Studies in the Palaearctic and Oriental Agrilus (Coleoptera, Buprestidae). III

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The following nomenclatorial changes are proposed in the genus Agrilus:

- *A. achilleus* Obenberger (= *A. myrmidonius* Obenberger syn. nov.);
- *A. albopictus* Kerremans (= *A. apicalis* (Bourgoin) syn. nov.);
- *A. macroderus* Abeille de Perrin (= *A. anguilfer* Abeille de Perrin syn. nov.);
- *A. piliventris* Deyrolle (= *A. takehori* Tôyama syn. nov.);
- *A. pseudocyaneus* Kiesenwetter (= *A. roubalianus* Obenberger syn. nov.);
- *A. ribbei* Kiesenwetter (= *A. tibialis* Lewis syn. nov., = *A. corax* Obenberger syn. nov.);
- *A. semiaeneus* Deyrolle (= *A. nagaii* Tôyama syn. nov.);
- *A. shibatai* Kurosawa (= *A. hokkaidensis* Tôyama syn. nov.);
- *A. suturaalba* Deyrolle (= *A. abreus* Fisher syn. nov.);
- *A. validus* Deyrolle (= *A. nobuyuki* Tôyama syn. nov.);
- *A. villosostriatus* Thomson (= *A. binominatus* Kerremans syn. nov.);
- *A. zigzag* Marseul (= *A. clermontianus* Roubal syn. nov.).

The complete synonymy of *A. ribbei* is listed; the authorship of *A. sinuatus yokoyamai* Iga is discussed; the correction to *A. senilis* Kerremans is given. Lectotypes of 24 species are designated.

Key words: taxonomy, Coleoptera, Buprestidae, Agrilinae, Agrilus.

Introduction

The present work is a continuation of the study of the type material of Palaearctic and Oriental *Agrilus* Curtis, 1825 (Jendek, 2000, 2001).

Material and methods

**Abbreviations used.** The material examined for this study is deposited in the following collections:

- DEIC, Deutsches Entomologisches Institut, Eberswalde, Germany;
- EJCB, Collection of E. Jendek, Slovak Academy of Sciences, Bratislava, Slovakia;
- IRSN, Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium;
- MCSR, Museo civico di Storia Naturale "Giacomo Doria", Genova, Italy;
- MNHN, Musée national d’Histoire naturelle, Paris, France;
- NMPC, Národní muzeum, Prague, Czech Republic;
- NSMT, National Science Museum, Tokyo, Japan;
- SNMB, Slovenské národné múzeum, Bratislava, Slovakia;
- SOCI, Collection of S. Ohmomo, Ibaraki, Japan;
- USNM, The United States National Museum of Natural History, Smithsonian Institution, Washington D. C., USA;
- ZSMC, Zoologische Staatssammlung, München, Germany.

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Other abbreviations used: MS, handwritten (manuscript). The backslash "\" is used to separate data from different labels; square brackets "[ ]" are used for my remarks; [p], preceding data printed; [h], preceding data hand-written. 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*, hereafter referred to as "the Code". Articles of the Code cited herein are simply cited as, for example, "Article 23.9".

Species names are listed in correct spelling. They are cited in the original generic combination and in the original status when followed by reference to the original description; otherwise, they are cited in the current generic combination and in the current status.

**Lectotype designations.** According to the Article 74.7.3, the lectotype designation after 1999 "must contain an express statement of the taxonomic purpose of the designation". Lectotype designations herein are provided in order to preserve the stability of nomenclature by fixing the status of the specimen as the sole name-bearing type of a particular nominal taxon and in order to specify the type locality. The lectotype designation of some species is not followed by any taxonomic act or notice of assignation. Status or synonymy of these species will be solved in subsequent publications, because only a limited number of types from public institutions was available. Lectotype designations were made with careful attention to previously accepted usages of a name.

For a lectotype designation proposed prior to the year 2000, the Code permits use of the terms "the holotype" or "the type" to indicate a lectotype designation (Articles 74.5 and 74.6). Such designations are cited along with a designator and relevant data.

Subsequently fixed name-bearing types were provided with a printed red label bearing all relevant data: e.g. type status, species name in original combination and correct spelling, author, year of the publication and an inscription "E. Jendek design." along with year of designation. Unlabeled lectotypes designated prior to the year 2000 by other authors were also provided with pertinent data label.

