Hydraena lotti sp. nov., a new member of the “Haenydra” lineage from the Peloponnese (Greece), with additional records of Hydraena species in the region (Coleoptera, Hydraenidae)

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Abstract

Hydraena lotti sp. nov. (Coleoptera, Hydraenidae) is described from the southern Peloponnese, Greece; the 92nd known member of the “Haenydra” lineage. The new species belongs to the H. emarginata complex, being closest morphologically to Hydraena pelops Jäch, 1995, from the south and east of the Taygetos range, H. pangaei Jäch, 1992, endemic to Mount Pangaeon in northeastern Greece, and H. samnitica Fiori, 1904, from central Italy. Characters on which the species can be distinguished are discussed; male genitalia and female elytral apices being particularly diagnostic. The ecology of H. lotti is described in the context of other members of the genus in the region. To date, the new species has only been found in small headwater streams at altitudes above 1,000 m in the northwest of the Taygetos range, where it can, however, be locally frequent. The opportunity is taken to provide an updated checklist of Peloponnese “Haenydra”, together with new distributional records of selected Hydraena species, including H. arachthi Ferro & Jäch, 2000, which is reported from the peninsula for the first time.

Key words: Coleoptera, Hydraenidae, Hydraena, “Haenydra” lineage, new species, Greece, Peloponnese, new records

Introduction

Hydraena Kugelann is the most speciose aquatic beetle genus on earth, with almost 900 described species, and many hundreds likely awaiting scientific discovery (Jäch & Balke, 2008; Trizzino et al., 2013a). Within Hydraena s.str. a number of monophyletic species groups are recognized, one of the most speciose being the “Haenydra” lineage, originally described as a genus by Rey (1886). “Haenydra” occur largely in countries bordering the northern Mediterranean, from Portugal to Iran, where most species have apparently diversified in the Pliocene and Pleistocene (Trizzino et al., 2011a). Members of “Haenydra” have invaded the rithron of fast flowing streams and rivers, where adults graze biofilms alongside raffle beetles (Elmidae). Unlike elms, however, most of the 92 described species of “Haenydra” have narrow geographical ranges, often being restricted to individual mountain systems, or indeed single springs or drainages within them (Jäch & Diaz, 2012; Stanković & Jäch, 2012; Trizzino et al., 2013b). Here I describe Hydraena lotti sp. nov., a member of the H. emarginata complex (sensu Trizzino et al., 2013b) of “Haenydra”, from the southern Peloponnese, Greece. Despite being locally common, and the region having been visited by a number of aquatic entomologists since d’Orchymont in the 1930s, this species has remained undetected until 2012. H. lotti sp. nov. is the seventh species of the lineage to be discovered in the Peloponnese, five of these being endemic to the peninsula. Whilst most Hydraena described in recent years emanate from poorly investigated areas, particularly in the tropics (e.g. Perkins, 2011), a steady stream of new species continues to be unearthed in Europe and western Asia. Jäch et al. (2005) ask how many undiscovered Hydraena species remain in Europe? As the description of this species demonstrates, there are still a number out there, even in apparently well-worked areas of the continent.