Nomenclatural and taxonomic notes on *Agrilus cyanescens* (Ratzeburg, 1837), *A. pratensis* (Ratzeburg, 1837) and *A. convexicollis* Redtenbacher, 1849 (Coleoptera: Buprestidae: Agrilinae)

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Abstract

A nomenclatural analysis of names cited in synonymy of *Agrilus cyanescens* (Ratzeburg, 1837), *A. pratensis* (Ratzeburg, 1837) and *A. convexicollis* Redtenbacher, 1849 is presented. The availability and status of each name is examined, discussed and an updated list of subspecies, available and unavailable synonyms is given. *Agrilus bidentulus* Ganglbauer, 1890 is considered a valid species and excluded from the synonymy of *A. cyanescens*; *A. pratensis praeclarus* Krogerus, 1925 is revalidated as a subspecies with the new synonym *fennicus* Obenberger, 1936.

Key words: Taxonomy, nomenclature, synonymy, Coleoptera, Buprestidae, Agrilinae, *Agrilus*, Palaearctic Region

Introduction

This contribution belongs to the nomenclatural-taxonomic series of papers (Jendek 2002a, 2002b, 2002c) on Palaearctic species of the genus *Agrilus* Curtis, 1825 undertaken with the aim to clean up the synonymy from unavailable names. All names, whether available or unavailable, which were discovered in literature citations are treated herein. Although the primary effort was focused to treat the nomenclatural status of names, several taxonomic changes are performed in context with the changes in the nomenclatural status of particular names.

Material and methods

Abbreviations used: square brackets “[ ]” are used for my remarks and addenda; the mark “[sic!]” (= so, thus) denotes that a word, phrase, passage, etc., that may appear strange or incorrect has been written intentionally or has been quoted verbatim.
Issues of nomenclature were resolved by consulting the fourth (ICZN, 1999) edition of the *International Code of Zoological Nomenclature*. Articles of the Code cited herein are simply cited as, for example, “Article 74.5”.

The analyzed names are divided into three groups. The names in each group are listed chronologically, then alphabetically.

The names originally proposed for a species and subspecies or replacement names include the name, the author, date, and page number for the original description, followed by (in parentheses) the verbatim transcription from the original publication, when needed with my supplements in “[ ]”.

The names originally proposed for an infrasubspecific entity are cited with the same attributes as the foregoing category, but in remarks, the availability of each name is treated and the corresponding Article of the Code is cited. The unavailable names originally proposed for infrasubspecific entities are included in synonymy only in order to eliminate confusion or questions about their status. Nonetheless, they have no nomenclatural status.

The names that were never proposed as new (unpublished names, misidentification, incorrect subsequent spelling etc) are, nevertheless, considered names, although they were never proposed as a new name of taxon or a new replacement name proposed to replace junior homonym. Nevertheless, they have been cited in references as though they were synonyms. This practice is misleading and confusing. These names are cited herein only to resolve their status. Each name is listed in the form (name, author) in which it was firstly introduced, followed by (in parentheses) the verbatim transcription from the original publication. In remarks, the author is cited, who is regarded the first introducing this name.

Type localities are cited only for available names and they are quoted in form of the original citation. My complementary comments and updates are consistently given in “[ ]”. Localities have been updated according to the GEOnet Names Server providing access to the database of foreign geographic feature names of the National Imagery and Mapping Agency (NIMA).

*Agrilus cyanescens* (Ratzeburg, 1837)

*cyanescens* Ratzeburg, 1837: 54-55. (*Buprestis* cyanescens Illiger. [sic!])

Although Illiger is cited after *cyanescens*, Ratzeburg is the author of the taxon. Ratzeburg’s citation of Illiger’s name relates to his remark: “Cyanescens von Illiger in Berl. Mus. genannt”.

Type locality: not given, but presumably Germany as indicated from the title: “Wäl dern Preufens”.
available synonyms
- *caeruleus* Rossi, 1792
- *amabilis* Gory & Laporte, 1837
- *sulcaticeps* Abeille de Perrin, 1869
- *acuticornis* Abeille de Perrin, 1897
- *teriolensis* Obenberger, 1916

unavailable synonyms
- *virens* Schilsky, 1888
- *combinator* Obenberger, 1925
- *subcarpathicus* Roubal, 1929
- *cuprescens* Fleischer, 1930
- *pseudroberti* Fleischer, 1930

subspecies
- ssp. *johanidesi* Niehuis, 1999

Available names proposed for species and subspecies or replacement names

caeueleus* Rossi, 1792: 62. ([B]uprestis[, caerulea [sic!]])