**Type locality.** The type locality is listed separately for each lectotype designated herein or that designated prior to the year 2000. Data were taken from all available, original sources as: original publication, locality originally cited and lectotypes’ label data. The type locality is quoted in the language and form of the original citation, the order of the elements is sometimes changed. To preserve original locality data, complements and updates are consistently given in "[ ]".

The historical or otherwise vague localities are updated (in most cases including coordinates) according to the GEOnet Names Server providing access to the database of foreign geographic feature names of the National Imagery and Mapping Agency (NIMA).

Names information in that database is approved by the United States Board on Geographic Names.

**Taxonomic part**

*Agrilus achilles* Obenberger

*Agrilus achilles* Obenberger, 1935: 121.

*Agrilus myrmidonius* Kerremans, 1912b: 208-209.

*Agrilus miwai* Théry, 1936: 61.

*Agrilus myrmido* Obenberger, 1936a: 1092. syn. nov.

**Remarks.** Kerremans described in two 1912 publications two different species under the name *myrmido*. **OBENBERGER** (1935) as the first revisor considered the species from Sarawak published in the Sarawak Museum Journal to be published in 1911, while that from Taiwan published in the Archiv für Naturgeschichte, in 1912. He proposed for *A. myrmido* from Taiwan the new replacement name *achilles*. **Théry** (1936) skipped the act of Obenberger and proposed for *A. myrmido* a second replacement name *miwai*. Finally **OBENBERGER** (1936a) omitted his own act from 1935 and proposed third replacement name *myrmidonius* and cited A. *miwai* as its synonym.

The description of *Agrilus myrmido* Kerremans, 1912b was based on an unspecified number of specimens from "Taihorinsho" (= Ta-lin (23° 36’ N, 120° 26’ E), Chiai, Taiwan). The single syntype preserved in DEIC was not examined.

*Agrilus myrmido* Kerremans, 1912b, *A. achilles*, *A. miwai* and *A. myrmidonius* are objective synonyms. See also *A. myrmido* Kerremans, 1912a.

*Agrilus albopictus* Kerremans


**Type locality:** Birmania [indicated from title] (= Myanmar), Carin Cheba, 900-1100 m [Karen Hills, approximate coordinates 19° 13’ N, 96° 35’ E, (Source: R. Poggi, Genova, personal communication according to itinerant map of L. Fea in Burma)].

Agrilus coraeoides Kerremans


Type locality: [Indonesia], Sumatra, Hindrapoera.

Remarks. Described from Sumatra, Hindrapoera [= ? Indrapura (2°04’ S, 100°56’ E)] as indicated in an announcement: “Sauf indication contraire, tous les Agrilus ont été capturés à Hindrapoera et dans les environs”. The type locality is presumably closed to another Weyers’ locality “Tambang Salida” (1°19’ S, 100°38’ E). However there is in NE Sumatra another “Hindrapoera” (= Indrapura), (= Indrapura) (3°18’ N, 99°23’ E).

Agrilus cyanoeoniger melanopterus Solsky


Type locality: [Russia] Siberien Amur [Amurskaya Oblast].

Remarks. Agrilus impressifrons was synonymized by Semenov-Tian-Shanski (1903: 171-172). The examination of the lectotype of A. impressifrons reconfirmed its conspecifity with A. cyanoeoniger melanopterus.

Agrilus inamoenus Kerremans


Type locality: Birmania [indicated from title] [= Myanmar], Carin Cheba, 900–1100 m [Karen Hills, approximate coordinates 19°13’ N, 96°35’ E, (Source: R. Poggi, Genova, personal commu...
**Agriulus liscapia** nom. nov.

*Sambus apicalis* Bourgoîn, 1923: 261. syn. nov. Lectotype designated by Descarpentries & Villiers (1967).

**Remarks.** Jendek (2000: 502–503) transferred *Sambus apicalis* Bourgoîn to *Agriulus*, where exists the senior homonym *A. apicalis* Waterhouse, 1889, without proposing a new replacement name, having presupposed a synonymy with an earlier described species. Due to the delayed revision I propose the new replacement name herein.

**Derivatio nominis.** Random recombination of the original name “apicalis”.

**Agriulus livens** Kerremans


**Type locality:** Birmania [= Myanmar], [Kachin State], Bhamo [24°16’ N, 97°14’ E].

**Remarks.** The original description neither implies not requires that there were syntypes, then Descarpentries & Villiers (1963b: 110) by the mention about “the type”: “Bhamo (Type, Musée de Gènes)” validly fixed the lectotype (Article 74.6.).

