

ARTIGO / ARTÍCULO / ARTICLE
Contribution to the knowledge of the genus
Trogoderma Dejean, 1821 from New Caledonia
(Coleoptera: Dermestidae: Megatomini).

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Abstract: *Trogoderma caledonica* sp. nov. and *T. lescheni* sp. nov. from New Caledonia are described, illustrated and compared with the similar New Caledonian species *T. vulneratum* Fauvel, 1903, *T. asperatum* Fauvel, 1903 and *T. millei* Háva, 2013. Key to species is provided.

Key words: Coleoptera, Dermestidae, Taxonomy, new species, distribution, *Trogoderma*, New Caledonia.

Resumen: Contribución al conocimiento del género *Trogoderma* Dejean, 1821 en Nueva Caledonia (Coleoptera: Dermestidae: Megatomini). Se describen *Trogoderma caledonica* sp. nov. y *T. lescheni* sp. nov. de Nueva Caledonia, y se ilustran y comparan con las especies neocaledonias similares *T. vulneratum* Fauvel, 1903, *T. asperatum* Fauvel, 1903 y *T. millei* Háva, 2013. Se aporta una clave de especies.

Palabras clave: Coleoptera, Dermestidae, Taxonomía, nuevas especies, distribución, *Trogoderma*, Nueva Caledonia.

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Introduction

The first concrete faunistic data and descriptions of species belonging to the family Dermestidae (Coleoptera) from New Caledonia were reported by Fauvel (1903). Until Mroczkowski (1968) and Háva (2003, 2013), no more data on New Caledonian dermestids were reported. During the determination of some unidentified Dermestidae sent to me for study by Dr. Richard Leschen from the New Zealand Arthropod Collection, Auckland (New Zealand), two new species from New Caledonia belonging to the genus *Trogoderma* Dejean, 1821 were found and therefore here described.

Material and methods

Because the size of the beetles or of their body parts can be useful in species recognition, following measurements were made with the following abbreviations:

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

Pronotal length (PL) - maximum length measured from anterior margin to posterior margin.

Pronotal width (PW) - maximum linear transverse distance.

Elytral length (EL) - linear distance from shoulder to apex of elytron.

Elytral width (EW) - maximum linear transverse distance.

The following acronyms refer to the collections where the examined material is deposited:
 IACC Agronomique Néo-Calédonien (I.A.C.), La Foa, New Caledonia.
 ISNB Collections Nationales Belges d'Insectes et d'Arachnides, Brussels, Belgium.
 JHAC Private Entomological Laboratory and Collection, Jiří Háva, Prague, Czech Republic.
 NZAC New Zealand Arthropod Collection, Auckland, New Zealand.
 ZMAN Zoologische Museum, Amsterdam, The Netherlands.

Results

Trogoderma asperatum Fauvel, 1903

Trogoderma asperatum Fauvel, 1903: 337

Type depository. ISNB.

Material examined. New Caledonia, Mt. Koghis, 500 m, 5-12.X.1978, G. Kuschel leg., 5♂♂, J. Háva det. (3 NZAC, 2 JHAC); New Caledonia, Mt. Mou, 750 m, 2.XI.1978, G. Kuschel leg., 1♂, J. Háva det. (NZAC).

Remarks. Species described from Art, with no illustrations in the original description (Fauvel, 1903). New faunistic records from Mt. Koghis and Mt. Mou. The mentioned specimens from Mt. Koghis collected with a malaise trap in marquis and those from Mt. Mou with a sifted litter, in moss and lichens.

Trogoderma vulneratum Fauvel, 1903

Trogoderma vulneratum Fauvel, 1903: 338

Type depository. ISNB.

Material examined. New Caledonia, Conception, 12.X.1978, G. Kuschel leg., 1♀, J. Háva det. (NZAC); New Caledonia, Nouméa, Anse Vata, 1.X.1978, G. Kuschel leg., 1♂, J. Háva det. (JHAC); New Caledonia, Tonghoué, 1♂, J. Háva det. (ZMAN).

Remarks. Species described from Tonghoué (Fauvel, 1903). New faunistic records from Conception and Nouméa.

Trogoderma millei Háva, 2013

Trogoderma millei Háva, 2013: 27

Type depository. IACC.

Material examined. Holotype (♂): N Calédonie, Pocquereux, 21°44S 165°54E, 10/11/2003, Mille Christian Rec.

Trogoderma caledonica sp. nov.

(Figs. 1-3)

Type material. Holotype (♂): New Caledonia, Mt. Rembai, 700 m, 18.X.1978, G. Kuschel leg. Holotype deposited in NZAC.

Description.

