

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

Eduard JENDEK

Institute of Zoology, Slovak Academy of Sciences, Dúbravská cesta 9, SK-84506 Bratislava, Slovakia; e-mail: uzaejend@savba.sk.

JENDEK, E., Studies in the Palaearctic and Oriental *Agrilus* (Coleoptera, Buprestidae). III. *Biologia, Bratislava*, 58: 179—190, 2003; ISSN 0006-3088.

The following nomenclatorial changes are proposed in the genus *Agrilus*: *A. achilleus* Obenberger (= *A. myrmidonius* Obenberger syn. nov.); *A. albopictus* Kerremans (= *A. argyropus* Descarpentries et Villiers syn. nov., = *A. delouchei* Descarpentries et Villiers syn. nov.); *A. liscapia* nom. nov. (= *A. apicalis* (Bourgoin) syn. nov.); *A. macroderus* Abeille de Perrin (= *A. angulifer* Abeille de Perrin syn. nov.); *A. piliventris* Deyrolle (= *A. takedai* Tôyama syn. nov., = *A. takehiroii* Tôyama syn. nov.); *A. pseudocyanus* 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. hokkaidoensis* Tôyama syn. nov.); *A. suturalba* Deyrolle (= *A. abreui* Fisher syn. nov.); *A. validus* Deyrolle (= *A. nobuyukii* 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:

BMNH, The Natural History Museum, London, England;

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;

MCSN, Museo civico di Storia Naturale "Giacomo Doria", Genova, Italy;

MNHN, Muséum 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.

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, but is not aimless. 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 usage 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 achilleus Obenberger

Agrilus achilleus Obenberger, 1935: 121.

Agrilus myrmido Kerremans, 1912b: 208-209.

Agrilus miwai Théry, 1936: 61.

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

Agrilus albopictus Kerremans

Agrilus albopictus Kerremans, 1892a: 822. Lectotype ♀, MCSN, by present designation: “Carin Cheba 900-1100 m L. Fea [leg.] V XII – [18] 88 [p] \ Typus [p] [red ink, red border] \ albopictus Kerr. [h] [black border] \ *A. albopictus* Kerr. typus! [h] \ albopictus Kerr. Type [Kerremans’ MS] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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 argyropus Descarpentries et Villiers, 1963a: 57, 61. **syn. nov.** Holotype ♀, MNHN: “Hoa-Binh Tonkin R. P. de Cooman [leg.] [p] \ *Agrilus argyropus* n. sp. Holotype nob[is]. A. Descarpentries et [h] A. Villiers det. 19 [p] 62

[h] \ MUSÉUM PARIS 1935 coll. A. THÉRY [p]”. Described from single specimen.

Type locality: Tonkin [= North Vietnam], Hoa-Binh [20°50' N, 105°20' E].

Agrilus delouchei Descarpentries et Villiers, 1963a: 57, 62. **syn. nov.** Holotype ♀, MNHN: “TONKIN [p] VII [h] Hoa-Binh [p] 40 [h] leg. A de Cooman [leg.] [p] [orange label] \ HOLO [h] TYPE [p] [red label] \ *Agrilus delouchei* n. sp. Holotype [female sign] nob[is]. A. Descarpentries et [h] A. Villiers det. 19 [p] 62 [h]”. Described from single specimen.

Type locality: Tonkin [= North Vietnam], Hoa-Binh [20°50' N, 105°20' E].

Remarks. *Agrilus argyropus* and *A. delouchei* are junior subjective synonyms of *A. albopictus* Kerremans, 1892.

Agrilus auricollis Kiesenwetter

Agrilus auricollis Kiesenwetter, 1857: 125, 149–150. Lectotype ♀, ZSMC, by present designation: “Austria [h] \ Kiesenwetter [p] \ Sammlung Cl. Müller [p] \ Type von [p] *Agrilus auricollis* Kiesw. [h] [red label] \ Holotypus [p] *Agrilus auricollis* Kiesenwetter [h] Zool. Staatsammlg. München [red label]”. Number of syntypes unknown.

Type locality: Austria.

Remarks. Described from multiple places of origin: “in den südlicheren Gegenden Deutschland’s, namentlich in Oesterreich, Bayern, Tyrol. Außerdem ist sie im südlichen Frankreich zu Hause”. The type locality becomes the place of origin of the lectotype (Article 76.2.).

Agrilus blatteicollis Bourgoïn

Agrilus blatteicollis Bourgoïn, 1922: 168. Lectotype ♀, MNHN, lectotype designation by DESCARPENTRIES & VILLIERS (1963c): “Hoo-Binh [sic!] Tonkin [p] \ *Agrilus blatteicollis* Bourgoïn [h] [black ink] Type [h] [red ink] \ MUSÉUM PARIS 1935 Coll. A. Théry [p]”. Number of syntypes unknown.

Type locality: Tonkin [= North Vietnam], Hoa-Binh [20°50' N, 105°20' E].

Remarks. No type locality was cited by Bourgoïn, but presumably “Indo-Chine française” as indicated in the title. The type locality is stipulated from the place of origin of the lectotype (Article 76.2.). Because the original description neither implies nor requires that there were syntypes, then DESCARPENTRIES & VILLIERS (1963c: 14) by the mention about holotype: “Hoa-Binh (R. P. De Cooman), holotype female au Muséum de Paris” validly fixed the lectotype (Article 74.6.).

Agrilus coraeboïdes Kerremans

Agrilus coraeboïdes Kerremans, 1900a: 5, 22, 28. Lectotype ♀, BMNH, by present designation: “SYNTYPE [p] [round label with blue border] \ Sumatra Weyers [leg.] [Kerremans’ MS] \ coraeboïdes Kerr. Type [Kerremans’ MS] \ Kerremans 1903-59 [p]” and 3♀♀ paralectotypes, from the same locality as lectotype. Described from three syntypes.

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” (= Indrapoera, = Indrapura) (3°18' N, 99°23' E).

Agrilus cyaneoniger melanopterus Solsky

Agrilus cyaneoniger melanopterus Solsky, 1875: 277–279. Lectotype designated by JENDEK (1995a).

Agrilus impressifrons Kiesenwetter, 1879: 254–255. Lectotype ♀, ZSMC, by present designation: “Sibirien Amur Christoph [18]77 [p] \ Kiesenwetter [p] \ Sammlung Cl. Müller [p] \ Type von [p] *Agrilus impressifrons* Kiesw. [h] [red label] \ Holotypus [sic!] [p] *Agrilus impressifrons* Kiesenw. [h] Zool. Staatsammlg. München [red label]”. Number of syntypes unknown.

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

Remarks. *Agrilus impressifrons* was synonymized by SEMENOV-TIAN-SHANSKIÏ (1903: 171-172). The examination of the lectotype of *A. impressifrons* reconfirmed its conspecificity with *A. cyaneoniger melanopterus*.

Agrilus inamoenus Kerremans

Agrilus inamoenus Kerremans, 1892a: 824–825. Lectotype ♀, MCSN, lectotype designation by DESCARPENTRIES & VILLIERS (1963b): “Carin Cheba 900–1100 m L. Fea [leg.] V XII – [18] 88 [p] \ Typus [p] [red ink, red border] \ inamoenus Kerr. [h] [black border] \ *A. inamoenus* Kerr. typus! [h] [yellow label] \ inamoenus Kerr. Type [Kerremans’ MS] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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-

nication according to itinerant map of L. Fea in Burma)].

Remarks. Because the original description neither implies nor requires that there were syntypes, then DESCARPENTRIES & VILLIERS (1963b: 109) by the mention about “the type”: “Birmania (Type, Musée de Gènes)” validly fixed the lectotype (Article 74.6.).

***Agrilus liscapia* nom. nov.**

Sambus apicalis Bourgoïn, 1923: 261. **syn. nov.** Lectotype designated by DESCARPENTRIES & VILLIERS (1967).

Remarks. JENDEK (2000: 502–503) transferred *Sambus apicalis* Bourgoïn to *Agrilus*, 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”.

***Agrilus livens* Kerremans**

Agrilus livens Kerremans, 1892a: 825. Lectotype ♂, MCSN, designated by DESCARPENTRIES & VILLIERS (1963b): “Bhamò Birmania Fea [leg.] [p] VIII [h] 188 [p] 5 [h] \ Typus [p] [red ink, red border] \ livens Kerr. [h] [black border] \ *A. livens* Kerr. typus ! [h] [yellow label] \ livens Kerr. Type [Kerremans' MS] \ Museo Civico di Genova [p]” and two paralectotypes, sex not examined from the same locality. Further two paralectotypes from the same locality as the lectotype are preserved in BMNH and IRSN. Number of syntypes unknown. **Type locality:** Birmania [= Myanmar], [Kachin State], Bhamò [24°16' N, 97°14' E].

Remarks. The original description neither implies nor 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.).

