Coléoptères

Coléoptères, 2017, 23(6) : 61-76

ISSN 1265-3357
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http://www.coleopteres.fr

Two new genera of Trichonychini from New Caledonia (Coleoptera, Staphylinidae, Pselaphinae)

by

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Résumé

Deux nouveaux genres de la tribu des Trichonychini, sous-tribu des Trichonychina (Staphylinidae, Pselaphinae, Euplectitae) sont décrits de Nouvelle-Calédonie : *Leschenellus* Théry, n. gen., avec cinq nouvelles espèces (*Leschenellus cuccodoroi* Théry, n. sp., *L. deharvengi* Théry, n. sp., *L. perreaui* Théry, n. sp., *L. solei* Théry, n. sp., et *L. tubulatus* Théry, n. sp.), et *Secchius* Théry, n. gen., avec une nouvelle espèce (*Secchius besucheti* Théry, n. sp.).

Summary

Two new genera of the tribe Trichonychini, subtribe Trichonychina (Staphylinidae, Pselaphinae, Euplectitae) are described from New Caledonia: *Leschenellus* Théry, n. gen., with five new species (*Leschenellus cuccodoroi* Théry, n. sp., *L. deharvengi* Théry, n. sp., *L. perreaui* Théry, n. sp., *L. solei* Théry, n. sp. and *L. tubulatus* Théry, n. sp.), and *Secchius* Théry, n. gen., with one new species (*Secchius besucheti* Théry, n. sp.).

Key words

Coleoptera, Staphylinidae, Pselaphinae, Euplectitae, Trichonychini, Rove beetles, taxonomy, biodiversity, Oceania, New-Caledonia.

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Taxonomic knowledge of the Pselaphinae of New Caledonia is reasonable owing to the descriptive works of Montrouzier (1864), Raffray (1896, 1904), Fauvel (1903), Park (1952), Hlaváč *et al.* (2006), Hlaváč (2009) and Yin & Hlaváč (2016). Descriptions listed in this article add two new genera and six new species to the tribe Trichonychini, subtribe Trichonychina, bringing the total number of Pselaphinae species of New Caledonia to 26 (we include an 'Updated catalogue of the New Caledonian Pselaphinae').

Material and Methods:

Abbreviations used:

CTT: Collection T. Théry: Fleury les Aubrais, France
IAC: Institut Agronomique Néo-Calédonien: La Foa (Pocquereux), New Caledonia, France
MHNG: Muséum d'Histoire Naturelle de Genève: Geneva, Switzerland
MNHN: Muséum National d'Histoire Naturelle: Paris, France
NZAC: New Zealand Arthropod Collection: Auckland, New Zealand

The main part of the material studied in this work was collected by the first author in New Caledonia from November 2007 to February 2008. Specimens were collected using Flight Intercept Traps (FIT) (Hill & Cermak, 1997). Other material from MHNG and MNHN examined in this article were all collected by litter sifting.

All specimens we examined are either glued on a card or point or slide-mounted in Euparal. Genital structures, when extracted, were placed in a droplet of Euparal and pinned with the related specimen. Specimens were studied using a microscope Leica Diaplan and pictures were taken with the spot insight IN1820 camera. An ocular micrometer was used for the measurements of structures.

We follow the terminology of Chandler (2001) for morphological structures except for mesosternite which is replaced by mesoventrite and metasternite which is replaced by metaventrite. The classification of subfamilies, tribes and subtribes are those of Chandler (2001).

Taxonomy:

Leschenellus Théry, **gen. nov.** (Fig. 1, 3-7, 9-14)

Type species: Leschenellus tubulatus Théry, n. sp., here designated.

Diagnosis. – Head with vertexal sulcus indistinct; antennal tubercles small; apicolateral gular tubercles small. Pronotum with lateral antebasal foveae present; median antebasal fovea present; antebasal sulcus faint or indistinct. Elytra with four basal foveae; discal stria lacking. Median prosternal carina lacking. Mesoventrite with two median foveae; lateral foveae forked internally. Abdomen with visible tergites 1 and 2 subequal in length; visible tergites 1 and 2 each with an inversed U or V-shaped discal carina; visible tergite 1 with large basolateral foveae.

Description. – Length: 1-1.4 mm. Head triangular; narrower than pronotum; rugose and strongly punctate; frons and vertex from flattened to slightly concave, frontal rostrum low; vertexal foveae small and nude; vertexal sulcus indistinct; antennal tubercles small and smooth; dorsal postantennal pit small, barely visible. Temples slightly prominent and rounded. Eyes located at a level below antennal insertions. Venter with short erected setae; gular carina present; gular pit with two foveae; apicolateral gular tubercles small. Antennae with 11 antennomeres; scape cylindrical and elongate; pedicel oval, shorter than scape; antennomeres of flagellum rounded with the first one longer and slightly conical; club compound by three antennomeres: the ninth and the tenth subequal, short and rounded, the eleventh constricted and elongate in apical 2/3. Maxillary palpi with the second segment claviform; the third small, slightly rounded; the last, large and amygdaliform.

Pronotum rugose and strongly punctate; more or less flattened anteriorly; widest just before middle; wider than head but slightly narrower than elytra; with lateral margins rounded in the anterior half, slightly constricted after the middle and then more straightened and convergent posteriorly; three antebasal foveae present, located in the third posterior; lateral antebasal foveae small and nude; median antebasal fovea smaller, placed in a small depression; antebasal sulcus present but faint; lateral longitudinal sulcus absent or indistinct; paranotal carinae present and arcuate.

Elytra slightly convex; with lateral margins slightly rounded; widest around at middle; humeral cali slightly prominent; each elytron with four basal foveae; subhumeral elytral fovea present; sutural stria complete; discal stria lacking. Prosternum without longitudinal carina; with large lateral procoxal foveae. Mesoventrite with two median foveae; lateral foveae forked internally, anterior forks shorter than posterior ones. Lateral mesocoxal foveae large. Lateral foveae of metaventrite large.

