with a large, transverse, slightly sclerotized, coiled sclerite in middle at bottom which is densely spinose at the apical margin. Parameres of dissimilar shape, left paramere rather elongate in comparison, longer than right one, with transverse apex; right paramere short but massive, rhomboidal.

Variation: Unknown.

**Distribution:** Groote Eylandt off the east coast of Arnhem Land, far Northern Territory, Australia. Known only from type locality.

**Collecting circumstances:** Not recorded.

**Relationships:** With respect to shape and structure of the aedeagus, this species is most similar and probably nearest related to *L. cordifer* DARLINGTON, 1968 from Papua New Guinea and northern Australia, slightly less so to *L. insularum* DARLINGTON, 1968 from islands off the east coast of New Guinea. It may represent even a differently coloured subspecies of *L. cordifer* which species is recorded from northern parts of Northern Territory, but that taxonomic decision should be postponed until additional material, as well from Groote Eylandt, as from nearby Arnhem Land, is available.

*Lebia gregoryi* sp. n. (Figs 2, 5)

**Examined types:** Holotype: ♂, "NE AUSTRALIA N-Queensland Gregory Downs I-2000 lgt. L. Hovorka" (QMT).

**Etymology:** The name refers to the type locality of this species, Gregory Downs, north-western Queensland, Australia.

**Diagnosis:** Easily distinguished from all described species of the Australian-Papuan Region by combination of large body size, absence of any elytral pattern, and the structure of the internal sac of the aedeagus which bears a number of large spines.

**Description:** Measurements and ratios: Body length: 8.4 mm; width: 3.95 mm. width/length of pronotum: 1.45; width pronotum/head: 1.14; length/width of elytra: 1.42; width elytra/pronotum: 2.06.

Colour (Fig. 5): Head and elytra dark piceous, pronotum very slightly paler; the wide lateral margins of the pronotum and the narrow margins of the elytra dirty yellow. Antenna and palpi pale reddish; femora yellow except the knees which are brown, tibiae and tarsi pale reddish. Lower surface brown, lateral parts of abdomen paler.

Head (Fig. 5): Of average size and shape, slightly narrower than pronotum. Eye very large, semicircular, orbit very short. Antenna elongate, surpassing the basal angle of the pronotum by at least 3 antennomeres. Labrum with a shallow impression in middle. Frons with fairly elongate, irregularly oblique impressions, centre of frons rather uneven. Labrum with superficial, irregularly transverse microreticulation, head surface without microreticulation and apparently without any punctures, very glossy.

Pronotum (Fig. 5): Rather narrow, also narrow in comparison to the elytra, slightly wider than the head, widest slightly in front of middle, slightly narrowed towards base. Apex slightly excised, apical angles widely rounded off, lateral margins anteriorly very convex, from middle straight and slightly oblique, feebly sinuate in front of the rectangular basal angles. Base in middle much produced, lateral excision deep, lateral parts of base transversal, almost straight. Apex margined, but weakly so in middle, base coarsely margined. Lateral margin widely explanate throughout, explanation even widened towards base, marginal channel fairly deep. Surface with distinct, slightly v-shaped anterior transverse sulcus, with a deep prebasal sulcus. Disk only with finest traces of extremely superficial, slightly transverse microreticulation, with fairly dense, shallow, more or less irregular wrinkles, and with very scattered, barely recognizable punctures, surface glossy.

Elytra (Fig. 5): Rather elongate (in group), oval-shaped, markedly widened towards apex, widest at apical third. Upper surface convex. Humerus rounded, lateral margin in basal half oblique and straight, then convex, not incised at basal third; apical angles widely rounded, apex rather deeply sinuate, apical margin incurved at suture. Striae complete, deep, at bottom very finely crenulate. Intervals convex throughout. 3<sup>rd</sup> interval bipunctate, punctures situated at 3<sup>rd</sup> stria. Series of marginal punctures composed of 16-17 punctures, the penultimate one removed from margin; series not interrupted in middle. Intervals with very fine, slightly superficial, irregularly transverse microreticulation and with scattered, barely recognizable punctures, rather glossy. Metathoracic wings fully developed.

