A new species of *Hydraena* (Coleoptera: Hydraenidae) of the *H. evanescens* complex from Sardinia*

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Abstract

A morphological analysis was performed in order to clarify the taxonomic scenario within the *Hydraena evanescens* complex (Coleoptera: Hydraenidae: Hydraeninae), including species associated with fast running waters in mountain areas of Corsica and Sardinia. The analysis was mainly focused on the specific distinction and formal description of a new species, *H. rosannae* sp. nov., from the Sulcis-Iglesiente region (SW Sardinia), morphologically distinctly separated from both the nearly parapatric *H. tyrrhena* Binaghi, 1961 (central and northern Sardinia) and the allopatric *H. evanescens* Rey, 1884 (Corsica). Two hypothetical palaeogeographical scenarios explaining the specific differentiation of the three species are briefly discussed.

**Key words:** Moss beetles, *Hydraena*, Haenpydra lineage, new species, Corso-Sardinia, palaeogeography

Introduction

*Hydraena* Kugelann (*s. l.*) is the largest genus within the family Hydraenidae, including some 700 species worldwide (Jäch *et al.* 2000; Beutel *et al.* 2003). The large W-Palaearctic subgenus *Haenpydra* Rey, 1886 was the object of a series of recent discussions, aimed at considering this group either as a quite distinct separate genus or subgenus (Jäch 1988, 1992; Angelini *et al.* 1995; Audisio & De Biase 1995; Ferro & Audisio 2006) or as a simple “lineage” of related species without any generic or even subgeneric value (Jäch *et al.* 2000, 2006; Beutel *et al.* 2003). We intend to discuss the taxonomic position of this assemblage elsewhere, based upon a series of relevant apomorphic characters well supported also by molecular data (Ferro & Audisio 2006; Ribera *et al.* unpublished; Audisio *et al.* unpublished). Here we only recall that *Haenpydra* is certainly a monophyletic clade, including just over 80 species distributed from southern Spain westwards at least to northern and western Iran eastwards (Bilton & Jäch 1998; Jäch *et al.* 2006).

During a recent (2008) field trip in Sardinia organized by the CNBFVR (Centro Nazionale per lo Studio e la Conservazione della Biodiversità Forestale “Bosco Fontana”, Verona, Italy) in the Sulcis-Iglesiente region, we discovered a new species of *Hydraena* (Haenpydra lineage) closely related to but specifically distinct from *H. tyrrhena* Binaghi, 1961, the only representative of this group hitherto known from Sardinia. *H. tyrrhena* was recently raised from subspecific to specific rank and separated from the Corsican *H. evanescens* (Rey, 1884) (Binaghi 1961; Audisio & De Biase 1995), due mainly to important differences in the shape of the aedeagus.