Abdomen with visible tergite 1 with large basolateral foveae; visible tergites 1 and 2 with an inversed U or V-shaped discal carina. Other tergites with basolateral foveae absent or indistinct. Visible tergites 1- 2 subequal in length; length of other visible tergites variable depending on sex and species.

Trochanters more or less amygdaliform. Profemora slightly swollen, meso- and metafemora narrower than profemora. Tibiae slender, broadening in distal half, then slightly narrowing at apex. Second tarsomeres slightly longer than third tarsomeres.

Sexual dimorphism. Eyes of males medium-sized with more than 20 facets, females eyes smaller with fewer than 10 facets. Males of several species with lateral

posterior expansions at the visible tergite 3, lateral expansions more or less developed depending on species (Fig. 3-6) and bearing small setae at their tips. Females with no expansions. Males of species without abdominal expansions, presenting an abdomen similar to that of females. Aedeagus (Fig. 7; 9-13) asymmetric; left paramere well developed, its apex modified according to species; right paramere very short; median lobe with dorsal diaphragm; lacking basoventral projection; internal sac with two structures: the longer, median with a long part outside the median lobe and almost as long as the left paramere; the shorter, more internal structure, forked, its larger and longer part markedly curled. Penial plate amygdaliform.

Remarks. – *Leschenellus* n. gen. is morphologically close to *Scabritia* Chandler (2001), however *Scabritia* is different notably in the following features: elytra with a complete discal stria and with three basal foveae; mesoventrite with a single median fovea and with simple lateral foveae.

Derivatio nominis. – This genus is friendly named in honour of Richard A. B. Leschen, Auckland, New Zealand. Gender masculine.

Distribution. – New Caledonia (Fig. 14).

Leschenellus tubulatus Théry, **n. sp.** (Fig. 1, 6, 9, 14)

HOLOTYPE: 1 ♂, New Caledonia, South Province, Col d'Amieu (Sarraméa), 412 m, 21°34.407 S-165°45.674 E, 19.XII.2007-11.I.2008, Flight Intercept Trap (FIT) *(T. Théry), in* coll. MNHN. PARATYPES: 18 ex., *in* coll. CTT, IAC, MHNG and NZAC. 1 ex. ♂, New Caledonia, Col d'Amieu, 11.XI.1997, "leaf litter + log" *(I. Löbl)*; 3 ex., same data than holotype (including one hind part); 2 ex., same data than holotype but 14-23.XI.2007 (including one hind part); 3 ex. ♂, same data than holotype but 23.XI-5.XII.2007; 2 ex. ♂ , same data than holotype but 5-19.XII.2007 (including one hind part); 3 ex., same data than holotype but 7-14.II.2008; 3 ex. ♀, New Caledonia, Col d'Amieu, 11.XI.1997, "leaf litter + log" *(I. Löbl)*; 2 ex. ♀, New Caledonia, Col d'Amieu, 480-520 m, 22.X.1998, "sec. For. #6" *(I. Löbl)*.

Diagnosis. – Vertex and frons flattened; lateral sides of head quite straight, almost concave, not raised. Profemora slightly more swollen than mesofemora. Male abdomen with visible tergite 3 with two long lateral tube-shaped expansions; inner and outer margins of basal half of expansions curved parallel, then convergent and straight on distal half; inner margin of expansions with a broad tooth at half-way; tips of expansions dorsally bevelled. Aedeagus with apical process of the left paramere with two small excrescences ventrally and two long spiny recurved excrescences dorsally.

Description. – Body length approximately 1.3-1.4 mm. Body brown-orange; legs, mouthparts and antennae paler. Dorsal pubescence quite dense with pale recumbent setae. Surface of head and pronotum very rugose and markedly punctate; elytra and tergites not rugose with a fine and evenly distributed punctation. Head triangular, lateral margins