Lower surface: Metepisternum elongate, 2 x as long as wide. Prosternum with a few elongate hairs in middle; abdominal sternites sparsely pilose, pilosity elongate and slightly denser on terminal sternite. Male terminal sternite 4-setose.

Legs: Of moderate size. 4<sup>th</sup> tarsomeres deeply excised. Tarsal claws with 4 remarkably elongate teeth. 1<sup>st</sup>-3<sup>rd</sup> male tarsomeres sparsely, biseriately squamose.

Male genitalia (Fig. 2): Genital ring large, rather narrow, parallel sided, slightly asymmetric, with obtusely angulate apex and narrow, elongate basis. Aedeagus moderately elongate, widened in middle, barely sinuate, lower surface in basal half slightly convex, in apical half gently concave, the very apex slightly turned down. Apex rather elongate though wide, very depressed, straight, convex at tip, situated in middle. Orificium elongate. Folding of internal sac complex, with a narrow, oblique, slightly sclerotized, coiled sclerite in middle on the left side which bears about a dozen relatively elongate, single spines. Parameres of dissimilar shape, left paramere comparatively short and somewhat odd shaped, longer than right one, with transverse apex; right paramere short but massive, rhomboidal.

Variation: Unknown.

**Distribution:** North-western Queensland, Australia. Known only from type locality.

**Collecting circumstances:** Not recorded.

**Relationships:** Taxonomically this species is rather isolated within the Papuan-Australian species of the genus *Lebia* and does not seem to have close relatives in that area.

***Lebia keiana* sp. n.** (Figs 3, 6)

**Examined types:** Holotype: ♂, "INDONESIA or. KEI-ISLANDS 10km W Tuai city, vic. Ohoidertawun vill. 10m, S5°37'13"/E132°39'20" 17-20.II.2011 leg. A. Skale (013)" (CBM). – Paratypes: 2 ♂♂, !INDONESIA or. Kei-Islands 10km W Tuai city, 10m vic. Ohoidertawun village S5°37'13"/E132°39'20", 17.- 20.II.2011 leg. A. Weigel 013" (CBM, NME).

**Etymology:** The name refers to the range of this species, Kei Islands south-west of the western coast of New Guinea.

**Diagnosis:** Rather small, unicolourous yellow species; distinguished from three species which possess the most similar male genitalia, *L. subglabra* BAEHR, 2004, *L. novabritannica* BAEHR, 2004, and *L. salomona* BAEHR, 2004, by pale, unicolourous colouration, wider, posteriad more widened elytra, and shorter and stouter apex of the aedeagus.

**Description:** Measurements and ratios: Body length: 4.8-4.95 mm; width: 2.35-2.45 mm. width/length of pronotum: 1.50-1.53; width pronotum/head: 1.19-1.24; length/width of elytra: 1.29-1.32; width elytra/pronotum: 1.92-1.96.

Colour (Fig. 6): Upper and lower surface pale reddish to light brown; mouth parts, palpi, antennae, and legs dark yellow to pale reddish. Elytra without any pattern.

Head (Fig. 6): Of average size and shape, narrower than pronotum. Eyes very large, semicircular. Antennae of moderate size, surpassing basal angles of pronotum by slightly less than 2 antennomeres. Labrum in middle gently impressed. Frons with short, shallow, slightly irregular impressions, in middle with a more or less distinct, shallow, impression. Surface with superficial, about isodiametric microreticulation, with scattered, extremely fine punctures, glossy.