**Agriulus longicollis** Saunders


**Type locality:** Siam [= Thailand].

**Remarks.** Because the original description neither implies not requires that there were syntypes, then Descarpentries & Villiers (1963c: 9) by the mention about “the type”: “Thailand (Mouhot, type au British Museum)” validly fixed the lectotype (Article 74.6.).

**Agriulus macroderus** Abeille de Perrin


**Type locality:** Romania Bucharest [44°25’ N, 22°06’ E].

**Remarks.** Described as a variety of *A. chrysoderes* Abeille de Perrin, 1891. As the name of a valid species used for first time by Obenberger (1936a: 1012).


**Type locality:** Austria Wien [= Vienna].

**Remarks.** Described from multiple localities: “Austria inferior, Hungaria, Slavonia, Serbia, Graecia, Russia meridionalis”. *Agriulus fuscosericeus* was synonymized by Obenberger (1936a: 1012) as the junior subjective synonym of *A. macroderus*. The reexamination of lectotypes reconfirmed their conspecifity.


**Type locality:** Caucasus occidental [Western part of Caucasus Mountain, now part of Russia and Georgia].

**Remarks.** Described as a variety of *A. chrysoderes* Abeille de Perrin, 1891 from “Caucas occidental” and subsequently considered as variety or subspecies of *A. chrysoderes* Abeille de Perrin, *A. communis* Obenberger, *A. aurichalceus* Redtenbacher or *A. viridis* Linné. The examina-
tion of the lectotype revealed its conspecificity with *A. macroderus*.

*Agrilus mediocris* Kerremans

*Agrilus mediocris* Kerremans, 1900b: 341–342.

*Agrilus modicus* Kerremans, 1893: 348. Lectotype ♀, BMNH, by present designation: “SYN-TYPE [p] [round label with blue border] \ Kanara Andrews [leg.] [Kerremans’ manuscript] \ modicus Kerr. Type [Kerremans’ manuscript] \ Kerremans 1903–59. [p] \ A. modicus Kerrem. Inde [h]” and 10 paralectotypes same locality data. Single paralectotype from the same locality is preserved in MNHN. Number of syntypes unknown.

**Type locality:** [India], Kanara (= ?Karnataka state).

**Remarks.** *Agrilus mediocris* Kerremans, 1900b was proposed as the replacement name for *A. modicus* Kerremans, 1893 not *A. modicus* Kerremans, 1892. *Agrilus modicus* Kerremans, 1893 was described from “Indes Orientales [indicated from title], Kanara”. There are several “Kanara” localities in India and Bangladesh, the type locality presumably pertains to Karnataka state following from the locality “Belgaum” in Karnataka and often accompanying “Kanara” in the paper; see also *A. modicus* Kerremans, 1892.

*Agrilus modicus* Kerremans


**Type locality:** [Indonesia, Nusa Tenggara Barat], Carin Cheba 900–1100 m L. Fea V XII – [18]88 [p] \ Holotypus [p] *Agrilus nivosus* Abeille de Perrin, 1900: 13. Lectotype ♀, ZSMC, by present designation: “Type ! [h] \ Aulie Ata [h] \ Turkestan (Stdgr. [= Staudinger] [leg.] 1901) [h] \ nivosus [h] \ Sammlung Dr. K. Daniel [p] \ Holotypus [p] Agrilus nivosus Abeille [h] Zool. Staatssammlg. München [p] [red label] \ Zool. Staatsslg. München [p] [blue label]”. There are in MNHN five specimens of *A. nivosus* from Turkestan labeled as syntypes, which I did not studied, but will be considered as paralectotypes.

**Type locality:** [Kazakhstan], Aulie Ata (= Zhambyl, 42°54’ N, 71°22’ E].

**Remarks.** The area of Russian Turkestan comprised the republics of Kazakhstan, Kyrgyzstan, Tadzhikistan, Turkmenistan and Uzbekistan.

*Agrilus nixius* Kerremans

*Agrilus nixius* Kerremans, 1896: 369–370. Lectotype ♀, BMNH, by present designation: “Type [p] [round label with red border] \ Sumbawa Staudinger[er leg.]. [Kerremans’ manuscript] \ nixius [sic!] Kerr. Type [Kerremans’ manuscript] \ Kerremans 1903–59. [p] \ A. nixus [sic!] Kerremans]. Sumbawa [h]”.

**Type locality:** [Indonesia, Nusa Tenggara Barat]
Agrilus nubilus Kerremans


_Type locality:_ Birmania [= Myanmar], [Kachin State], Bhamo [24°16’N, 97°14’E].