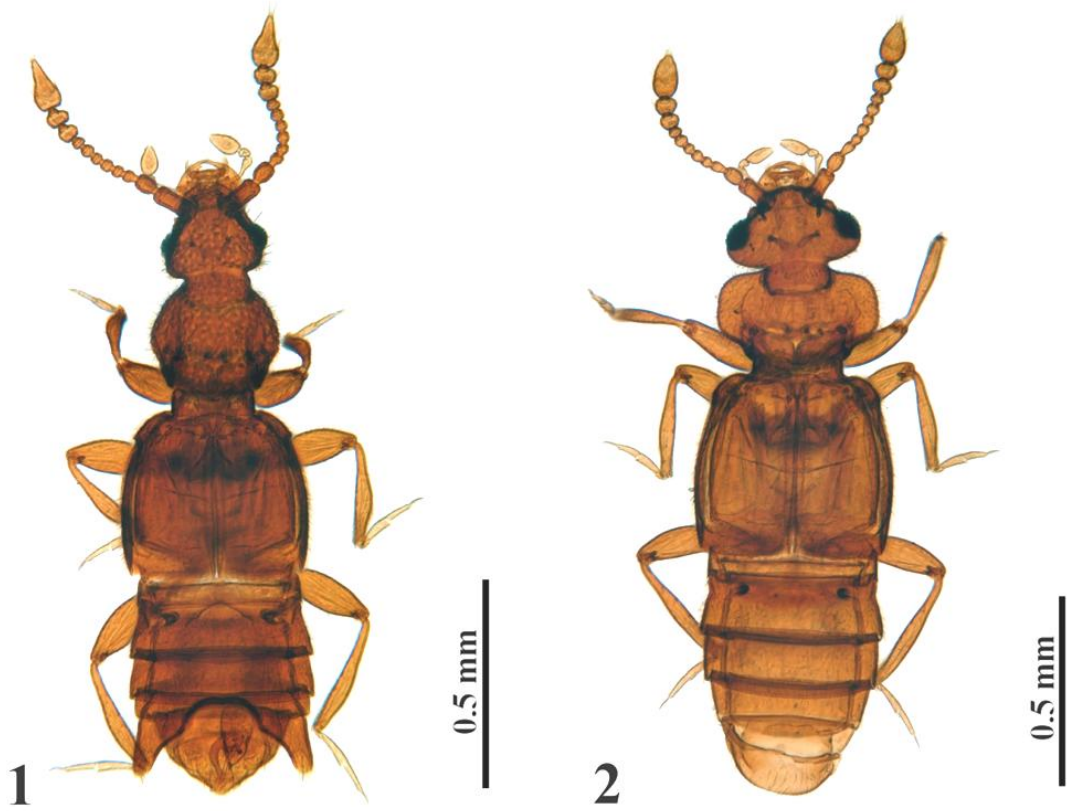


Fig. 1-2: habitus (in temporary slide preparations). – 1, *Leschenellus tubulatus* n. sp. (paratype). – 2, *Secchius besucheti* n. sp. (holotype with aedeagus extracted).

almost straight. Frons barely flat, not large. Antennae about as long as head and pronotum combined. Temples conspicuous and rounded. Abdomen with visible tergite 1 with a conspicuous discal carina in an inverted V-shape, rounded at base; discal carina of the visible tergite 2 barely visible, as wide as the previous one, but shorter and quite straight at base. Profemora slightly more swollen than mesofemora.

Sexual dimorphism. Male abdomen with visible tergite 3 with two long lateral tube-shaped expansions extending to the posterior margin of visible tergite 4; inner and outer margins of basal half of expansions curved parallel, inner and outer margins of apical half of expansions convergent, inner margin of expansions with a broad tooth at half-way; tips of expansions dorsally bevelled and bearing small setae; visible tergite 3 with a small posteriorly pointed median tooth on its posterior margin, this median tooth sometimes reduced or absent. Female abdomen with no expansion. Eyes of male with between 25 and 30 facets, eyes of female with less than ten facets. Aedeagus in lateral view (Fig. 9) with left paramere almost straight, strongly constricted in the apical third; apical process with two small excrescences ventrally, and two long recurved spiny excrescences dorsally; dorsal proximal excrescence, long and thin, reaching median lobe; dorsal distal excrescence shorter, reaching the proximal one.

Derivatio nominis. – The name is based after the unusual shape of the third visible tergite.

Distribution. – New Caledonia (Fig. 14).

Leschenellus cuccodoroi Théry, **n. sp.** (Fig. 5, 10, 14)

HOLOTYPE: 1 ♂, New Caledonia, South Province, Mont Do (Bouloupari), 1022 m, 21°45.212 S -166°00.011 E, 22.XI-7.XII.2007, Flight Intercept Trap (FIT) *(T. Théry), in* coll. MNHN.

Diagnosis (male). – Vertex and frons flattened; lateral sides of head straight, almost concave, not raised. Profemora slightly more swollen than mesofemora. Male abdomen with visible tergite 3 with two long lateral tube-shaped expansions; expansions slightly shorter than visible tergite 4; inner and outer margins of expansions curved parallel from base to apex; tips of expansions truncated, each truncation concave. Aedeagus with apical process of the left paramere with two broad lobes ventrally and two spiny recurved excrescences dorsally.

Description (male). – Body length approximately 1.3 mm. Body brown-orange; legs, mouthparts and antennae paler. Dorsal pubescence quite dense with pale recumbent setae. Surface of head and pronotum very rugose and markedly punctate; elytra and tergites not rugose with a fine and evenly distributed punctation. Head triangular, lateral margins almost straight. Frons barely flat, not large. Eyes with about more than 25 facets. Antennae about as long as head and pronotum combined. Temples conspicuous and rounded. Abdomen with visible tergite 1 with a conspicuous discal carina in an inverted U-shape, well-rounded at base; discal carina of the visible tergite 2 similar to that of visible tergite 1 but less visible and less rounded at base; visible tergite 3 with two long lateral tube-shaped expansions; expansions slightly shorter than visible tergite 4; inner and outer margins of expansions curved parallel from base to apex; tips of expansions truncated and bearing small setae, each truncation concave. Profemora slightly more swollen than mesofemora. Aedeagus in lateral view (Fig. 10) with left paramere slightly elbowed at proximal third; apical process with two large lobes ventrally and two recurved spiny excrescences dorsally; proximal excrescence, long and thin, not reaching median lobe; distal excrescence about three times shorter than the proximal one. Female unknown.

Derivatio nominis. – This species is friendly named in honour of Giulio Cuccodoro, Geneva, Switzerland.

Distribution. – New Caledonia (Fig. 14).

Leschenellus deharvengi Théry, **n. sp.** (Fig. 4, 11)

HOLOTYPE: 1 ♂, New Caledonia, North Province, Poindimié, Massif d'Amoa, Forêt de Povila, 440 m, 23.XII.1995, "litière" *(L. Deharveng), in* coll. MNHN.