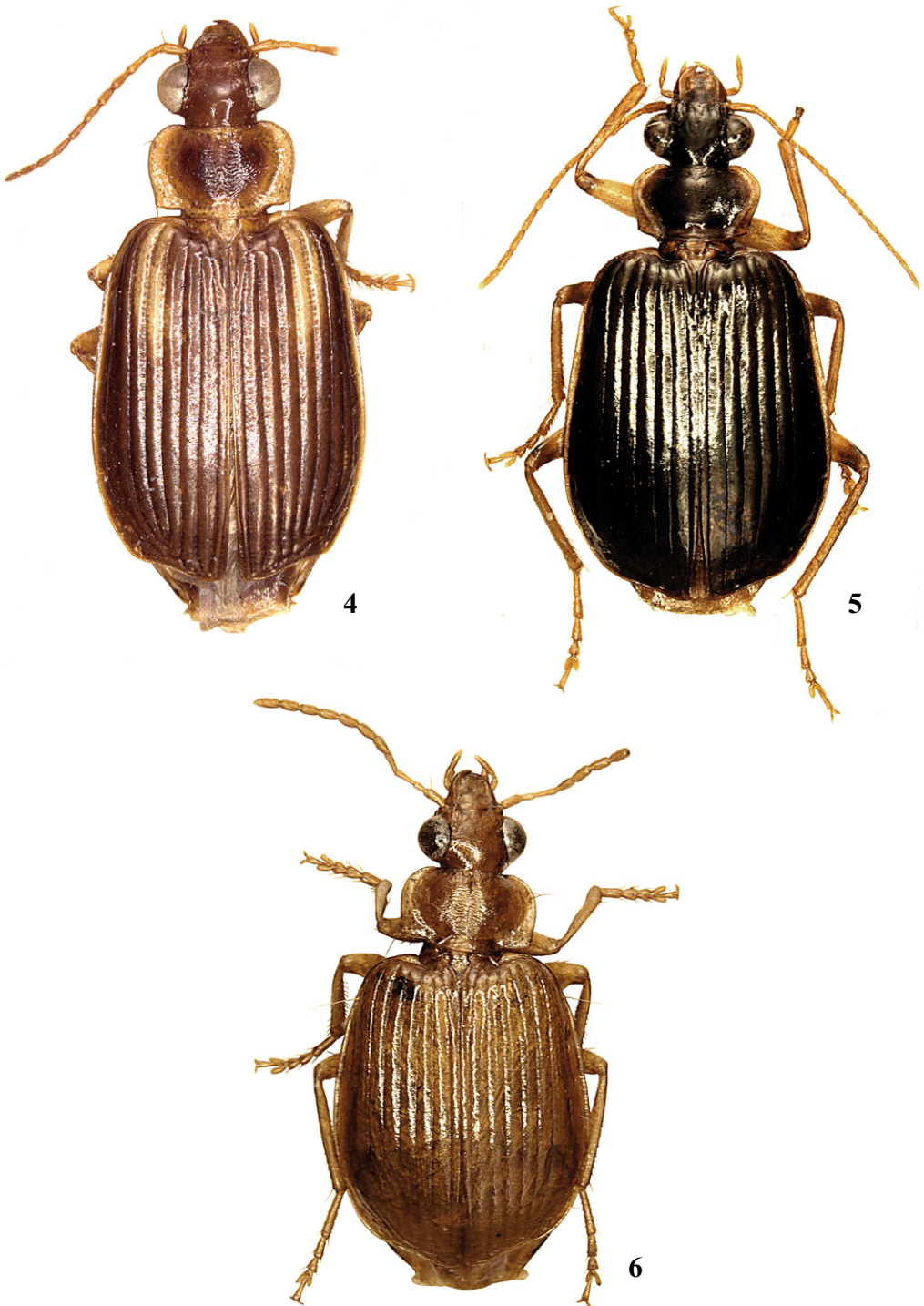
Pronotum (Fig. 6): Wide, considerably wider than head, widest at middle but barely narrowed towards base. Apical angles widely rounded off, lateral margin anteriorly very convex, from middle almost straight, barely sinuate in front of the faintly produced, rectangular basal angles. Base in middle much produced, lateral excision deep, lateral parts of base transversal, almost straight. Apex laterally margined, in middle not or indistinctly margined, base coarsely margined. Lateral margin explanate throughout, explanation even widened towards base, marginal channel fairly deep. Surface with a distinct, moderately deep prebasal transverse sulcus. Disk with rather superficial, about isodiametric microreticulation, with fairly dense, more or less coarse, quite irregular wrinkles and with very scattered punctures, surface moderately glossy.

