

GIANFRANCO CURLETTI*

Two new species of the genus *Agrilus* Curtis, 1825 from Ecuador and Nicaragua (Coleoptera, Buprestidae)

ABSTRACT - Two new species of *Agrilus* Curtis, 1825 are described: *A. tandapianus* n. sp. from Ecuador, compared with the Brazilian species *A. preyssleri* Obenberger, 1933 and *A. lavoisieri* Obenberger, 1933 and *A. zythum* n. sp. from Nicaragua, similar to *A. delicatulus* Waterhouse, 1889 and *A. illigeri* Obenberger, 1933, both from Mexico.

KEY WORDS - Coleoptera, Buprestidae, *Agrilus*, new species, Neotropical region, Ecuador, Nicaragua.

RIASSUNTO - *Due nuove specie del genere Agrilus Curtis, 1825 di Ecuador e Nicaragua (Coleoptera, Buprestidae).*

Sono descritte due nuove specie di *Agrilus* Curtis, 1825: *A. tandapianus* n. sp. dell'Ecuador, comparato alle specie brasiliane *A. preyssleri* Obenberger, 1933 e *A. lavoisieri* Obenberger, 1933 e *A. zythum* n. sp. del Nicaragua, simile ad *A. delicatulus* Waterhouse, 1889 e ad *A. illigeri* Obenberger, 1933, entrambe del Messico.

MATERIAL AND METHODS

The species descriptions follow the procedure proposed by Curletti (2010), which allows, with the help of photography, to identify an appropriate and concrete habitus of the taxa, omitting most of the unnecessary and repetitive descriptions of unimportant and subjective general morphology, and to dwell in more detail on distinctive characters that cannot be assessed from the images.

Photographs were taken with a Nikon Coolpix P6000 camera mounted on a Leica MZ6 stereomicroscope. A series of photographs at different focus planes were taken and the stack was combined to a single image with

* Museo Civico di Storia Naturale, Parco Cascina Vigna, 10022 Carmagnola, Italy

Combine Z4. The final images were processed using Photoshop 5.0 Limited Edition (Adobe Systems Inc.). The specimens were mounted dry on card for the study, description and conservation. The genitalia were glued on the same card.

ACRONYMS

CMNG: Manfred Niehuis collection, Albersweiler, Germany

MCCI: Museo Civico di Storia Naturale di Carmagnola, Italy

WBWC: W. Barries collection, Wien, Austria

***Agrilus (Agrilus) tandapianus* n. sp.** (fig. 1a, 1b, 1c)

Material examined

Holotype ♂: Ecuador, Tandapi, Santa Domingo, 15-17.XII.2004, Mracek leg. (MCCI). Paratypes: 2 ♀♀, idem (WBWC & MCCI).

Holotype description

Length 6.1 mm. Frons and vertex green, glabrous. Pronotum red, with two round white spots at margins. Elytra black, with short white pubescence at apex. Clypeus without transverse carina. Antennae serrate from antennomere 4. Pronotum with premarginal carinula entire. Lateral carinae joined before base. Scutellum red, depressed ahead. Elytral apex rounded and microdenticulate. Mentonniere with anterior margin sinuate. Prosternal plate parallel, with apex truncate. Lateroterga with white uniform pubescence, sterna glabrous. All claws bifid, median and posterior internal hook more thickened. Metatarsus little shorter than metatibia; first metatarsomere as long as the sum of the following two (1=2+3). Aedeagus fig. 1c.

Paratypes description

Length 6.2 and 7.4 mm. In the bigger specimen the apical pubescence of elytra is not visible. The other differences are sexual: frons black and metatarsus shorter, as the internal hooks of the claws.

Etymology

After the type locality.

Comments

A. tandapianus n. sp. belongs to a group of species widely represented in the Neotropic, characterized by the pronotum red or gold-coloured. In particular, for the size, the presence of two pubescent spots on pronotum and the premarginal carinula, *A. tandapianus* n. sp. is similar to *A. preysleri* Obenberger, 1933a and *A. lavoisieri* Obenberger, 1933a, both described from São Paulo in Brazil. However, they can be easily differentiated by the different shape of the aedeagus.



Fig. 1 - *Agrilus tandapianus* n. sp., holotype: a) back; b) profile; c) aedeagus 2 mm.

***Agrilus (Agrilus) zythum* n. sp.**
(fig. 2a, 2b, 2c)

Material examined

Holotype ♂: Nicaragua, Granada, Res. Silv. Domitila, VI-2/5-2013, day collecting, 11.71°N 85.95°W, el. abt. 60-100 m, B. Raber, D. Heffern, & E. van den Berghe legg. (MCCI). Paratypes: 1 ♂ and 1 ♀, idem (CMNG).

Holotype description

Length 6.2 mm. Entirely brown dorsally. Frons green, glabrous. Antennae short, toothed from antennomere 5.

Pronotum advanced in middle, between the eyes. Premarginal carinula absent, replaced by strong and pronounced striae. Marginal carinae separated from base. Mentonniere sinuate, prosternal plate parallel.

Elytra with white pubescence more thickened towards suture. Apex rounded and microdenticulate. Sternal pubescence white and uniformly disposed. Anterior and median claws bifid, posterior simply toothed. Metatarsus longer than metatibia: first metatarsomere longer than the sum of the following two ($1 > 2+3$).

Aedeagus as in the fig. 2c.

Paratypes description

Length 6.2 (♀) and 5.4 (♂) mm. The differences are sexual: the female has the frons brown, all the claws toothed, and the metatarsomere as long as the metatibia.

Etymology

From Latin *zythum* = beer.

Comments

A. zythum n. sp. remembers *A. delicatulus* Waterhouse, 1889 from Mexico, but the latter is green in color, the marginal carinae are joined before the base, and has pubescent frons. Another similar species is *A. illigeri* Obenberger, 1933b from Mexico; it differs for having glabrous elytra.

ACKNOWLEDGMENTS

I am grateful to W. Barries and M. Niehuis for the confidence in sending the material and for the granting of the types to MCCI.



Fig. 2 - *Agrilus zythum* n. sp., holotype: a) back; b) profile; c) aedeagus 1.5 mm.

REFERENCES

- CURLETTI G., 2010 – New species of the genus *Agrilus* Curtis, 1825, from Nicaragua and Panamá (Coleoptera: Buprestidae: Agrilinae). *Zootaxa* 2333: 59-68.
- OBERBERGER J., 1933a – *Agrilus*-Studien II. *Wiener Entomologische Zeitung* 50: 6-24.
- OBERBERGER J., 1933b – Nové druhy rodu *Agrilus* Steph. (Col. Bupr.). De Agrili generis speciebus novis (Col. Bupr.). *Acta Entomologica Musei Nationalis Pragae* 11: 15-81.
- WATERHOUSE C.O., 1889 – *Biologia Centrali-Americana, Insecta, Coleoptera, Buprestidae*, Volume 3, part 1, pp. 49-166, plates IV-VIII and Supplement, pp. 167-193.