Diagnosis (male). – Vertex and frons almost flattened; frons broad, lateral sides of head quite straight, elevated. Profemora conspicuously stouter than mesofemora. Male abdomen with visible tergite 3 with two short, triangular lateral expansions, much shorter than visible tergite 4; outer margins of expansions slightly curved, inner margins sinuate; posterior margin of visible tergite 3 medially with a notch located in a deep depression. Aedeagus with

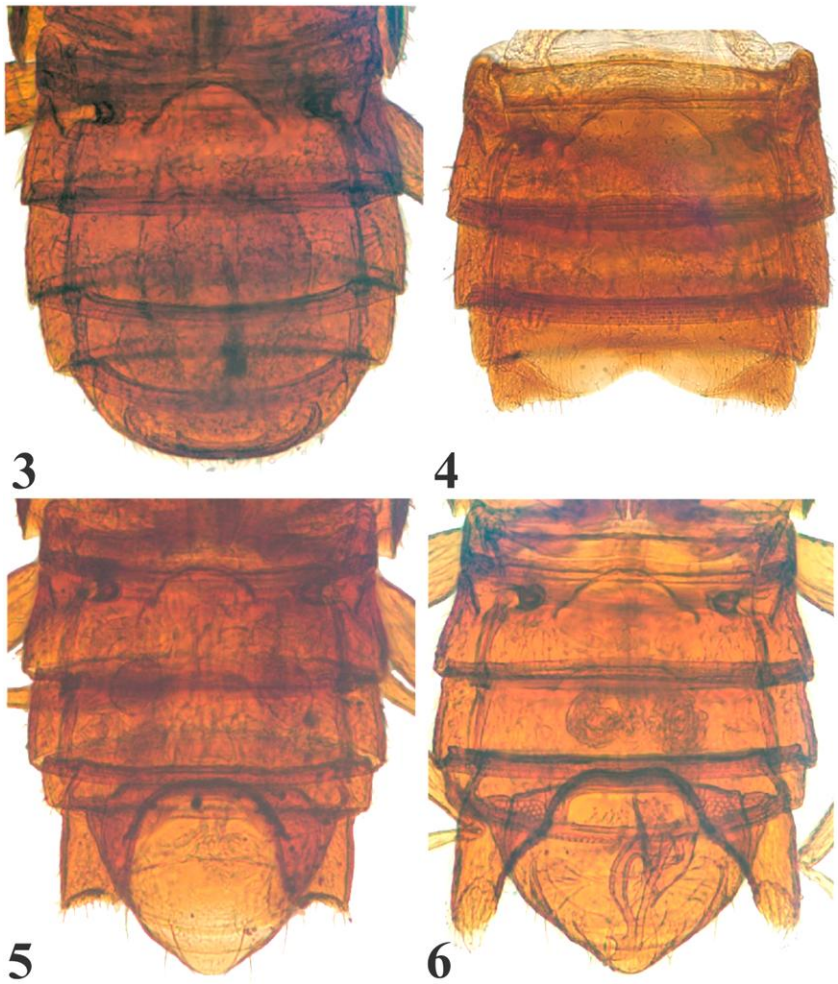


Fig. 3-6: abdomen of *Leschenellus spp.* (in temporary slide preparations). – 3, *Leschenellus solei* n. sp. (aedeagus extracted). – 4, *L. deharvengi* n. sp. (two last abdominal segments removed and aedeagus extracted). – 5, *L. cuccodoroi* n. sp. (aedeagus extracted). – 6, *L. tubulatus* n. sp.

apical process of the left paramere with a single, large rounded lobe ventrally and two spiny excrescences dorsally.

Description (male). – Body length approximately 1.2 mm. Body brown-orange; legs, mouthparts and antennae paler. Dorsal pubescence quite dense with pale recumbent setae. Surface of head and pronotum very rugose and markedly punctate; elytra and tergites not rugose with a fine and evenly distributed punctation. Head, lateral margins quite straight. Frons barely flat, large. Eyes with about 25 facets. Antennae about as long as head and pronotum combined. Temples conspicuous and rounded. Abdomen with visible tergite 1 with a conspicuous discal carina in an inverted V-shape, rounded at base; discal carina of the visible tergite 2 scarcely visible, as wide as the previous one, but shorter and quite straight at base; visible tergite 3 with two short, triangular lateral expansions, much shorter than visible tergite 4; outer margins of expansions slightly curved, inner margins sinuate; posterior margin of visible tergite 3 medially with a notch located in a deep depression. Profemora conspicuously stouter than mesofemora. Aedeagus in lateral view (Fig. 11) with left paramere strongly elbowed at proximal third; apical process with a single, large, rounded lobe ventrally, and two spiny excrescences dorsally; proximal excrescence, long, straight and thin, reaching

