



Further three new species of *Agrilus* Curtis, 1825 from Brazil (Coleoptera: Buprestidae)

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Abstract. *Agrilus* (*Agrilus*) *najarae* n. sp., *Agrilus* (*Agrilus*) *clown* n. sp. and *Agrilus* (*Agrilus*) *paolettae* n. sp. from Brazil are described.

Riassunto. *Ulteriori tre nuove specie di Agrilus Curtis, 1825 del Brasile (Coleoptera: Buprestidae).* Sono descritti *Agrilus* (*Agrilus*) *najarae* n. sp., *Agrilus* (*Agrilus*) *clown* n. sp., *Agrilus* (*Agrilus*) *paolettae* n. sp.

Resumo. *Mais três novas espécies de Agrilus Curtis, 1825 do Brasil (Coleoptera: Buprestidae).* Foram descritos *Agrilus* (*Agrilus*) *najarae* n. sp., *Agrilus* (*Agrilus*) *clown* n. sp., *Agrilus* (*Agrilus*) *paolettae* n. sp.

Key words. Coleoptera, Buprestidae, genus *Agrilus*, new species, Brazil.

Introduction

Following a research carried out in the Parque Estadual do Rio Doce (PERD), in Minas Gerais (Brazil), we obtained hundreds of specimens of xylophagous Coleoptera belonging mainly to families Buprestidae, Cerambycidae and Scolytidae, which emerged from *Anadenanthera colubrina* (Vell.) Brenan (Fabaceae). Among them, one new species, here described, belonging to the genus *Agrilus* Curtis, 1825, has emerged. Herein two other new species collected in the field in another context are described. This contribution is the third one concerning the knowledge of Agrilinae of PERD (CURLETTI *et al.*, 2013; CURLETTI & MIGLIORE, 2014).

Material and methods

The species descriptions follow the procedure proposed by CURLETTI (2010) allowing, with the help of photography, the taxon identification without most of the unnecessary and repetitive descriptions of unimportant and subjective general morphology. This allows to focus on details of distinctive characters that cannot be assessed from the images. The pictures were made with a Nikon Coolpix P6000 connected to a stereomicroscope Leica MZ6, elaborated with Adobe Photoshop 5.0 and stacked with Combine Z4 program. The specimens and genitalia were mounted dry and glued on the same card.

Acronyms

MZUSP: Museu de Zoologia da Universidade de São Paulo, Brazil; MCCI: Museo Civico di Storia Naturale di Carmagnola, Italy; NMPC: Narodni Muzeum, Praha, Czech Republic; PERD: Parque Estadual do Rio Doce, MG, Brazil.

Descriptions of the new species

Agrilus (Agrilus) najarae n. sp. (Figs 1a, 1b, 1c)

Material examined

Holotype ♂: Brasil, P.E. Rio Doce, 19°46'19" S – 42°37'42" W, 28.X.2013, retirada de [withdraw of] 26.VI.2014, ex larva *Anadenanthera colubrina*, L. Migliore leg. (MZUSP); 1 paratype ♀, *idem* (MZUSP); 1 paratype ♀, *idem*, retirada do X.2014 (MCCI).

Holotype description

Length 10.9 mm. Bronze colour. The pubescence is brown orangeade. Frons green with a line of pubescence along the inferior part of eyes and a rounded spot at the base, before the clypeus; this last without carina. Antennae serrate from the fourth article; the inferior sides of the apical antennomeres are copper red. Pronotum with premarginal carinulae entire. Marginal carinae joined before the base. Mentoniere with anterior margin slightly sinuate in the middle; prosternal plate strongly pubescent, parallel, with apex rounded. Elytral apex rounded with one brief strong tooth in the middle.

Ventral side entirely pubescent, but with more thickened pubescence at the lateral sides and in the middle of basal ventrite. Last visible ventrite rounded.

Legs with all claws bifid. Metatarsus as long as the metatibia: basal metatarsomere as long as the sum of the following four ($1 = 2+3+4+5$). Aedeagus as in Fig. 1c.



Fig. 1. *Agrilus najarae* n. sp., holotype. a) back, b) profile, c) aedeagus, 2.5 mm.

Paratypes variability

Length 10.9 mm. The differences are sexual: the females have a more stumpy form, frons brown, antennae shorter without copper reflections on the basal sides, prosternal plate less pubescent, metatarsus shorter than the metatibia with basal metatarsomere less long than the sum of the following four ($1 < 2+3+4+5$). All the claws are bifid also in the females: this character is rare in the genus *Agrilus*.

Etymology

After the name of Serena Najara Migliore, sister of one of the authors, for the help in the field research.