Elytra (Fig. 6): Rather short (in group), oval-shaped, markedly widened towards apex, widest well behind middle. Upper surface convex. Humeri rounded, lateral margin in basal half oblique and little convex, in apical half markedly convex, barely incised at basal third, apical angles widely rounded, apex but faintly sinuate, apical margin slightly incurved at suture. Striae complete, deep, at bottom very finely crenulate. Intervals convex throughout. 3<sup>rd</sup> interval bipunctate, punctures situated at 3<sup>rd</sup> stria. Series of marginal punctures composed of 13-14 punctures, the penultimate one removed from margin; series not interrupted in middle. Intervals with distinct but slightly superficial, slightly transverse microreticulation and very scattered punctures which are barely recognizable, rather glossy. Metathoracic wings fully developed.

Lower surface: Metepisternum rather elongate, slightly less than 2 x as long as wide. Prosternum with a few short hairs in middle; abdominal sternites very sparsely pilose, pilosity slightly denser on terminal sternite. Male terminal sternite 2-setose.

Legs: Of moderate size. 4<sup>th</sup> tarsomeres very deeply excised. Tarsal claws with 4 large teeth. 1<sup>st</sup>-3<sup>rd</sup> male tarsomeres sparsely, biserially squamose.

Male genitalia (Fig. 3): Genitalia very similar to those of *L. subglabra* BAEHR. Genital ring large, rather elongate, fairly asymmetric, remarkably widened towards apex, with wide, oblique and convex apex and narrow, elongate basis. Aedeagus moderately elongate, slightly widened in middle, barely sinuate, lower surface straight throughout. Apex rather short, depressed, straight, triangular. Orificium elongate. Folding of internal sac complex, with two transverse, very densely denticulate sclerites in middle at bottom, and another plate that is slightly sclerotized at its left margin. Parameres of dissimilar shape, left paramere short in comparison, though longer than right one, with triangular apex; right paramere short but massive, rhomboidal.



**Figs 4-6: Habitus. Body length in brackets.**  
**4. *Lebia eylandti* sp. n.** (6.0 mm), **5. *L. gregoryi* sp. n.** (8.4 mm), **6. *L. keiana* sp. n.** (4.8 mm).

Variation: Apart from minor differences in relative shape of pronotum and elytra very little variation is noted.

**Distribution:** Kei Islands. Known only from type locality.

**Collecting circumstances:** Not recorded. All specimens collected in lowland.

**Relationships:** With respect to shape and structure of aedeagus and genital ring this species is quite similar to *L. subglabra* BAEHR from New Guinea, *L. novabritannica* BAEHR from New Britain, and *L. salomona* BAEHR from Bougainville Island in the Solomon Islands.

### Recognition

In the key to the Australian-Papuan *Lebia* (BAEHR 2004: 239), excluding those of the *L. karenia* subgroup (BAEHR 2010: 120), *Lebia eylandti* can be easily followed on to couplet 12 which must be altered as follows. For better use numbers of figures in the revision are introduced as **B04**.

12. Elytra testaceous with transverse dark spot; aedeagus with two denticulate bands and a slightly sclerotized fold behind (**B04** figs 13, 14). New Britain, Solomon Islands . . . . . 13.
- Elytra either dark with light cordiform spot (**B04** fig. 30) or with narrow and short humeral spot (Fig. 4); aedeagus with a transverse, densely spinose, sinuate sclerite at bottom of internal sac (Fig. 1; **B04** fig. 11). New Guinea, northern Australia. . . . . 12a.
- 12a. Elytra dark with light cordiform spot (**B04** fig. 30); lower surface of aedeagus regularly concave, apex symmetric and distinctly lancet-shaped (**B04** fig. 11). New Guinea and northern Australia: northernmost parts of Northern Territory and of Western Australia. . . *L. cordifer* DARLINGTON, 1968
- Elytra dark with narrow light humeral spot (Fig. 4); lower surface of aedeagus towards apex suddenly curved down, apex slightly asymmetric and less lancet-shaped (Fig. 1). Groote Eylandt: north-eastern Northern Territory. . . . . *L. eylandti* **sp. n.**
13. As in key.

In the key to the Australian-Papuan *Lebia* (BAEHR 2004: 239), excluding those of the *L. karenia* subgroup (BAEHR 2010: 120), *Lebia gregoryi* and *Lebia keiana* can be easily followed on to couplet 24 which must be altered as follows. For better use numbers of figures in the revision are introduced as **B04**.

24. Microreticulation of head distinct and complete; pronotum wide and rather incurved towards apex (**B04** fig. 44); aedeagus with wide, obtuse apex, internal sac with many dispersed dentiform sclerites (**B04** fig. 9). New Guinea . . . . . *L. barda* DARLINGTON, 1968
- Microreticulation of head superficial and incomplete; pronotum commonly narrower, usually less incurved towards apex (Fig. 5; **B04** figs 40, 41, 46, 48); internal sac of aedeagus with a transverse and sinuate or oblique denticulate or dentate band (Figs 2, 3; **B04** figs 5, 6), or with two denticulate sclerites in middle at bottom (**B04** fig. 12), or unknown . . . . . 25.
25. Microreticulation of pronotum rather superficial (**B04** fig. 46); elytra either unicolourous pale reddish or with large, slightly darker cloud; **either** aedeagus with basally wide, symmetric, triangular apex, internal sac with two transverse, densely denticulate bands and a more or less sclerotized plate behind (Fig. 3; **B04** fig. 12), **or** aedeagus with parallel sided, at tip convex apex, internal sac with a narrow oblique band covered by rather large spines (Fig. 2). . . . . 25a.
- Microreticulation of pronotum very distinct (**B04** figs 40, 41, 48); elytra unicolourous reddish; aedeagus with narrow, elongate apex asymmetrically situated at right side, internal sac with a transverse, sinuate, denticulate band (**B04** figs 5, 6), or unknown. . . . . 26.

- 25a. Body length > 8 mm; aedeagus with parallel sided, at tip convex apex, internal sac with a narrow oblique band covered by rather large spines (Fig. 2). Australia: north-western Queensland. . . . . *L. gregoryi* **sp. n.**
- Body length < 5 mm; aedeagus with basally wide, symmetric, triangular apex, internal sac with two transverse, densely denticulate bands and a more or less sclerotized plate behind (Fig. 3; **B04** fig. 12). New Guinea, Kei Islands . . . . . 25b.
- 25b. Pronotum slightly narrower, ratio width/length < 1.5; elytra slightly longer, ratio length/width > 1.34; apex of aedeagus longer and narrower (**B04** fig. 12). New Guinea . . . . . *L. subglabra* BAEHR, 2004
- Pronotum slightly wider, ratio width/length > 1.5; elytra slightly shorter, ratio length/width < 1.32; apex of aedeagus shorter and stouter (Fig. 3). Kei Islands . . . . . *L. keiana* **sp. n.**
26. As in key.

