

## Revision of the *Agrilus cyanescens* species-group (Coleoptera: Buprestidae) with description of three new species from the east Palaearctic region

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### Abstract

The *Agrilus cyanescens* species-group of jewel beetles is defined to include seven species, three of which are newly described: *A. dali* Jendek sp. n. (China: Yunnan), *A. zhongdian* Jendek sp. n. (China: Yunnan) and *A. arsenevi* Jendek sp. n. (Russia: Primorsky Kray). Three new synonyms are proposed for *A. cyanescens* (Ratzeburg, 1837) (= *italicus* Obenberger, 1920 syn. n.; = *cockerelli* Fisher, 1925 syn. n.; = *pooli* Théry, 1936 syn. n.). Each member of the group is illustrated and an identification key to species, based on males, is provided.

**Key words:** Taxonomy, new species, Coleoptera, Buprestidae, *Agrilus*, Palaearctic region, invasive alien species

### Introduction

The cosmopolitan jewel beetle genus *Agrilus* with 2788 species (Bellamy 2008) is among the largest conventionally accepted genera of the Animal Kingdom. One Asian species, *A. planipennis* Fairmaire, 1888, has recently become a subject of intensive research due to the fact that it is among the most notorious invasive alien species in North America. In spite of this focused attention the vast majority of species have never been illustrated or keyed, a satisfactory internal generic classification does not exist, and apparently hundreds of new *Agrilus* species are still to be described.

This paper continues the series of the first author's publications (Jendek, 2003, 2004, 2005, 2007) on the taxonomy and systematics of the genus *Agrilus* with particular emphasis on those from the Palaearctic Region. The aim of this paper is to diagnose and revise yet another presumably natural (monophyletic) assemblage informally termed here as *A. cyanescens* species-group. This group presently consists of seven species; three of them are newly described below. A member of this assemblage, *A. cyanescens* (Ratzeburg, 1837), is one of the most widely naturally distributed *Agrilus* species ranging through most of the Palaearctic Region, and has also been introduced to North America.

### Material and methods

Only available names are cited in the synonymy; for unavailable names, misidentifications and mistyping see Jendek (2002). Synonyms are listed chronologically. The type locality is quoted in the language and form of the original citation, the order of these data is sometimes altered from the original sequence. All taxonomic acts proposed in this paper should be attributed to the first author.

The following abbreviations are used in the text: [p], preceding data 'printed'; [h], preceding data 'handwritten'. Square brackets [ ] are used for remarks and addenda; the backslash (\ ) separates data from different labels. Codens for museums and collections are: