

**A contribution to knowledge of Dermestidae (Coleoptera)
from Australia - Part 5.
Subfamily Trinodinae from Queensland and New Caledonia**

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Abstract. The following new species are described, illustrated and compared with similar taxa: *Trichelodes caledonicus* sp. nov. (New Caledonia) and *Trinoparvus suturalis* sp. nov. (Australia: Queensland). The species *Evorinea iota* (Arrow, 1915) is newly recorded from Australia: Queensland. A key to Australian species belonging to Trinodinae is provided.

INTRODUCTION

The subfamily Trinodinae Casey, 1900 recently contains 10 genera classed in 4 tribes worldwide (Háva 2015). Only an introduced species *Thylophorus contractus* Motschulsky, 1839 and an endemic species *Trichelodes delicatula* Carter, 1935 have still been known. In the present article, a further species is newly recorded for Australia and two species are newly described from Australia: Queensland and New Caledonia.

The article follows preceding articles about Dermestidae published by the present author (Háva 2016, 2017, 2018, Háva & Horák 2017).

MATERIAL AND METHODS

The size of the beetles or of their body parts can be useful in species recognition and thus, the following measurements were made:

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

elytral width (EW) - maximum linear transverse distance.

Moreover, the following abbreviations refer to the collections, in which the examined material is deposited:

AHEC Andreas Herrmann, private collection, Stade, Germany;

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic;

MNHN Muséum National d'Histoire Naturelle, Paris, France;

QMBA Queensland Museum, Brisbane, Queensland, Australia.

Specimens of the species described here are provided with red, printed labels with text as follows: „HOLOTYPE [or PARATYPE, respectively] *name of species* sp. nov. Jiří Háva det. 2019”.

RESULTS

Subfamily Trinodinae Casey, 1900

Tribe Trinodini Casey, 1900

Genus *Evorinea* Beal, 1961

Type species: *Apsectus iota* Arrow, 1915.

Evorinea iota (Arrow, 1915)

Material examined: „SEQ; 25°26'S 150°01'E, Boggom. 3. Via Taroom, 12 Nov 1996-Jan 1997, Cook & Monteith, Baited Flight Intercept 041“ / *Evorinea* sp. Det. J. F. Lawrence, 1 spec., J. Háva det., (QMBA); AU: Queensland, Mission Beach, 9.2.2014, L. J. Cookson leg., 1 ♂, J. Háva det., (AHEC); AU: N Queensland, Mt. Isa, 26.1.2000, Sv. Bílý lgt., 1 ♀, J. Háva det., (JHAC).

Distribution. A species known from Kenya, Reunion, Bali, Cambodia, Japan, Java, Malaysia: Pahang, Sarawak, Myanmar, Philippines, Sri Lanka, Sulawesi, Sumatra, Taiwan, Thailand, Vietnam, Caroline Is., Kiribati (Gilbert Is.), Mariana Is., Palau, Papua New Guinea, Ponape, Tanimbar, Tonga, Truk, West Papua (Háva 2015), new to Australia: Queensland.

Tribe Thylodriini Semenov-Tian-Shanskiy, 1909

Genus *Trichelodes* Carter, 1935

Type species: *Trichelodes delicatula* Carter, 1935.

Trichelodes delicatula Carter, 1935

Material examined: „SEQ; 26°08'S 151°59'E, Nanjur SF, 2nd SITE, 29 Jul- 23 Oct 1995, G. Monteith, 320 m, RF Intercept Trap, 2 spec., (QMBA); „SEQ; 28°12'S 153°16'E, Springbrook, Nth end, 15 May - 30 Aug 1997, G. Monteith, 5016, OF Intercept, 850 m“, 1 spec., (QMBA); „SEQ; 25°27'S 151°22'E, Gurgeena Plateau, 22 Aug-10 Oct 1998, G.B. Monteith, Open Forest, F.I.T. 7266“, 1 spec. (QMBA); „Eurimbula Nat. Pk., C Qld., 15 Sept 1989, G.B. Monteith, Pyrethrum, Rainforest“, 1 spec., (QMBA); „SEQ; 25°40'S 151°26'E, Nipping Gully, Site 4, 21 Aug-9 Oct 1998, G.B. Monteith, Open for., F.I.T., 200 m, 7261“, 1 spec., (JHAC); „New South Wales, Biddon, 18.09.2013, leg. Cookson, 1 spec., J. Háva det., (AHEC).