Comments

For body shape, colour and presence of a second line of pubescence in the middle of the elytral apex, *A. najarae* n. sp. is very similar to the sympatric *Agrilus verutoides* Obenberger, 1935 (OBENBERGER, 1935; type in NMPC). In a brief precedent analysis we attributed the specimens to this latter species, but with a second attentive study we came to the conclusion that the specimens of Rio Doce belong to another species, differing from *A. verutoides* for having premarginal carinula entire and elytral apex one toothed (three toothed in *A. verutoides*).

***Agrilus (Agrilus) clown* n. sp.** (Figs 2a, 2b)

Material examined

Holotype ♀: Brasil, P.E. Rio Doce, Carioquinha P1, noite [night], 30.09.2013, L. Migliore & C.A. Corrêa leg.

Holotype description

Length 8.7 mm. Frons red in the upper part, black at the base. In the black baseline side there is a median longitudinal line of white pubescence. Antennae black, small and short, serrate from the fifth antennomere. Pronotum with premarginal carinula not entire. Marginal carinae separated from the base. Mentonniere with an entire and not very rounded edge. Prosternal plate large, curved, with apex forming three lobes. Elytra blue steel anteriorly, black in the middle and at the apex. Besides the two pruinose spot in humeral callus and the posterior pubescence, two (1+1) short pubescent posthumeral lines are visible. Ventral side black. Last three apical ventrites with a large spot of white pubescence on the sides. Legs black. All claws toothed. Metatarsus less long than metatibia; metatarsomeres short, the basal as long as the sum of the following two ($1 = 2+3$).

Etymology

From English “clown”: for the colour pattern.

Comments

Agrilus clown n. sp. belongs to the group in the fauna of French Guyana that CURLETTI & BRÛLÉ (2011, 2013) indicated with the number 04, characterized by “Pronotum bicolore transversalement avec la partie antérieure rouge vif”. In South America there are currently about fifteen species. Due to the stumpy form and the presence of the two pruinose spots in humeral callus, *A. clown* n. sp. is similar to *A. rossanae* Curletti, 2005 described from Panama (CURLETTI, 2005; cfr. HESPENHEIDE, 2012 that revised this group for Central America). In addition to the scutellum clearly larger, *A. clown* n. sp. principally differs from *A. rossanae* for the following characters:

<i>Agrilus clown</i> n. sp.	<i>Agrilus rossanae</i> Curletti
Pronotal striae denser and thickened.	Pronotal striae more scattered.
Basal dimple of pronotum with concentric striae.	Basal dimple of pronotum with transverse striae.
Basal dimple of pronotum glabrous.	Basal dimple of pronotum pubescent.
A short pubescent line behind humeral callus.	Absence of pubescent line behind humeral callus.
Metatarsomeres wider and longer: $1 = 2+3$.	Metatarsomeres smaller and shorter: $1 = 2$.



Fig. 2. *Agrilus clown* n. sp., holotype. a) back, b) profile.

***Agrilus (Agrilus) paolettae* n. sp.** (Figs 3a, 3b)

Material examined

Holotype ♀: Brasil, Montes Claros, 20.VII.2013, Rodriguez R.A. leg. (MZUSP).

Holotype description

Length 8.2 mm. Head with apex black, wider than the half of anterior margin of pronotum. Frons wine red, with yellow pubescence in the central sulcus and along the eyes. Clypeus not carinate. Antennae black with antennomeres very serrate/widened from the fourth. Pronotum divided in two parts by a wide transverse line of squamose yellow/orange pubescence that rises along the lateral margins, that leaves three uncovered bumps: two in frontal side of copper colour and one posterior, bigger, black. The sculpture on the black bump is transverse, in the copper bumps rounded. Premarginal carinula absent. Marginal carinae separated from base. Mentonniere with anterior margin lightly sinuate in middle. Prosternal plate parallel. Elytra black, with white pubescence more thickened along the suture. Apex strongly denticulate. Lateroterga with squamose yellow pubescence covering the integuments. Sterna with the same pubescence at the sides. Legs black: metatarsus

shorter than the metatibia. Basal metatarsomeres short: the first shorter than the sum of the following two ($1 < 2+3$). All claws mucronate.

Etymology

Term of endearment and diminutive of Italian name Paola. After Paola Michelazzo from Sanfrè (Italy), naturalist botanic, for the help provided.

Comments

Agrilus paolettae n. sp. belongs to the group of species characterized by pruinose pubescence on pronotum covering the integuments (group 08 in CURLETTI & BRÛLÉ, 2011). For the morphological characters of pronotal structure, *A. paolettae* n. sp. is unmistakable; anyway it may be compared with *A. amoenus* Curletti & Brûlé, 2014 described for French Guyana (CURLETTI & BRÛLÉ, 2014): *A. paolettae* n. sp. differs from this last species especially for having elytral white pubescence visible on entire surface, for prehumeral carinula absent, for pubescence on median part of pronotum, for lateroterga uniformly pubescent, for basal metatarsomere less elongated.



Fig. 3. *Agrilus paolettae* n. sp., Holotype. a) back, b) profile.

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