Male. Body measurements (mm): TL 1.8 PL 0.8 PW 0.9 EL 1.0 EW 1.0. Body parallel (Fig. 1). Dorsal integument of head, pronotum and elytra entirely dark-brown. Ventral integument of thorax and

abdomen dark-brown. Antennae and legs dark-brown. Pubescence of dorsal surfaces coarse, erect consisting of dark-brown setae; pubescence on ventral surfaces moderately fine, recumbed dark-brown. Antennae with 11 antennomeres, antennal club with 6 antennomeres (Fig. 2). Median ocellus on head presented. Segments I-V dark brown, VI-XI black. Pronotum dark-brown, lateral margins very raised. Antennal fossa extending completely to base of prothorax, deeply excavated. Punctuation very fine on the disc and coarse on lateral margins. Elytra coarsely punctured on basal 1/3 and near scutellum, finely punctured on other elytral parts; humera with one large bump. Pubescence entirely dark-brown. Epipleuron extending to hind margin of metepimeron. Prosternum with anterior margin carinate, posterior process gradually tapering towards apex. Metasternum very finely punctured on the disc. Legs dark-brown with brown setae. Abdominal visible sternite finely punctured. Male genitalia as Fig. 3.

Female. Unknown.

Differential diagnosis. The new species differs from all known New Caledonian species by the unicolorous integument of elytra and the forms of antennae and male genitalia.

Name derivation. Named according to its type locality.

***Trogoderma lescheni* sp. nov.**

(Figs. 4-5)

Type material. Holotype (♀): New Caledonia, Mt. Koghis, 500 m, 5-12.X.1978, G. Kuschel leg. Holotype deposited in NZAC.

Description.

Female. Body measurements (mm): TL 3.0 PL 1.0 PW 1.3 EL 2.0 EW 1.4. Body oblong-ovate (Fig. 4). Dorsal integument of head and pronotum black, elytra red and black. Ventral integument of thorax and abdomen black. Antennae and legs dark-brown. Pubescence of dorsal surfaces coarse, erect consisting of black and white setae; pubescence on ventral surfaces moderately fine, recumbed black. Antennae with 11 antennomeres, antennal club with 4 antennomeres (Fig. 5). Median ocellus on head presented. Pronotum black, lateral margins very raised; pubescence black intermixed white setae on the disc. Punctuation very fine on the disc and coarse on lateral margins. Antennal fossa extending completely to base of prothorax, deeply excavated. Elytra black with small red spot on humera, coarsely punctured on basal 1/3 and near scutellum, finely punctured on other elytral parts. Pubescence black with small patches of white pubescence on humera. Epipleuron black, extending to hind margin of metepimeron. Prosternum with anterior margin carinate, posterior process gradually tapering towards apex. Metasternum very finely punctured on the disc. Legs dark-brown with black setae. Abdominal visible sternite finely punctured.

Male. Unknown.

Differential diagnosis. The new species is similar to *T. asperatum* Fauvel, 1903, but differs from it by the brown antennal club and the red humeral patterns of elytra; the new species differs from *T. reitteri* Blackburn, 1892 (species known from Australia: New South Wales) by the pronotal and elytral black integument and the structure of antennae.

Remarks. Bionomy unknown, the holotype specimen collected with a sifted litter and rotten wood.

Name derivation. Patronymic, dedicated to my friend Richard Leschen, Curator of Entomology in New Zealand Arthropod Collection, Auckland (New Zealand).

Key to the New Caledonian species of *Trogoderma*

- 1(2) Dorsal integument of elytra unicolorous.
 Setation unicolorous, integument dark-brown, form of body parallel and elongate..... *T. caledonica* sp. nov.
 Setation bicolorous, integument brown, form of body oblong-ovate, elytral setation brown with one fascia from yellow setation *T. millei* Háva, 2013
- 2(1) Dorsal integument of elytra bicolorous; form of body parallel or oblong-ovate.
- 3(4) Body parallel; each elytron with two broad yellow transverse bands (extremely these two bands are connected to only one large yellow macula); antennal club 5-segmented *T. vulneratum* Fauvel, 1903
- 4(3) Body oblong-ovate.
- 5(6) Each elytron black or dark-brown with large apical red spot; antennal club black, with 5 antennomeres..... *T. asperatum* Fauvel, 1903
- 6(5) Each elytron dark-brown with small humeral red spot; antennal club brown, with 5 antennomeres..... *T. lescheni* sp. nov.

List of all known New Caledonian Dermestidae

(i = introduced species)

| Species | Localities |
|--|---|
| Dermestinae | |
| Dermestini | |
| <i>Dermestes (Dermestes) ater</i> DeGeer, 1774 ⁱ | Art, Balade, Ile de Pins, Kanala, La Foa, Lifou |
| <i>Dermestes (Dermestinus) carnivorus</i> Fabricius, 1775 ⁱ | Ile de Pins |
| <i>Dermestes (Dermestinus) maculatus</i> DeGeer, 1774 ⁱ | Kanala, Nouméa, Thio, Yahoué, La Foa, La Tamoá |
| Attageninae | |
| Attagenini | |
| <i>Attagenus australis</i> (Montrouzier, 1860) | Art, Ile de Pins, Kanala, Lifou |
| <i>Attagenus fasciatus</i> (Thunberg, 1795) ⁱ | Nouméa, Yahoué, La Foa |
| <i>Attagenus unicolor unicolor</i> (Brahm, 1791) ⁱ | Baie du Prony, Ile Nou |
| Megatominae | |
| Anthrenini | |
| <i>Anthrenus (Anthrenus) oceanicus</i> Fauvel, 1903 ⁱ | Yahoué |
| Megatomini | |
| <i>Anthrenocerus variabilis</i> (Reitter, 1881) ⁱ | Bourail, Ile de Pins, Koné, Nouméa, Tonghoué |
| <i>Orphinus fulvipes</i> (Guérin-Ménéville, 1838) ⁱ | Koné, Nouméa, Yahoué |
| <i>Trogoderma asperatum</i> Fauvel, 1903 | Art, Mt. Koghis, Mt. Mou |
| <i>Trogoderma caledonica</i> sp. nov. | Mt. Rembai |
| <i>Trogoderma lescheni</i> sp. nov. | Mt. Koghis |
| <i>Trogoderma millei</i> Háva, 2013 | La Foa |
| <i>Trogoderma vulneratum</i> Fauvel, 1903 | Conception, Nouméa, Tonghoué |