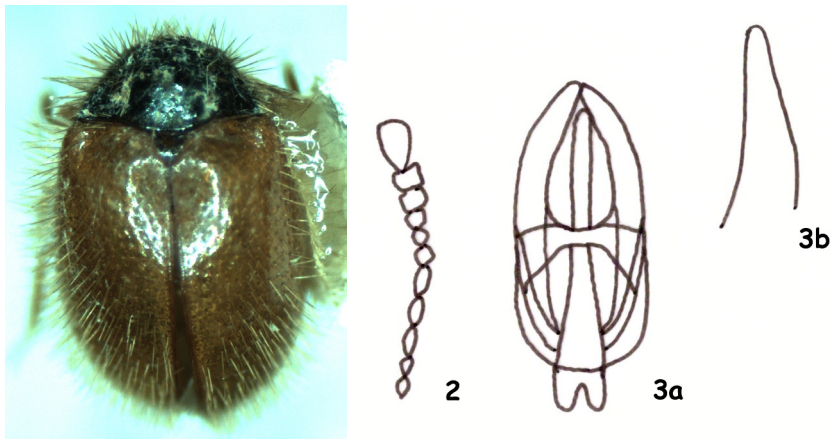
Distribution. A species known from Australia: New to South Wales and Queensland (Peacock 1978, Lawrence & Slipinski 2005, Háva 2015).

Trichelodes caledonicus sp. nov.

(Figs. 1-3)

Type material. Holotype (♂): „New Caledonia, 11202, 22°06'S 166°39'E, 160 m, Riv. Bleue, Kaori Geant, 19 Nov 2002, G. Monteith, pyrethrum, trees & logs“, (MNHN).

Description. Body measurements in mm: TL 1.70, EW 1.13. Body oval and convex, dorsal surface: head and pronotum black, elytra light brown, shiny, very sparsely punctate, clothed with long, strong, erect and yellow setation (Fig. 1). Head as broad as long, sparsely and finely punctate, very shiny. Eyes large with some hardly visible microsetae. Ocellus present on front. Antenna with 11 antennomeres; the antennal club consisting of 6 antennomeres, clearly distinct, longish ovate and almost two times as long as the shaft, the last segment is slightly bigger than each of the two previous segments. The colour of the antenna is entirely light brown (Fig. 2). Pronotum shiny black, very sparsely and finely punctate, like the elytra clothed with long, strong, erect and yellow setation; 2 times as wide at base as long; anterior and lateral margins as well as the lateral furrows straight, pronotum narrowed anteriorly. Elytra with similar punctation and setation as pronotum; cuticle shiny and entirely light brown. Scutellum small and somewhat triangular, finely punctate. Mesosternum and metasternum dark brown to black, punctation similar to elytra and pronotum; visible abdominal ventrites light brown



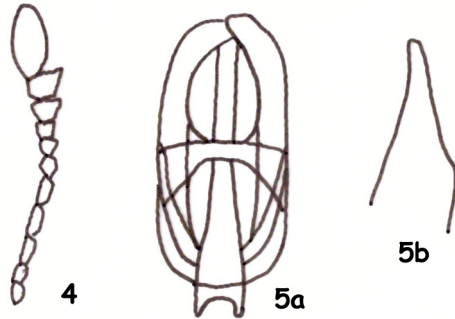
Figs. 1-3. *Trichelodes caledonicus* sp. nov.: 1- habitus, dorsal aspect; 2- antenna of male; 3a- male genitalia, 3b- tip of paramere, lateral aspect (Figs. 2-3 schematically).

as elytra, covered by thin, recumbent, yellow setation. Legs and tarsi entirely brown, nearly naked except a single row of thin long setae along edge of each tibia. Tarsi distinctly shorter than tibiae. Dorsal shape of the male genitalia as shown in Fig. 3.

Female. Unknown.

Differential diagnosis. The new species is similar to *Trichelodes delicatula* Carter, 1935 known from Australia: New South Wales and Queensland, but differs from it by the structure of antennae and male genitalia.

Etymology. Named according to the type Country.



Figs. 4-5. *Trichelodes delicatula* Carter, 1935:
4- antenna of male; 5a- male genitalia, 5b- tip of
paramere, lateral aspect (Figs. 4-5 schematically).

Tribe Trinoparvini Háva in Kirejtshuk, Háva & Nel, 2010

Genus *Trinoparvus* Háva, 2004

Type species: *Trinoparvus villosus* Háva, 2004.

Trinoparvus suturalis sp. nov.