**Remarks.** The original description neither implies not requires that there were syntypes, then Descarpentries & Villiers (1963b: 112) by the mention about “the type”: “Bhamo (Type, Musée de Gènes)” validly fixed the lectotype (Article 74.6.).

Agrilus obscuricollis Kiesenwetter


_Type locality:_ France, Rhône Alpes department, Lyon [45°45’N, 4°51’E].

**Remarks.** Originally described from two localities: “In Deutschland selten; es liegt mir nur ein von Kahr in Steyermark gesammeltes Exemplar vor. Häufiger findet sich das Thier in Lyon”.

Agrilus octonotatus Saunders


_Type locality:_ Russia, Eastern Siberia Amur [= Amurskaya Oblast’].
Agrilus perviridis Kerremans

Type locality: [Indonesia], Sumatra, région du lac Toba [indicated from title], Pangherang Pisang [1°55’ N, 98°45’ E].

Agrilus piliventris Deyrolle


Remarks. The examination of holotypes of A. takedai and A. takehiroi revealed their conspeciﬁcity with A. piliventris.

Agrilus pseudocyaneus Kiesenwetter


Type locality: [Russia, Karachayevo-Cherkessiya], Caucasus borealis, Teberda [43°26’38” N, 41°44’45” E].

Agrilus roubalianus Obenberger, 1937: 58. syn. nov.

Remarks. The specific name roubalianus Obenberger was proposed as the replacement name for A. foveola Roubaix but A. obscuricollis var. foveola Rey, 1891. The examination of the holotype of A. foveola revealed its conspeciﬁcity with A. pseudocyaneus.

Agrilus pubiventris Kiesenwetter
Agrilus pubiventris Kiesenwetter, 1857: 124, 126–127. Lectotype, sex not examined, MNHN, by present designation: “TRANSCRIPTIO TYPUS (Laferté) [h] \ MUSEUM PARIS 1952 COLL. R. OBERTHUR [p] [yellow label]”. Number of syntypes unknown.

Type locality: [Russia, Eastern Siberia] Amur (unpublished).


Agrilus ribbei Kiesenwetter
*tibialis* Lewis, 1893 syn. nov.

*gracilipes* Lewis, 1893

*japonicus* Kerremans, 1898

*lewisiellus* Kerremans, 1903

*corax* Obenberger, 1917 syn. nov.

*taigicola* Obenberger, 1924

*larvatus* Obenberger, 1924

*prinadai* Fisher, 1925

*bakinensis* Obenberger, 1935

*freyi* Théry, 1939

*sturupicus* Alexeev, 1979


Type locality: [Russia, Eastern Siberia] Amur [= Amurskaya Oblast’].

Remarks. The type examination of A. ribbei revealed its conspeciﬁcity with *A. tibialis* Lewis, 1893. *Agrilus ribbei* can not be considered a nomen oblitum as it was considered till now as a valid name of species (the Article 23.9. and subsidiary).

This variable species was separated into two subspecies, which differ only in the color: brown-green, continental (East Asia) and blue, insular (Japan). Since both forms were found commonly to cohabitate, I consider them to be chromatic aberrations. Thus “corax” as the younger name of continental subspecies is new subjective synonym of *A. ribbei*. For details on the synonymy see JENDEK (1994, 1995a). Due to the intricate state in the synonymy I give above an overview of all available synonyms.
Agrilus semiaeneus Deyrolle

Remarks. The examination of the holotypes of A. semiaeneus and A. nagai revealed their conspecificity.

Agrilus senilis Kerremans
Correction. In the first part of the studies of Agrilus (Jende, 2000: 506) the lectotype designation of A. senilis Kerremans, 1914 was proposed. Due to a typographical error, the paragraph with the paragraph that pertained to A. semiaeneus Deyrolle. Agrilus senilis is not a synonym of A. semiaeneus.

Agrilus sericans Kiesenwetter
Agrilus sericans Kiesenwetter, 1857: 124, 127. Lectotype, sex not examined, MNHN, by present designation: “TRANSCRIPTIO [p] Cuprescens Ménétr. Chalconotus (Megerle) Caucas Typ Gory [h] MUSEUM PARIS 1952 COLL. R. OBERTHUR [p] [yellow label]”. There is in ZSMC a single specimen from “Sarepta” labeled as the type of A. sericans Kiesenwetter, which I do not consider to be a paralectotype (see remarks). The number of syntypes is unknown.