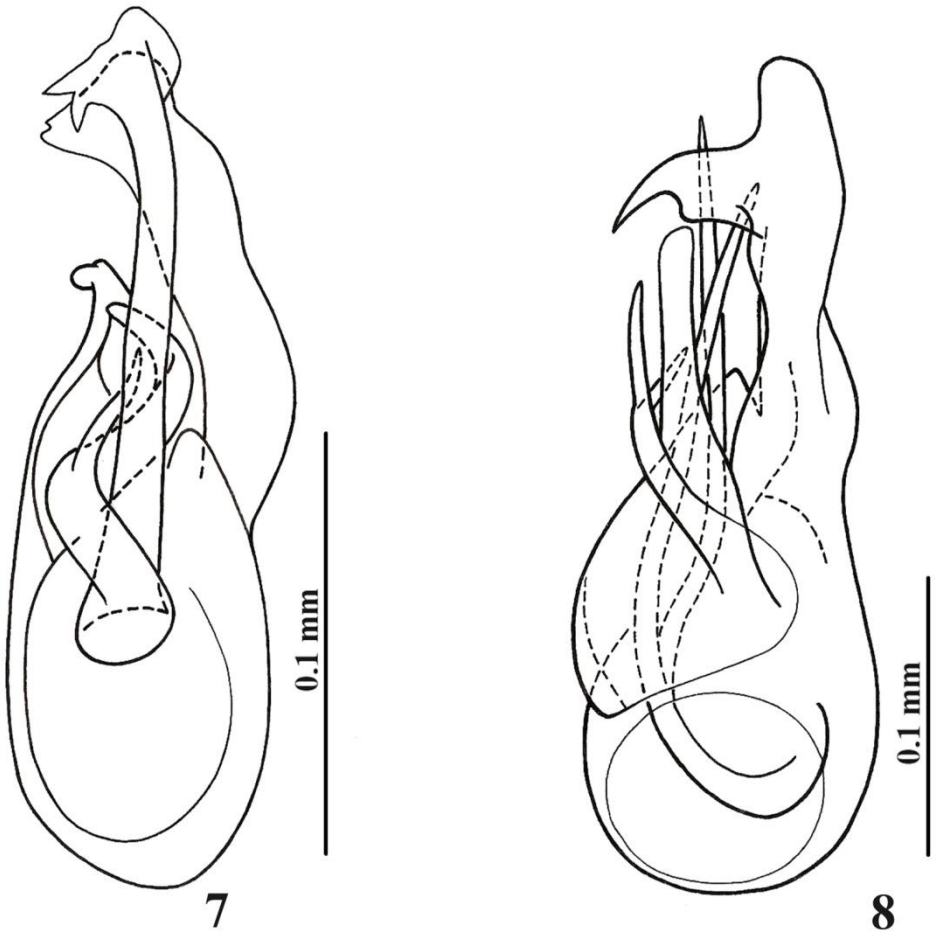


Fig. 7-8: aedeagus in dorsal view. – 7, *Leschenellus perreaui* n. sp. – 8, *Secchius besucheti* n. sp.

median lobe; distal excrescence short recurved, about three times shorter than the proximal one. Female unknown.

Derivatio nominis. – This species is friendly named in honour of Louis Deharveng, Paris, France, collector of this species.

Distribution. – New Caledonia (Fig. 14).

Leschenellus solei Théry, **n. sp.** (Fig. 3, 12, 14)

HOLOTYPE: 1 ♂, New Caledonia, South Province, Sarraméa: trail to Plateau Dogny, 700-900 m, 23.X.98, "wood&leaf litter" *(I. Löbl)*, *in* coll. MHNG. PARATYPE 1 ex. ♂, same data than holotype, *in* coll. MHNG.

Diagnosis (male). – Vertex and frons flattened, almost concave; lateral sides of head slightly raised, their margin slightly convex. Profemora slightly more swollen than mesofemora. Male abdomen with visible tergite 3 without lateral expansions; visible tergites 1-4 subequal. Aedeagus with apical process

of the left paramere with three lobes ventrally; dorsally with a large proximal excrescence and a small apical tooth.

Description (male). – Body length approximately 1.3-1.4 mm. Body brown-orange; legs, mouthparts and antennae paler. Dorsal pubescence quite dense with pale recumbent setae. Surface of head and pronotum very rugose and markedly punctate; elytra and tergites not rugose with a fine and evenly distributed punctation. Head triangular, lateral margins almost straight. Frons barely flat, not large. Eyes with about 25 facets. Antennae about as long as head and pronotum combined. Temples conspicuous and rounded. Abdomen with visible tergite 1 with a conspicuous discal carina in an inverted V-shape, rounded at base; discal carina of the visible tergite 2 barely visible, as wide as the previous one, but shorter and quite straight at base; visible tergite 3 not modified, without lateral expansions. Profemora slightly more swollen than mesofemora. Aedeagus in lateral view (Fig. 12) with left paramere large, barely elbowed at base; apical process of the left paramere with three lobes ventrally, the more proximal one the biggest, and one large recurved excrescence dorsally. Female unknown.

Derivatio nominis. – This species is friendly named in honour of Floréal Solé, Lille, France.

Distribution. – New Caledonia (Fig. 14).

Leschenellus perreaui Théry, **n. sp.** (Fig. 7, 13, 14)

HOLOTYPE: 1 ♂, New Caledonia, South Province, Rivière Bleue, 412 m, prim. "forest, litter", 20.X.1998 *(I. Löbl), in* coll. MHNG. PARATYPES: 2 ex. ♂, *in* coll. CTT and MHNG, same data than holotype.

Diagnosis (male). – Vertex and frons flattened, almost concave; lateral sides of head not raised, their margin straight. Profemora slightly more swollen than mesofemora. Male abdomen with visible tergite 3 without lateral expansions; visible tergites 1-4 subequal. Aedeagus with apical process of the left paramere strongly elbowed in apical third, with a small rounded apical tooth ventrally.

Description (male). – Body length approximately 1 mm. Body brown-orange; legs, mouthparts and antennae paler. Dorsal pubescence quite dense with pale recumbent setae. Surface of head and pronotum very rugose and markedly punctate; elytra and tergites not rugose with a fine and evenly distributed punctation. Head triangular, lateral margins almost straight. Frons flattened, almost concave, not large. Eyes with about 25 facets. Antennae about as long as head and pronotum combined. Temples conspicuous and rounded. Abdomen with visible tergite 1 with a conspicuous discal carina in an inverted V-shape, rounded at base; discal carina of the visible tergite 2 barely visible, as wide as the previous one, but shorter and quite straight at base; visible tergite 3 not modified, without lateral expansions. Profemora slightly more swollen than mesofemora. Aedeagus in lateral view (Fig. 13) with left paramere slightly elbowed at base; apical process of the left paramere strongly elbowed in apical third, with a small rounded apical tooth ventrally. Female unknown.