(Figs. 6-8)

Type material. Holotype (♂): „SEQ: 27°36'Sx 153°13'E, Mt. Cotton, upper gully, 7 May 1998, 150 m, 5816, G. Montelth & G. Thomps, Rainfor., pyreth.ontrees“, [QMT245524] (QMBA). Paratypes: (5 spec.): the same data as holotype (4 QMBA, 1 JHAC); (1 spec.): „SEQ: 26°08'Sx 151°58'E, Nangur State For., 24 Nov 1995, G. Monteith, Pyrethrum, trees, 320 m“, (QMBA); (1 spec.): „SEQ: 27°14'Sx 152°15'E, Mt Deongwar, 3 km S, Site 1, 14 Oct 1998, P. Bouchard, 460 m, pyrethrum, trees, 7285“, (JHAC); (1 spec.): „SEQ: 26°52'Sx 151°59'E, Yarraman, 3.3 km S, 15 Jan 1998, G. Monteith, 420 m, pyrethrum, tre bases Vine forest, 5704“, (QMBA); (1 spec.): „SEQ: 25°48'Sx 151°59'E, Stockhaven, 3 km SE, 10 Oct 1998, Rainforest, G. & S. Monteith, 450 m, pyrethrum trees, 7270“, (QMBA); (1 spec.): „SEQ: 25°10'Sx 150°01'E, Isla Gorge NP, NE Cnr, 4 Apr 1998, G. B. Monteith, 260 m, Pyr,Trees, R/F, 5760“, (QMBA).

Description. Male. Body (Figs. 6) brownish-black on dorsal and ventral surfaces, shiny, oval, with erect, long, light brown setation. Measurements (mm): TL 1.1 EW 0.8. Head very large, finely punctate with erect, long, light brown setation; maxillary and labial palpi yellowish-brown; setation on mentum denser. Ocellus on front present. Antennae yellow, with 10-antennomeres, antennal club with 3-antennomeres (Fig. 7). Pronotum finely punctate as head, with erect, long, light brown setation, anterior angles not visible from above. Scutellum small, triangular, without setation. Elytra finely punctate as head and pronotum with erect, long, light brown setation. Each elytron dark brown to black, with light brown suture. Epipleura long, narrow, brown. Legs brown with long yellow setae. Prosternal process quite straight, broad, without tip. Metasternum with erect, long, light brown setation and without small striae near coxa. Abdominal ventrites brown, finely punctate with long, light brown setation; first visible abdominal ventrite with long striae near post-coxal line. Male genitalia as in Fig. 8, length 0.37 mm.



Figs. 6-8. *Trinoparvus suturalis* sp. nov.: 6- habitus; 7- antenna; 8- male genitalia (Figs. 7-8 schematically).

Female. Externally similar to male, but terminal antennomere is small.

Variability. Measurements (mm): TL 1.1-1.3 EW 0.7-0.9.

Differential diagnosis. The genus *Trinoparvus* Háva, 2004 recently contains three species (Háva 2014), the new species can be differentiated based on characters in the following key.

- 1(4) Elytral cuticle unicolorous
- 2(3) Each elytron with small depressions (bump) near scutellum; metasternum with small striae near coxa; first visible abdominal sternite with small striae near post-coxal line (Madagascar) *Trinoparvus laboriosus* Háva, 2004
- 3(2) Each elytron without small depression (bump) near scutellum; metasternum without small striae near coxae; first visible abdominal sternite without small striae near post-coxal line (New Caledonia) *Trinoparvus villosus* Háva, 2004
- 4(1) Elytral cuticle bicolorous
- 5(6) Each elytron with two large reddish circular spots (Thailand) *Trinoparvus majeri* Háva, 2014
- 6(5) Elytral suture light brown, other parts black to dark brown (Australia: Queensland) *Trinoparvus suturalis* sp. nov.

Etymology. The specific name was chosen according to the light brown coloured suture.

KEY TO SPECIES OF TRINODINAE RECORDED FROM AUSTRALIA

- 1(4) antennae 11- antennomered, elytra unicolorous, prosternum with tip
- 2(3) pronotum without any carina or furrow; antennal club composed with 1-2 antennomeres; prosternum with distinct antennal grooves *Evorinea iota* (Arrow, 1915)
- 3(2) sides of pronotum with prominent longitudinal sublateral carina or deep furrow, at least in basal half, separating disc from side borders; antennal club composed of 4-6 antennomeres; prosternum without distinct antennal grooves *Trichelodes delicatula* Carter, 1935
- 4(1) antennae 10- antennomered, body very small and circular, elytra bicolorous, prosternum without tip *Trinoparvus suturalis* sp. nov.

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