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***Paolaltica eocenica* new genus and new species of flea beetle (Coleoptera: Chrysomelidae: Galerucinae: Alticini) from Baltic amber**

MAURIZIO BIONDI

Department of Health, Life and Environmental Sciences, University of L'Aquila, 67100 Coppito-L'Aquila, Italy.

E-mail: maurizio.biondi@univaq.it

Abstract

Paolaltica eocenica new genus and new species (Coleoptera: Chrysomelidae: Galerucinae: Alticini) is described and illustrated from Upper Eocene Baltic amber. The new taxon is compared with fossil and recent flea beetle genera.

Key words: Coleoptera, Chrysomelidae, new genus, new species, Baltic amber, Eocene, fossil resin, *Amphimela*, *Erystus*, *Sphaeroderma*

Introduction

The Chrysomelidae is one of the largest phytophagous insect families and includes approximately 37,000 to 40,000 species (Jolivet & Verma 2002; Biondi & D'Alessandro 2012). The monophyletic tribe Alticini (traditionally considered as subfamily) is closely related to the tribe Galerucini, both currently contained within the subfamily Galerucinae (Bouchard *et al.* 2011). Alticini and Galerucini are considered to be separate suprageneric taxa because of the metafemoral spring in Alticini, as well as specific structures of the spermatheca, median lobe of aedeagus and hind wing venation of these two groups (Furth & Suzuki 1994, 1998). The Alticini is a tribe composed of minute to medium-sized beetles, whose enlarged hind femora and renowned jumping ability have earned them the common name of “flea beetles”. They are highly specialised phytophagous insects. Both the adult and larval stages feed on stems, leaves or roots, and rarely on flowers, of almost all the higher plant families (Jolivet & Hawkeswood 1995). To date the tribe Alticini includes about 8,000 species, grouped in approximately 500 genera. This taxon has a world-wide distribution, but occurs mainly in the tropical regions of South America, Africa and Asia (Konstantinov & Vandenberg 1996; Santiago-Blay 2004; Biondi & D'Alessandro 2012).

Fossil flea beetles are generally very poorly known. Only nine species, belonging to seven different genera, are known until now from fossil resin. Among Eocene amber deposits, three species are known from Baltic amber (Kaliningrad region, Russia), three from Rovno amber (Ukraine), and one from Oise amber (France), while Miocene deposits have yielded one species from Chiapas amber (Mexico) and one from Dominican amber (Dominican Republic) (Bukejs 2014) (Fig. 1).

In this paper, after the recent description of the new genus *Ambralaltica* Bukejs & Konstantinov (Bukejs & Konstantinov 2013) a further new flea beetle genus and species is described from Baltic amber obtained from the Kaliningrad region (Russia).

Material and methods

The amber piece was obtained from commercial sources. The embedded specimen was studied under a LEICA M205C binocular microscope. Photomicrographs were taken using a Leica DFC500 camera and the Helicon Focus 5 software (www.heliconsoft.com). Morphometric measures were taken using the image analysis software Image-Pro Insight 8.0 for Windows (www.mediacy.com). The specimen is slightly distorted due to compression, and

Type strata. Baltic Amber, Upper Eocene, Prussian Formation (Priabonian). Estimated age: 37.2–33.9 my.

Type locality. Russia: Kaliningrad region: the Sambian [Samland] peninsula: Yantarny village [formerly Palmnicken].

Etymology. The specific epithet refers to the geologic time of the specimen's origin.

Description. Body length (LB) about 2.00 mm; length of pronotum (LP): 0.47 mm; length of elytra (LE) about 1.60 mm; length of left antenna (LAN): 1.05 mm. Dorsal integument apparently golden green with clear metallic reflections (some reflections may represent reflective surfaces within surrounding amber); ventral parts dark bronze with weak metallic reflections; legs clearly blackened, apparently with weak metallic reflections. Antennae longer than half of body length (LAN/LB \approx 0.52); each antennomere proportional to following numerical sequence: 56:29:37:59:77:52:73:66:68:67:100 (right antenna). Pronotal punctation uniformly and moderately impressed. Elytral punctation arranged in regular rows, apparently clearly impressed up to apical declivity.

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