This name is the junior primary homonym of *Buprestis caerulea* Thunberg, 1789 (now in *Meliboeus*) and *Buprestis caerulea* Olivier, 1790 (now in *Psiloptera* Dejean, 1833); and senior subjective synonym of *Agrilus cyanescens* (Ratzeburg, 1837).

Type locality: “in planta silvae Pisane [= Pisa province, Tuscany, CW Italy]”.

amabilis* Gory & Laporte, 1837: 52-53. (Agrilus Amabilis)

The first synonymy of this name as the junior subjective synonym of *A. caeruleus* was by Kiesenwetter (1857: 141, 142). The lectotype designation by Jendek (1998: 317).

Type locality: “Saxe [= Saxonia, E Germany]”.

sulcaticeps* Abeille de Perrin, 1869: 79-80. (Agrilus sulcaticeps)

The first synonymy of this name as the junior subjective synonym of *A. caeruleus* was by Abeille de Perrin (1897: 9).

Type locality: “Briançon [44°54' N, 6°37' E] (Hautes-Alpes) SE France]”.

bidentulus* Ganglbauer, 1890: 22, 31. species revalidated

This species was described from China, Gansu and was synonymized by Alexeev (1959: 26) as the junior subjective synonym of *A. caeruleus*. This taxon belongs to the *cyanescens* species group but it is not conspecific with *A. cyanescens* and it shall be removed from this synonymy.
**acuticornis** Abeille de Perrin, 1897: 3, 10. ([*Agrilus*] *acuticornis* n. sp.)

The first time synonym of this name as the junior subjective synonym of *A. cyanescens* was by Niehuis & Tezcan (1993: 1, 22).

Type locality: “Caucase arménien [Armenia]”.

**teriolensis** Obenberger, 1916: 275. (*Agrilus artemisiae* subsp. *teriolensis* m. n. sp. [sic!])

The name *teriolensis* was proposed as a subspecies of *A. artemisiae* Brisout de Barneville, 1863. Curletti (1994: 167) studied the type and synonymized it as the junior subjective synonym of *A. cyanescens*.

Type locality: “Tirol [SW Austria]”.

**johanidesi** Niehuis, 1999: 35-41. (*Agrilus cyanescens* *johanidesi* n. ssp.)

Proposed as the subspecies of *A. cyanescens*.

Type locality: “Syria, Quatanā –Burqush env. [33°27’ N, 36°02’ E]”.

**Names originally proposed for an infrasubspecific entities**

**virens** Schilsky, 1888: 187. (*Agrilus coeruleus* [sic!] v. *virens*)

The name *virens* was proposed as a variety of *A. caeruleus*. The content of the work unambiguously revealed that names were proposed as an infrasubspecific entity, since the taxon was very briefly diagnosed only by differences in color: “Oberseite grün”. This name was never adopted as a valid name of a species or a subspecies. Following Article 45.6.4, such name should be deemed infrasubspecific and unavailable from the original publication.

**combinator** Obenberger, 1925: 102. (*Agrilus fissifrons* var. *combinator* m. n. var.)

The type specimen was examined and is conspecific with *A. cyanescens*. The content of the work unambiguously revealed that names were proposed as an infrasubspecific entity, since the taxon was very briefly diagnosed only by differences in color: “A typo thorace ac capite aeneobrunneis, elytris clare viridibus differt” and Obenberger, in subsequent references, treated it as a mere aberration. This name was never adopted as a valid name of a species or a subspecies. Following Article 45.6.4, such name should be deemed infrasubspecific and unavailable from the original publication.


The type specimen was examined and is conspecific with *A. cyanescens*. It was originally proposed as an aberration and thus an unavailable name (Article 45.6.2).
cuprescens Fleischer, 1930: 207. ([Agrilus coeruleus] [sic!] a. *cuprescens* Fleisch.)

Obenberger (1936: 1004) cited it in combination with *A. kyselyi* Obenberger, 1924. It was originally proposed as an aberration and thus is an unavailable name (Article 45.6.2).

pseudroberti Fleischer, 1930: 207. ([Agrilus coeruleus] [sic!] a. *pseudroberti* [sic!] Fleisch.)