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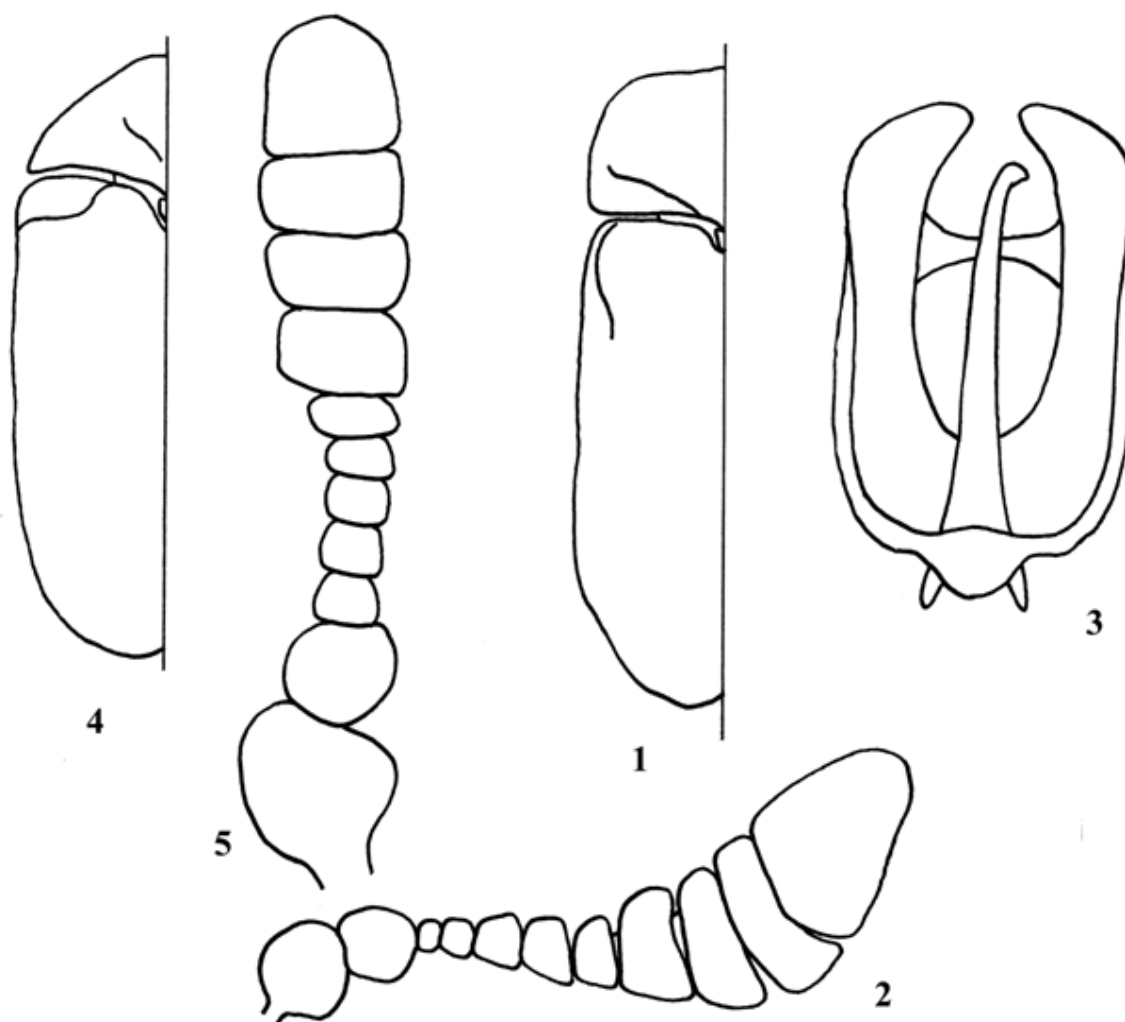
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Figs. 1-3.- *Trogoderma caledonica* sp. nov. 1.- Habitus. 2.- Antenna of male. 3.- Male genitalia.

Figs. 4-5.- *T. lescheni* sp. nov. 4.- Habitus; 5.- Antenna of female.