***Lebia trivittoides* nom. nov. for *Lebia trivittata* BAEHR, 2004**

To Wolfgang LORENZ' catalogue (LORENZ 2005) I owe the information that the name *Lebia trivittata* BAEHR, 2004 is unavailable, because it is preoccupied by the name *Lebia trivittata* DEJEAN, 1831 which species belongs to the tribe Pentagonicini and today is named *Pentagonica trivittata* (DEJEAN, 1831). Therefore the species *Lebia trivittata* BAEHR, 2004 is herewith renamed *Lebia trivittoides* **nom. nov.**

***Pseudoplatiella* nom. nov. for *Pseudoplatia* BAEHR, 2006**

To the same catalogue (LORENZ 2005) I also owe the information that the name *Pseudoplatia* BAEHR, 2006 for a genus of New Guinean Lebiini is preoccupied by the name *Pseudoplatia* PRINCIS, 1967 of a genus of Blattaria. Therefore the Lebiine genus *Pseudoplatia* BAEHR, 2006 is herewith renamed *Pseudoplatiella* **nom. nov.** The genus contains the following species:

*P. dorsata* (DARLINGTON, 1968)  
*P. dorsata minor* (BAEHR, 2006)  
*P. drumonti* (BAEHR, 2006)  
*P. expansa* (BAEHR, 2006)  
*P. georgei* (BAEHR, 2006)  
*P. gerdi* (BAEHR, 2006)  
*P. latipennis* (BAEHR, 2006)

*P. minuthoides* (DARLINGTON, 1968)  
*P. missai* (BAEHR, 2006)  
*P. recticollis* (BAEHR, 2006)  
*P. riedeli* (BAEHR, 2006)  
*P. rossi* (DARLINGTON, 1968)  
*P. sedlacekorum* (DARLINGTON, 1968)  
*P. subnitens* (DARLINGTON, 1968)

**Remarks**

Two of the new species of the genus *Lebia* described in the present paper are insular species each apparently closely related to a mainland species which is demonstrated by their rather similarly shaped and structured male genitalia. *L. eylandti* certainly is related to *L. cordifer* DARLINGTON from New Guinea and northern Australia. Body size and shape, and the male genitalia are quite similar, but the elytral pattern is very different.

*L. keiana* most probably is next related to *L. subglabra* BAEHR from New Guinea, and both species just slightly differ in shape of pronotum and elytra and in shape of the apex of the aedeagus.

The third species, *Lebia gregoryi*, apparently does not have any close relations to anyone of the described species from the Australian-Papuan region.

Besides some species which either form other distinctive groups, or possess genitalia which deviate in some respects from those of the groups mentioned below, in the Australian-Papuan Region two groups of species are clearly differentiated according to the structure of the internal sac of the aedeagus:



One group bears a coiled, sclerotized fold in the middle of the internal sac with is furnished in different ways with many elongate spines at its apical margin, and the genital ring is rather triangular and has a narrow apex (see fig. 1, **B04** figs 5-8, 10, 11). In one subgroup (*L. australica* BAEHR, 2004, *L. papuensis* MACLEAY, 1876, and *L. papuella* DARLINGTON, 1968) this band is narrow (see **B04** figs 5-7), in the other subgroup (*L. gemina* BAEHR, 2004, *L. insularum* DARLINGTON, 1968, *L. cordifer* DARLINGTON, 1968, and *L. eylandti* sp. n.) this plate is large. This group includes species that occur in New Guinea and northern Australia.

The species of the second group (*L. subglabra* BAEHR, 2004, *L. novabritannica* BAEHR, 2004, *L. salomona* BAEHR, 2004, *L. trivittata* BAEHR, 2004, and *L. keiana* sp. n.) bear two narrow denticulate bands in the middle of the internal sac and a large, more or less sclerotized, coiled fold behind, and the genital ring is wide and has a wide, oblique-convex apex (Fig. 2, **B04** figs 12-14, 18). The range of this group extends from Sulawesi through Kei Islands, New Guinea, New Britain to Solomon Islands.

### Acknowledgements

I am indebted to M. HÄCKER (Prague), P. HUDSON (Adelaide), A. SKALE (Bayreuth), and A. WEIGEL (Pössneck) for the kind gift or loan of the specimens. To the Deutsche Forschungsgemeinschaft (DFG) I am indebted for supporting the recent visit at South Australian Museum by the grant No. BA 856/11-1.

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