It was originally proposed as an aberration and thus is an unavailable name (Article 45.6.2).

**Unpublished names and misidentification**

*amethystinus* Schönherr ([Buprestis] *Amethystina* Olivier[ier]. [sic!])

Schönherr (1817: 258) did not describe this species as new, as he attributed it to Olivier. Schönherr erroneously considered *Buprestis amethystina* Olivier, 1790 (now in *Meligobius*) to be conspecific with *Buprestis caerulea* Rossi, 1792 (now junior subjective synonym of *A. cyanescens*). It was first introduced in the synonymy of *A. caeruleus* by Gemminger & Harold (1869: 1438). Misidentification.

*cyaneus* Lacordaire ([Agrilus]. *cyaneus* Olivier[ier]. [sic!])

Lacordaire in Boisduval & Lacordaire (1835: 612-613) did not describe this species as new; he attributed it to Olivier. This name was introduced by Obenberger (1936: 975) in the synonymy of *A. caeruleus*. Misidentification.

*cyaneus* Gory & Laporte ([Agrilus] *cyaneus*, Olivier [sic!])

Gory & Laporte (1837: 52) did not describe this species as new; he attributed it to Olivier. It was first introduced in the synonymy of *A. caeruleus* by Kiesenwetter (1857: 140, 141). Misidentification.

*Agrilus pratensis* (Ratzeburg, 1837)

*pratensis* Ratzeburg, 1837: 56-57. (*Buprestis*. *pratensis*)

Type locality: not given, but presumably Germany. This species was described from specimen provided on loan by the German entomologist E. G. Germar: “Indessen gehört das von H. Germar mir als *B. linearis* geliehene Stück zu einer ganz anderen Art *B. pratensis*”.

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1. Olivier (1790: 91) also did not describe this species as new; he attributed it to Fabricius. Actually, Olivier only cited *Buprestis cyanea* Fabricius, 1775 (now in *Phaenops* Dejean, 1833).
available synonyms
- robertii Chevrolat, 1838
- pseudocoeruleus Obenberger, 1930

unavailable synonyms
- strigicollis Rey, 1891
- confusus Schaefer, 1936
- paracyaneus Schaefer, 1937
- aeneicolor Schaefer, 1946
- confusinella Schaefer, 1949

subspecies
- ssp. praeclarus Krogerus, 1925 revalidated name
  available synonym
  - fennicus Obenberger, 1936 syn. nov.

-ssp. djukini Obenberger, 1935
  available synonym
  - chankae Obenberger, 1935

- ssp. meridionalis Cobos, 1986

Available names proposed for species and subspecies or replacement names

robertii Chevrolat, 1838: 89-90. (Agrilus Robertii [sic!])
A junior subjective synonym of A. pratensis. It was first synonymized by Kiesenwetter (1857: 146).
Type locality: “Belgia [= Belgium] ... des environs de Liège [50°38' N, 5°34' E]”.

pseudocoeruleus Obenberger, 1930: 112. (Agrilus pseudocoeruleus m. n. sp.)
Type locality: “Asia centralis: Sefid-rud [in Iran?]”.

praeclarus Krogerus, 1925: 73, 75-76. ([Agrilus] Robertii var. praeclarus n. var.) revalidated name
The name praeclarus was proposed as a variety of A. robertii. This taxon was briefly diagnosed only by differences in color: “Heller gefärbt als die Nominalform. Halsschild goldgrün, Flügeldecken blau”, but it is not considered unambiguously proposed for an infrasubspecific entity, because it was described from northernmost distribution area of A. pratensis and this taxon was deemed to be a subspecies of A. pratensis under the name fennicus Obenberger 1936. See also comments under fennicus Obenberger.
Type locality: “im südlichen Finnland, St. Ylöjärvi [61°33' N, 23°35' E]”. 
fennicus Obenberger, 1936: 1029. ([Agrilus Roberti] [sic!] ab. [sic!] fennicus nom. nov.)

syn. nov.

