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## ***Gonomyia (Leiponeura) maidenorum* nov.sp., a new species of crane fly from Victoria, Australia (Diptera: Limoniidae)**

Zacariah D. BILLINGHAM & Günther THEISCHINGER

**Abstract:** A new species of Australian crane fly is here described: *Gonomyia (Leiponeura) maidenorum* nov.sp. from Victoria. This new species belongs in the *Gonomyia (Leiponeura) skusei* species group of THEISCHINGER (1994).

**Key words:** *Gonomyia*, Limoniidae, new species, Australia.

### **Introduction**

The Australian species of *Gonomyia* MEIGEN, 1818, were revised by THEISCHINGER (1994) and descriptions of three additional species were subsequently provided by THEISCHINGER (1996, 1999). This paper further adds to the knowledge of the Australian *Gonomyia* by adding one species to the *Gonomyia (Leiponeura) skusei* species group of THEISCHINGER (1994).

The species described herein was discovered during surveys of the crane fly fauna of Victoria undertaken by the first author.

### **Materials and Methods**

The specimen was collected by sweeping a hand net through vegetation and then preserved in 100% ethanol. As a result of this preservation, the coloration of the specimen may have changed from the natural state. For the illustration of the male genitalia (hypopygium) the specimen was cleared in KOH and displayed in glycerol. Descriptive terminology is in accord with MCALPINE (1981).

### **Systematics**

#### ***Gonomyia (Leiponeura) maidenorum* nov.sp. (Figs 1-3)**

**Type material:** Holotype ♂: Victoria, Guys Hill, tributary of Cardinia Creek (-38.00900°, 145.39458°), 5.xi.2011, Z. Billingham; Museum Victoria collection MVT21936.

## Description

### Male (Figs 1-3)

**Head.** Brownish black with vertex pale yellow, palpus brownish black. Antenna with scape and pedicel brownish black, flagellum missing.

**Thorax** (Figs 1 and 3). Pronotum pale yellow dorsally, brown laterally. Prescutum brownish black with posterolateral angle pale yellow. Scutum brownish black with anterolateral angle pale yellow, a medial yellow stripe extending from the transverse suture to the posterior boarder, posterolateral angle pale yellow. Scutellum brownish yellow with anterolateral angle darker brown. Mediotergite bordered anteriorly and laterally with pale yellow, otherwise brownish. Cervical sclerite and propleuron brownish. Anepisternum brownish. Katepisternum brownish dorsally and basally, pale yellow medially. Anepimeron pale yellow dorsally darkening to brown. Katepimeron entirely pale yellow. Meron pale yellow dorsally, brown basally. Katatergite pale yellow dorsally darkening to brown. Metanepisternum entirely pale yellow. Metakatepisternum pale yellow dorsally, brown basally. The thoracic patterning gives the appearance, when viewed laterally, of alternating brown and pale yellow longitudinal stripes. Procoxa pale brownish yellow, meso- and metacoxa brownish dorsally, pale yellow basally. Trochanters brownish yellow, remainder of legs missing.

**Wing.** Pale brownish grey. Halter with stem brownish yellow, knob pale yellow.

**Abdomen.** Brownish grey, each tergite and sternite with a narrow lateral pale yellow border such that, when viewed laterally, the abdomen appears to bear a medial pale yellow longitudinal stripe.

**Genitalia** (Fig. 2). Hypopygium brownish yellow. Gonocoxite with dorsolateral angle strongly produced; proctiger very elaborate; inner gonostylus club-shaped in dorsal view, bearing two close to apical setae that are slightly stronger than the normal setae, one more medially the other more laterally; outer gonostylus strongly curved, bifid with the prongs slightly pointed, the subapical one with two subapical teeth or at least elevations; aedeagal complex long with apical section bottle-shaped, not much curved and slightly longer than basal section.