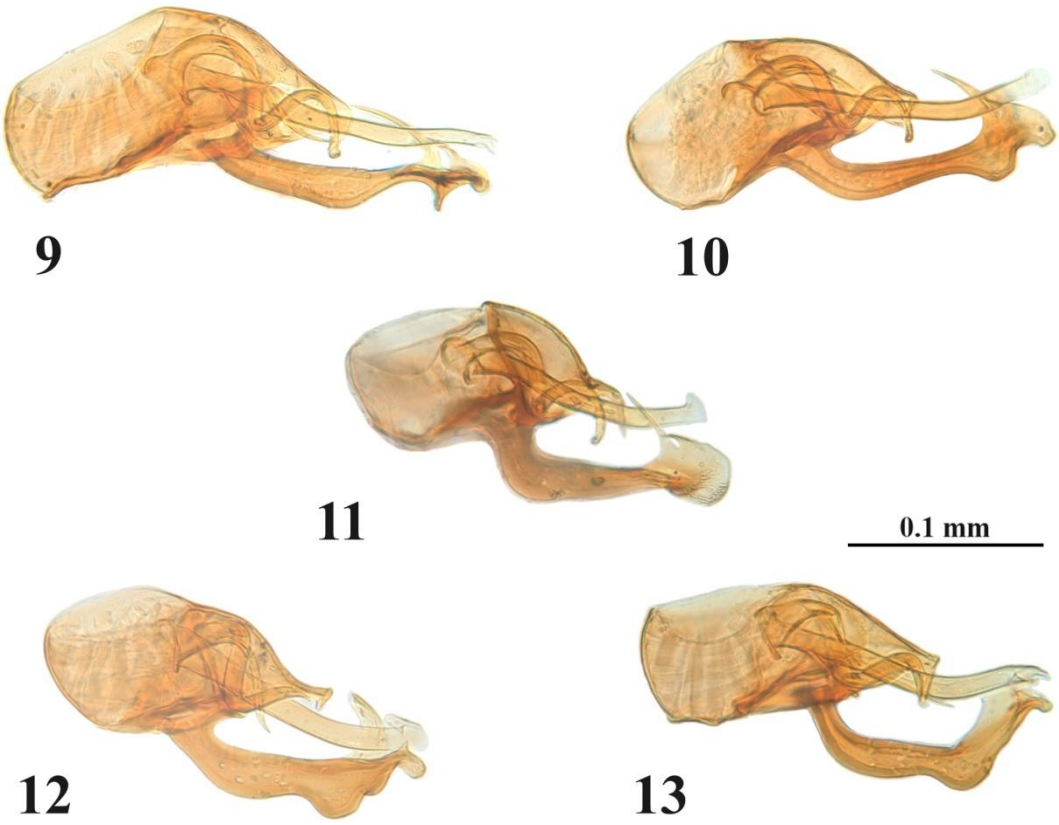


Fig. 9-13: aedeagus of *Leschenellus spp.* in lateral view. – 9, *Leschenellus tubulatus* n. sp. – 10, *L. cuccodoroi* n. sp. – 11, *L. deharvengi* n. sp. – 12, *L. solei* n. sp. – 13, *L. perreaui* n. sp.

Derivatio nominis. – This species is friendly named in honour of Michel Perreau, Paris, France.

Distribution. – New Caledonia (Fig. 14).

Other material studied:

Several females were also studied. But because of the lack of clear diagnostic characters on those specimens we have chosen not to include them in any *Leschenellus* species.

4 ex. ♀, *in* coll. MHNG: 2 ex. New Caledonia, Sarraméa: trail to Plateau Dogny, 700-900 m, 23.X.98, "wood&leaf litter" *(I. Löbl)*; 2 ex., New Caledonia, South Province, Rivière Bleue, 412 m, prim. "forest, litter", 20.X.1998 *(I. Löbl).*

Key to males of *Leschenellus* n. gen.

1 (2) Visible tergite 3 with lateral expansions..... **3**
2 (1) Visible tergite 3 without lateral expansions..... **7**

3 (4) Visible tergite 3 with lateral sides poorly expanded posteriorly, expansion shorter than visible tergite 4..... *L. deharvengi* n. sp.

4 (3) Visible tergite 3 with lateral sides in "tube-shape" expansions.…..... **5**

5 (6) "Tube-shape" expansions with margins convergent apically, their tips dorsally bevelled…….....…..…….…….. *L. tubulatus* n. sp.

6 (5) "Tube-shape" expansions with margins sub-parallel, their tips truncated and concave……...…….……..... *L. cuccodoroi* n. sp.

7 (8) In lateral view, left paramere of aedeagus slightly curved, almost right; its apex with a long conspicuous dorsal excrescence, and trilobed ventrally….....… *L. solei* n. sp.

8 (7) In lateral view, left paramere of aedeagus almost elbowed, the dorsal excrescence of its apex poorly developed, its apex not trilobed ventrally...……. *L. perreaui* n. sp.

Secchius Théry, **gen. nov.** (Figs. 8, 15)

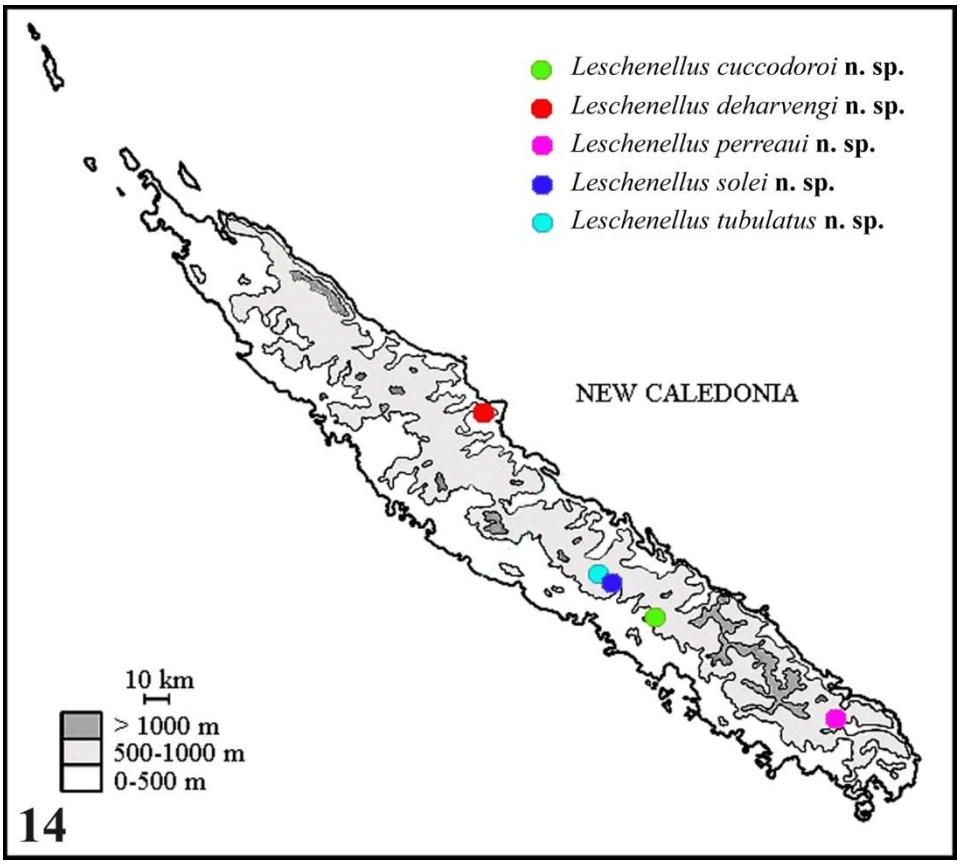
Type species: Secchius besucheti Théry, n. sp., here designated.