Type locality: Caucasus [Caucasus Mountains, now Azerbaijan, Armenia, Georgia and part of Russia].

Remarks. The type locality of A. sericans as stated by Kiesenwetter is “Vom Caucasus” and not “Sarepta”. Kiesenwetter based the type of A. sericans on a wrongly determined specimen cited by Gory & Laporte de Castelnau (1837: 56–57) under the name “Agrilus cuprescens, Ménétriers”.

Agrilus shibatai Kurosawa


Agrilus sinuatus yokoyamai Iga
Agrilus sinuatus yokoyamai Iga, 1955: 79. I failed to locate the type of A. sinuatus yokoyamai Iga in NSMT.

Remarks. Agrilus sinuatus yokoyamai Iga was described as a variety of A. sachalinensis Ober-berger, 1935. Kurosawa (1963) used first time the name “yokoyamai Iga” as a valid name of species and later (Kurosawa, 1974a, b, 1975) adopted it as the subspecies of A. sinuatus (Olivier, 1790). Tôyama (1985b, 1989) and Akiyama & Ohmomo (1997 in corrections), assigned the authorship of A. sinuatus yokoyamai to Kurosawa. According to Articles 45.6.4., 45.6.4.1., the name yokoyamai is deemed to be available and subspecific from the original publication with the authorship assigned to Iga and not to Kurosawa.

Agrilus suginoi Tôyama

Remarks. Agrilus suginoi, along with A. adelphus Kerremans, is closely related to the West Palearctic A. sulcicolis Lacordaire. Agrilus suginoi differs from A. adelphus by having more convex pronotum, with more shallow lateral impressions; sharper prehumerus and by distinctly arcuate elytral apices (apices at A. adelphus are shallowly arcuate or obliquely subtruncate apically). However, the only reliable distinction is the form of the aedeagus: A. suginoi has the upper proximal part of tegmen medially broadly shallowly impressed with sharp, crenulate, lateral carinae; while in A. adelphus is proximal part of tegmen convex.

Additional material examined.

**Agrilus transversus** Kerremans


**Type locality**: Indonesia, Sumatra, Si-Rambé.

**Remarks**: The type locality “Si-Rambé” is presumably located nearby Toba, Danau (lake), 2°35’ N, 98°50’ E, Sumatera Utara as indicated from the title “Sumatra dans la région du lac Toba”.

**Agrilus validus** Deyrolle


**Remarks**: The comparison of the lectotype of *A. validus* with the holotype of *A. nobuyukii* revealed their conspecificity.

**Agrilus villosostriatus** Thomson


**Type locality**: India Orien. Mhora [site unlocated].


**Remarks**: Number of syntypes unknown. Any type locality is cited in the description, but “Inde” is indicated in the title. The examination of the single syntype in MNHN revealed, that *A. villosostriatus* Kerremans is conspecific with *A. villosostriatus* Thomson. The syntype is not available to me at present in order to perform the lectotype designation. Junior primary homonym and subjective synonym of *A. villosostriatus* Thomson.

*Agrilus villosostriatus* var. *carmineus* Kerremans, 1892b: 214–215. unavailable name

**Remarks**: Described along with *A. villosostriatus* Kerremans as his variety: “Var. B. carmineus”.

**Agrilus taveuniensis** Théry


**Type locality**: Fiji [islands], Taveuni [island, 16°50’ S, 179°56’ W].
Content of the work unambiguously revealed that name was proposed for an infrasubspecific entity, because distinctive characters are only color differences: “Ochraceo-villosus; thorace nigro, elytris ad latera carmineis, ad suturam viridibus ... Bien que ces deux variétés différent absolument au point de vue de la coloration”. Following Article 45.6.4, such a name should be deemed infrasubspecific and unavailable from the original publication.

Agrilus binominatus Kerremans, 1900b: 341. 

**Agrilus zigzag**

Marseul, 1866: 439, 478–479. 


**Agrilus clermontianus** syn. nov. 


**Type locality**: [Russia, Volgogradskaya Oblast’] Sarepta [48°30’ N, 44°30’ E]. 

**Remarks**: The type of *A. zigzag*, described from “Russie méridionale” from an unspecified number of specimens, was not examined. There are in BMNH, IRSN and MNHN specimens labeled as “type” of *A. zigzag*. The conspecificity of *A. zigzag* and *A. clermonianus* is judged from the generally accepted concept of *A. zigzag*.

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