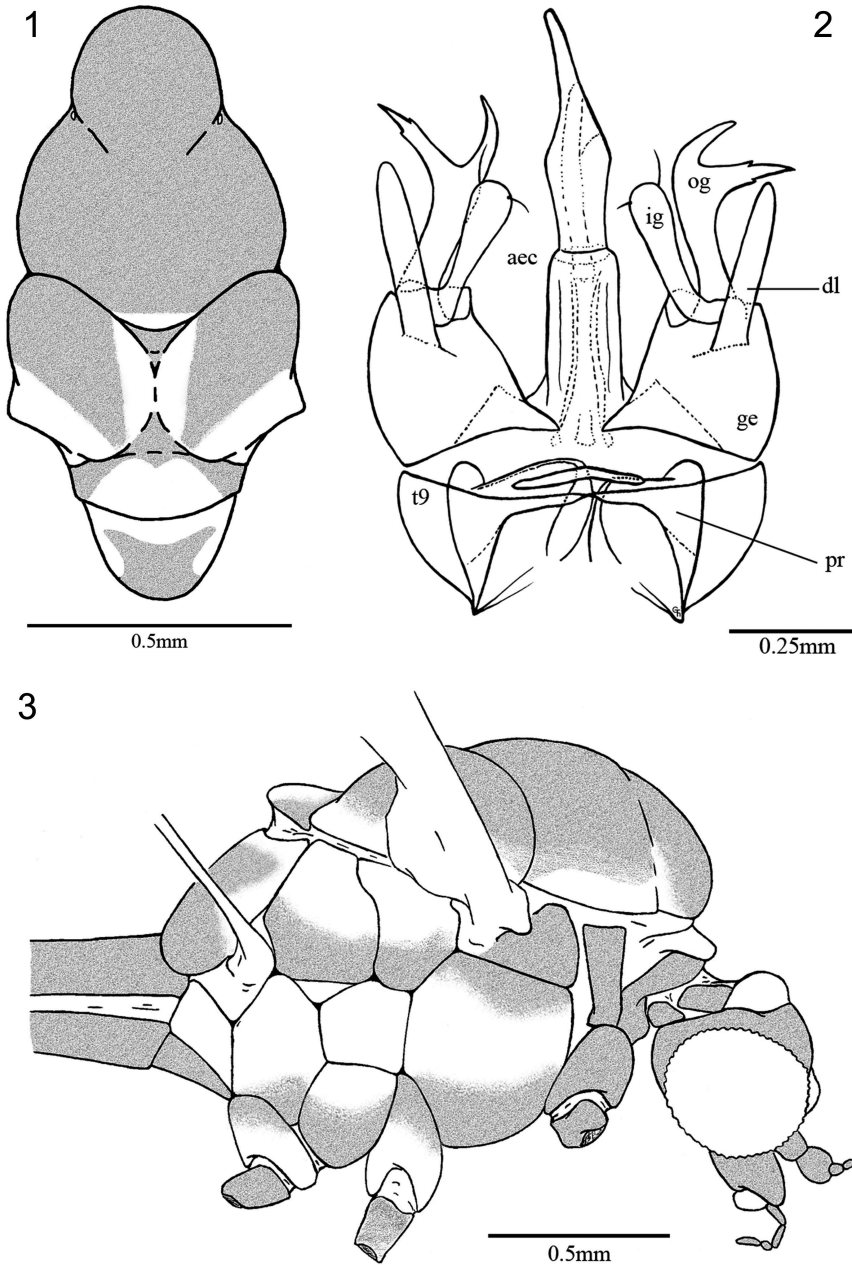
**Dimensions.** Wing length 5.0 mm; body length 4.5 mm.

Female unknown.

**Etymology.** This species is dedicated to the Maiden family whose support of, and assistance in, the first authors studies of Australian crane flies are greatly appreciated.

## Discussion

The strongly developed and elaborate proctiger, the strongly produced dorsolateral angle of the gonocoxite, the compact aedeagal complex and its lack of sclerotized lateral elements, the hardly sclerotized inner and strongly sclerotized outer gonostylus indicate that *G. (L.) maidenorum* nov.sp. belongs in the *G. (L.) skusei* group of THEISCHINGER (1994). In detail, it appears closest to *G. baiame* THEISCHINGER, 1994 and can be distinguished from it by the longer, straighter aedeagal complex and the almost identical structure of the two strongly curved branches of the outer gonostyli (versus the shorter and more strongly curved aedeagal complex and the different structure, bifid one, tri-fid the other, of the two branches of the outer gonostyli in *G. baiame*).



**Figs 1-3:** *Gonomyia (Leiponeura) maidenorum* nov.sp., male: (1) thorax, dorsal; (2) hypopygium, dorsal; (3) thorax, lateral. Abbreviations as used in figures: aec, aedeagal complex; dl, dorsal lobe of gonocoxite; ge, gonocoxite; ig, inner gonostylus; og, outer gonostylus; pr, proctiger; t9, tergite 9.

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## Zusammenfassung

In vorliegender Arbeit wird das Männchen von *Gonomyia* (*Leiponeura*) *maidenorum* nov.sp. from Victoria, Australien, beschrieben. Diese neue Species gehört in die *Gonomyia* (*Leiponeura*) *skusei* Gruppe von THEISCHINGER (1994) und steht *G. baiame* THEISCHINGER, 1994 am nächsten.

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- THEISCHINGER G. (1994): The Limoniinae (Diptera: Tipulidae) of Australia. V. The genera *Helius* LE PELETIER & SERVILLE, *Toxorhina* LOEW, *Limonia* MEIGEN (part), *Tonnoiromyia* ALEXANDER and *Collessophila* gen.nov. (all tribe Limoniini) and *Atarba* OSTEN-SACKEN, *Amphineurus* SKUSE, *Erioptera* MEIGEN, *Cheilotrichia* ROSSI, *Gonomyia* MEIGEN and *Idiocera* DALE (all tribe Eriopterini). — *Stapfia* **36**: 37-276.
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### Authors' addresses:

Zacariah D. BILLINGHAM  
Aquatic Sciences, Natural Resources, GHD  
180 Lonsdale Street, Melbourne, Victoria 3000, Australia  
E-mail: zac.billingham@ghd.com

PhD candidate, Department of Ecology, Environment  
and Evolution, La Trobe University  
Bundoora, Vic 3086, Australia  
E-mail: 18244636@students.latrobe.edu.au

Günther THEISCHINGER  
Research Associate, Australian Museum Research Institute  
Australian Museum, 1 William Street, Sydney NSW 2010  
Research Fellow, Office of Environment and Heritage  
NSW Department of Planning and Environment  
PO Box 29, Lidcombe NSW 1825, Australia  
E-mail: Gunther.Theischinger@environment.nsw.gov.au

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