Diagnosis. – Head triangular, transverse, convex; eyes laterally located, directed forwards; vertexal sulcus lacking; antennal tubercles small; dorsal postantennal pit well-developed; apicolateral gular tubercles small. Pronotum transverse, sub-rectangular, convex; lateral antebasal foveae nude, distantly located, connected by a well-developed antebasal sulcus; median antebasal fovea lacking. Elytra with four basal foveae; discal stria lacking. Median prosternal carina lacking. Mesoventrite with one small median fovea, forked internally; lateral foveae forked internally. Abdomen with visible tergites 1-4 subequal in length; visible tergite 1 with discal carina, with large basolateral foveae.

Description. – 1.6 mm. Head triangular, transverse, convex, narrower than pronotum; frons and vertex broad, prominent; frontal rostrum low; vertexal foveae nude and punctiform; vertexal sulcus lacking; antennal tubercles small, rounded, smooth; dorsal postantennal pit well-developed. Temples rounded and narrow. Eyes located laterally but directed forwards, at a level below antennal insertions. Venter with short erected setae; gular carina present; gular pit deep with two foveae; apicolateral gular tubercles small. Antennae with 11 antennomeres; scape cylindrical and elongate; pedicel oval, shorter than scape; 6 first antennomeres of flagellum short and rounded except the first one conical; club compound by three antennomeres: the tenth slightly bigger than the ninth, both rounded, the eleventh amygdaliform, bigger and longer than the two previous combined. Maxillary palpi with the second article claviform, the third small, short and slightly rounded, the last, large and amygdaliform.

Pronotum markedly transverse, expanded laterally, almost rectangular, constricted at base; narrower than elytra; disk convex; lateral margins sub-parallel; with two nude lateral antebasal foveae, distantly located in the basal third, connected by a well-developed antebasal sulcus; median antebasal fovea lacking.

Elytra slightly convex; humeral cali slightly prominent; each elytron with four basal foveae; subhumeral fovea present; sutural stria entire; discal stria lacking.



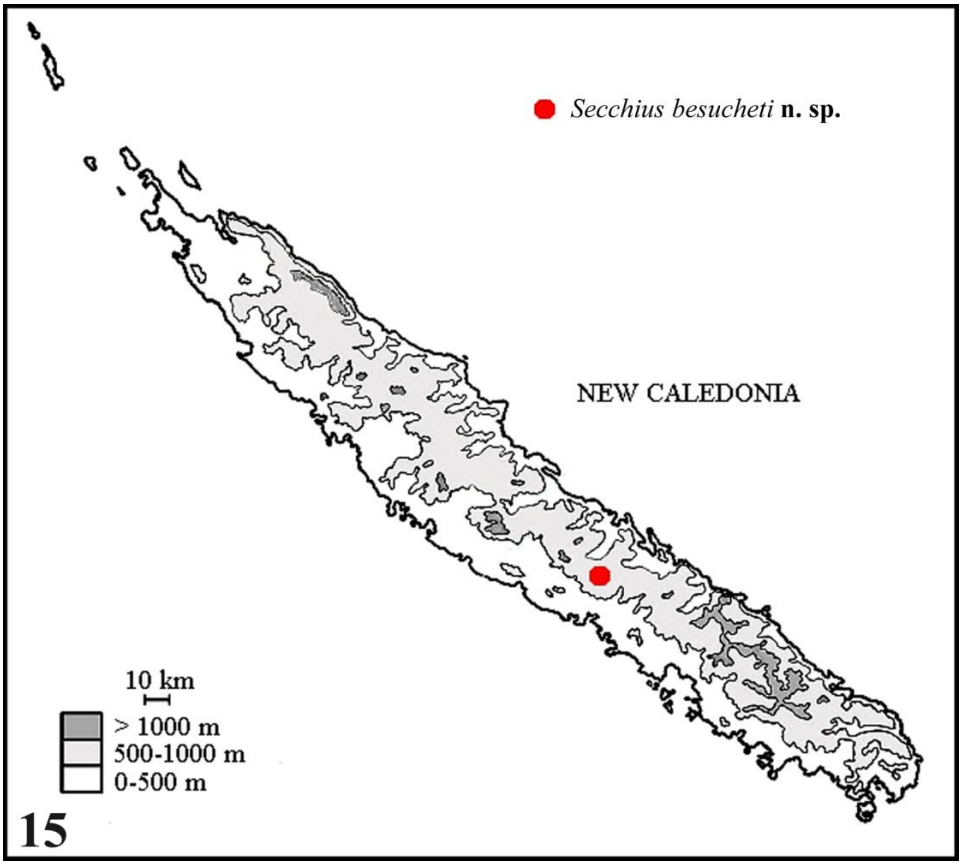


Fig. 14-15: distribution maps. – 14, *Leschenellus* spp. – 15, *Secchius besucheti* n. sp.

