



On the identity of *Rhinusa hispida* (Brullé) and its current synonyms (Coleoptera: Curculionidae)

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Abstract

From examination of type specimens the authors establish that *Rhinusa hispida sensu auctorum* is not the same species as *R. hispida* (Brullé, 1832), which is instead synonymous with *R. tetra* (Fabricius, 1792) (**syn. n.**). Moreover, under the name *R. hispida sensu auctorum* two distinct taxa are confused, which can be distinguished from each other by taxonomic, biological and genetic differences: *R. pilosa* (Gyllenhal, 1838) and *R. brondelii* (Brisout, 1862), **stat. n.** (= *R. lanuginosa* (Wollaston, 1875), **syn. n.**). *Gymnetron vulpes* Lucas, 1849 (= *G. marmota* Fairmaire, 1883, **syn. n.**), previously placed under synonymy of *R. hispida* (Brullé), is transferred to the genus *Mecinus* and considered a distinct species. A neotype of *G. pilosum brondelii* Brisout and lectotypes of *G. hispidum* Brullé, *G. pilosum* Gyllenhal, *G. vulpes* Lucas and *G. lanuginosum* Wollaston are designated.

Key words: Curculionidae, Mecinini, *Rhinusa*, taxonomy, biology, molecular DNA

Introduction

For more than one century, the identity of the taxon *Gymnetron hispidum* Brullé, 1832, presently placed in the genus *Rhinusa* (Caldara 2001), has been taxonomically uncontroversial (Desbrochers 1893, Reitter 1908, 1916, Hustache 1931, Hoffmann 1958, Smreczyński 1976, Lohse & Tischler 1983), because of its easy differentiation from all other species of *Rhinusa*. However, several names were proposed as synonyms of *G. hispidum*: *G. pilosum* Gyllenhal, 1838, *G. vulpes* Lucas, 1849, *G. pilosum brondelii* Brisout, 1862 and *G. lanuginosum* Wollaston, 1875. In recent years three research groups studying the taxonomy (Caldara), biology (Toševski, Desančić and Gassmann) and molecular DNA (Emerson and Legarreta) of the so called *G. hispidum*, a potential agent for natural control of invasive toadflaxes (*Linaria vulgaris* (L.) Miller and *L. dalmatica* (L.) Maire & Petit-Mengin) in North America, independently noticed that two distinct taxa are confused under this name. They can, however, be distinguished by the shape of the rostrum in lateral view, and we tentatively named them taxon A (with straight rostrum) and taxon B (with curved rostrum). The aim of this study was the examination of syntypes of *G. hispidum* and all of its putative synonyms, in order to establish the correct names of the two taxa in question.

The collections from which specimens were studied are as abbreviated as follows:

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