

A new species of the pollen-beetle genus *Meligethes* (Coleoptera: Nitidulidae) of the *M. aeneus* group from Greece, with review of the *M. subaeneus* complex

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Abstract

A morphological analysis was performed, combined with field data on insect/host-plant associations to clarify the taxonomic scenario of the Palaearctic *Meligethes subaeneus* complex (Coleoptera, Nitidulidae, Meligethinae), including three European and Caucasian species (*M. subaeneus*, *M. matronalis*, *M. epeirosi* n.sp.) that are associated with flowers of Brassicaceae for larval development. The analysis was focused on the diagnosis and formal description of a new species, *M. epeirosi* n.sp. from NW Greece (Pindo Chain), which develops on *Cardamine* (s.str.) *glauca* Sprengel. The morphological variation of the true *M. subaeneus* in Europe was also analysed; the combined morphological and ecological evidence suggests that this species is structured in three main groups of European populations, which are probably the result of Pleistocene differentiation, suggesting an ongoing process of incipient speciation within this taxon.

Key words: Coleoptera, Nitidulidae, *Meligethes*, new species, Greece, Brassicaceae

Introduction

The large Palaearctic *Meligethes aeneus* group (Coleoptera, Nitidulidae, Meligethinae) contains some 40 species arranged in subgroups and complexes that are difficult to classify. All species are associated with flowers of Brassicaceae for larval development (Audisio, 1993; Audisio & De Biase, 1999; Audisio et al., 1999a, 1999b, 2000, 2001a, 2001b, 2002, 2003, 2005a, 2005b; De Biase et al., 2003). *Meligethes coracinus* Sturm, 1845 (Europe to eastern Siberia; Kirejtshuk 1992, Audisio 1993) is a member of the *M. aeneus* species group, and as discussed by Audisio et al. (2005a, 2005b), is the first described taxon of a relatively large subgroup of species including (Table 1) *M. subaeneus*