Prosternum without median carina; with small lateral procoxal foveae. Mesoventrite with one small median fovea, forked internally; with two conspicuous lateral foveae, forked internally, anterior forks shorter than posterior ones. Lateral mesocoxal foveae small. Lateral foveae of metaventrite small.

Abdomen with visible tergites 1-4 subequal in length; visible tergite 1 with large basolateral fovea and with a barely visible discal carina; visible tergites 2-4 with small basolateral foveae.

Trochanters amygdaliform. Profemora slightly swollen, more swollen than meso- and metafemora. Tibiae slender broadening in distal half, narrowing at apex. Second tarsomeres slightly longer than third tarsomeres.

Sexual dimorphism : aedeagus (Fig. 7) asymmetric; left paramere developed and large; right paramere small and triangular; median lobe with dorsal diaphragm, lacking basoventral projection; internal sac with several long and forked spines. Penial plate amygdaliform. Female unknown.

Derivatio nominis. – This genus is named in memory of François Secchi (1935-2016), amateur coleopterist of the Orleans' region (France) and of his wife Anne-Marie Secchi (1937-2015). Genus monobasic, gender masculine.

Distribution. – New Caledonia (Fig. 15).

Secchius besucheti Théry, **n. sp.** (Figs. 2, 7)

HOLOTYPE: 1 ♂, New Caledonia, South Province, Col d'Amieu (Sarraméa), 412 m, 21°34.407 S-165°45.674 E, 7-14.II.2008, Flight Intercept Trap (FIT) *(team of IAC), in* coll. MNHN.

Diagnosis (male). – Body length approximately 1.6 mm. Body orange, palpi paler. Pubescence quite dense with long pallid and recumbent setae. Surface of body shiny and finely punctate. Head very transverse, more than 1.7 times wider than long, posterior margin almost straight; eyes large, each one with more than 30 facets. Pronotum transverse, with the anterior margin rounded at middle, the posterior margin much more rounded; lateral margin subparallel, anterior and posterior angles rounded. Elytra slightly convex, lateral margins slightly rounded. Abdomen with discal carina of the visible tergite 1 barely visible. Aedeagus as in figure 7.

Derivatio nominis. – This species is friendly named in honour of Claude Besuchet, Geneva, Switzerland.

Distribution. – New Caledonia (Fig. 15).

Updated catalogue of the New Caledonian Pselaphinae

Euplectitae

Leschenellus cuccodoroi n. sp.
Leschenellus deharvengi n. sp.

Leschenellus perreaui n. sp.
Leschenellus solei n. sp.
Leschenellus tubulatus n. sp.
Placodium remingtoni Park, 1952
Secchius besucheti n. sp.

Goniaceritae

Anasopsis adumbrata Raffray, 1896
Anasopsis aubei Montrouzier, 1864
Anasospsis distans Fauvel, 1903
Baraxina francoisi Raffray, 1896
Eupines caledonica Raffray, 1896
Eupines spinifera Fauvel, 1903
Eupines suturalis Fauvel, 1903
Eupines trapezus Fauvel, 1903
Eupines villosula Raffray, 1896
Kieneriella novaecaledoniae Yin et Hlaváč, 2016
Physoplectus homaliinus Fauvel, 1903

Pselaphitae

Anagonus breviscapus Hlaváč, 2009
Anagonus fracticornis Fauvel, 1903
Anagonus spinipalpis Hlaváč, 2009
Caledonogonus loebli Hlaváč, 2009
Caledonogonus pilosus Hlaváč, 2009
Paragonus excavatus Hlaváč, 2009
Taomica cassani Hlaváč, 2006

Discussion:

The known pselaphine fauna of New Caledonia now totals 26 species in 12 genera. It shows affinities with the Australian fauna (Chandler, 2001) sharing genera *Eupines* and *Physoplectus*, and with the New Zealand fauna (Nomura & Leschen, 2006) sharing genera *Eupines* and *Placodium*. The other New Caledonian genera are still all endemic. New Caledonia is known to be a biodiversity hotspot with a high rate of microendemism (Grandcolas *et al.*, 2008) and the number of pselaphine taxa appears to be very low for a tropical territory with these characteristics. Some groups of Pselaphinae are poorly representated (*i.e.* Pselaphitae Tyrini, Pselaphitae Pselaphini, Goniaceritae Brachyglutini) or totally absent from the known New Caledonian pselaphine fauna (*i.e.* Faronitae, Euplectitae Euplectini, Euplectitae Trogastrini, Clavigeritae). Except in case of Faronitae which prefer temperate climate (Chandler, 2001), absence of the others groups in literature is due to a lack of studies and does not reflect the biodiversity of the group for that territory. During his field trip in New

Caledonia, the first author collected numerous other species, mostly undescribed, belonging to the following groups: Pselaphitae Pselaphini, Goniaceritae Brachyglutini, Euplectitae Euplectini, Euplectitae Trichonychini and Clavigeritae. Those species will be described in furthers works. In addition to that material, numerous other new species held in several institutes are waiting to be studied and described as well. Considering faunal characteristics of New Caledonia, the study of those specimens will reveal for sure a very important biodiversity for this group in this territory.

Acknowledgments. – We are grateful to the Entomological Society of France *(Société Entomologique de France)* for the *"Germaine Cousin"* grant obtained by the first author to partially finance a trip to New Caledonia. We also extend our thanks to *"Direction de l'Environnement de la Province Sud"* and more particularly to David Paulaud (permit n° 6024-153/2007/DENV/SMT), to Giulio Cuccodoro (MHNG), and Louis Deharveng (MNHN) for having sent us material for study; to Christian Mille and the IAC's team of La Foa, New Caledonia, for their hospitality. Special thanks to Olivier Montreuil, Georges Coulon, Don Chandler and Colin Favret for their advice, Claude Besuchet, Michel Perreau and Geoff Monteith respectively for drawings, photographs and basemap illustrating this work.

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Date de publication : 19 juillet 2017

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