The name praeclarus Krogerus is the junior primary homonym of praeclarus Rey, 1891 proposed as a variety of A. viridis (Linné, 1758). The name praeclarus Krogerus was substituted by Obenberger in 1936 by the replacement name fennicus. This taxonomic act was mistakenly repeated by Obenberger also in 1937. Schaefer (1949: 392) erected fennicus to the subspecies level. I consider praeclarus Rey to be an unavailable name (this name will be treated in a future contribution on A. viridis) and thus praeclarus Krogerus is deemed a valid subspecies of A. pratensis and fennicus Obenberger is junior objective synonym of praeclarus Krogerus.


Described as a subspecies of A. robertii. The lectotype designation was by Jendek (1994: 11).

Type locality: “s. Trojckoe [= Troitskoye, 44°51’ N, 132°02’ E], oz. Chanka [Khanka lake], Primors. [Primorskiy Kray, Russia]”. The type locality precised according to the lectotype locality data.


Described as a subspecies of A. betuleti (Ratzeburg, 1837). The proposal of a junior subjective synonym of A. pratensis djukini and the lectotype designation was given by Jendek (1994: 11).

Type locality: “Chanka [Khanka lake] Ussuri Kamen-Rybolov [44°45’ N, 132°04’ E]”. The type locality precised according to the lectotype locality data.

meridionalis Cobos, 1986: 241-243, 316. ([Agrilus (Anambus)] pratensis meridionalis ssp. nov.)

Proposed as a subspecies of A. pratensis.

Type locality: “Balenyá [= 41°49’ N, 2°13’ E, Catalonia, Spain]”.

Names originally proposed for an infrasubspecific entities

strigicollis Rey, 1891: 19. (Agrilus pratensis ... variété strigicollis R[ey].)

The name strigicollis was proposed as a variety of A. pratensis. The content of the work unambiguously revealed that name was proposed for an infrasubspecific entity, since the taxon was briefly diagnosed only by a smaller size and denser structure of pronotum: “est moindre, avec les rides du prothorax paraissant un peu moins serrées” without the citation of type locality. This name was never adopted as a valid name of a species or a subspecies. Following Article 45.6.4, such a name should be deemed infrasubspecific and unavailable from the original publication.
confusus Schaefer, 1936: 117. ([Agrilus Roberti ab. confusus nov.]
Proposed as an aberration of A. roberti and thus an unavailable name (Article 45.6.2).
See also confusinella Schaefer, 1949.

paracyaneus Schaefer, 1937: 84. ([Agrilus pratensis] ab. paracyaneus nov.)
Proposed as an aberration of A. pratensis and thus an unavailable name (Article 45.6.2).

aeneicolor Schaefer, 1946: 73. ([Agrilus pratensis] ab. aeneicolor nov.)
Proposed as an aberration of A. pratensis and thus an unavailable name (Article 45.6.2).

confusinella Schaefer, 1949: 391, 392, 490. ([Agrilus pratensis] ab. confusinella nom. nov.)
Proposed as a replacement name for an unavailable name A. pratensis a. confusus Schaefer, 1936 not A. confusus Waterhouse, 1889 and thus an unavailable name.

Unpublished names and misidentification

auricollis Sturm ([Agrilus] auricollis. St[urn])

linearis Gory & Laporte (Agrilus linearis. Fabr[icius]. [sic!])
Gory & Laporte (1837: 55-56) misidentified A. pratensis under the name linearis according to Kiesenwetter (1857: 146, 147), who attributed linearis to Gory & Laporte and listed it in the synonymy of A. pratensis. Gory & Laporte did not describe the species as new; they attributed it to Fabricius. Misidentification.

linearis Paykull (Bupr[estis]. Linearis ... Fabr[icius])

Agrilus convexicollis Redtenbacher, 1849
convexicollis Redtenbacher, 1849: 285. ([Agrilus] (Redt.) convexicollis)
Type locality: Not given, but presumably Austria as indicated by title of the work “Fauna Austriaca”.

available synonym

- mancinii Obenberger, 1927

Available names proposed for species and subspecies

mancinii Obenberger, 1927: 84-85. (Agrilus convexicollis ssp. Mancinii m. n. ssp.)

Proposed as a subspecies of A. convexicollis and as the junior subjective synonym of A convexicollis by Curletti (1987: 151).

Type locality: “Italia: Poggio Cavallo [42°45' N, 11°09' E], Dint. Grosseto”.

Unpublished name

brevitarsis Erichson, “[Agrilus] brevitarsis Erichs. i. litt.”


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