***Agrilus longicollis* Saunders**

Agrilus longicollis Saunders, 1866: 315–316. Lectotype ♂, BMNH, lectotype designation by DESCARPENTRIES & VILLIERS (1963c): “Type [p] [round label with red border] \ Siam [?] [illegible handwriting] Mouhot [leg.] [p] \ longicollis ES Type Siam [h] \ Saunders 74.18. [p]”. Number of syntypes unknown.

Type locality: Siam [= Thailand].

Remarks. Because the original description neither implies nor requires that there were syn-

types, then DESCARPENTRIES & VILLIERS (1963c: 9) by the mention about “the type”: “Thailand (Mouhot, type au British Museum)” validly fixed the lectotype (Article 74.6.).

***Agrilus macroderus* Abeille de Perrin**

Agrilus chrysoderes var. *macroderus* Abeille de Perrin, 1897: 4, 5, 15. Lectotype ♂, MNHN, by present designation: “BUCAREST A. L. Montandon [leg.] [p] \ *A. chrysoderes* Ab. var. *macroderus* Ab. [h] \ MUSÉUM PARIS 1919 COLL. A. de PERRIN [p]” and one paralectotype ♂: “Corfu [39°37' N, 19°48' E, Ionian Islands, Greece] [h] \ MUSÉUM PARIS 1919 COLL. A. de PERRIN [p]”. Described from two syntypes.

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).

Agrilus fuscosericeus Daniel, K. & Daniel, J., 1898: 66–68. Lectotype ♂, ZSMC, by present designation: “Wien Bartscht [h] \ fuscosericeus [h] \ Sammlung Dr. K. Daniel [p] \ Holotypus [p] ? *Agrilus fuscosericeus* K. Daniel [h] Zool. Staatssammlg. München [red label]” and one paralectotype ♀, with same data as lectotype. Originally were both syntypes on one pin, data under paralectotype were transcribed from original labels. Number of syntypes unknown.

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

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

Agrilus chrysoderes var. *angulifer* Abeille de Perrin, 1897: 5, 15. **syn. nov.** Lectotype ♂, MNHN, by present designation: “CAUCAS OCCID. STARCK [p] \ MUSÉUM PARIS 1919 COLL. A. de PERRIN [p]” and two paralectotypes, male and female with same data as lectotype. Number of syntypes unknown.

Type locality: Caucase 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 “Caucase 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 Andrewes [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**

Agrilus modicus Kerremans, 1892a: 821–822. Lectotype ♀, MCSN, by present designation: “Carin Cheba 900–1100 m L. Fea V XII – [18]88 [p] \ Typus [p] [red ink, red border] \ modicus Kerr. [h] [black border] \ *A. modicus* Kerr. typus! [h] \ *A. modicus* Kerr. Type [Kerremans’ MS] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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)].

Remarks. The name *modicus* was proposed by Kerremans for two different species of *Agrilus*, firstly in 1892, secondly in 1893 (see also *A. mediocris* Kerremans).

***Agrilus modiglianii* Kerremans**

Agrilus modiglianii Kerremans, 1894: 529–530. Lectotype, sex not examined, MCSN, by present designation: “SUMATRA PANGHERANG-PISANG X. [18]90 e III. [18]91 E. Modigliani [leg.] [p] \ TYPUS [p] [red ink, red border] \ Modiglianii Kerrem. [h] \ Modiglianii Kerrem. Type [Ker-

remans’ MS] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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

***Agrilus myrmido* Kerremans**

Agrilus myrmido Kerremans, 1912a: 76. Lectotype ♀, MNHN, lectotype designated by OBENBERGER (1960: 131): “Kuching Sarawak Hewitt [leg.] [Kerremans’ MS] \ Mirmido [sic!] Kerr. Type [Kerremans’ MS] \ MUSEUM PARIS COLL. CH. KERREMANS 1923 [p] [yellow label]”. Number of syntypes unknown.

Type locality: [Malaysia], Sarawak, Kuching [1°33' N, 110°20' E].

Remarks. The original description neither implies not requires that there were syntypes, then OBENBERGER (1960: 131) by the mention about “the type”: “Le type fait partie des collection du Muséum National d’Histoire Naturelle de Paris” validly fixed the lectotype (Article 74.6.).

Any type locality is cited in the description, but Borneo is indicated in the title: “the insect fauna of Borneo”. The type locality is precise from the lectotype locality. See also *A. achilleus* Obenberger.

***Agrilus nivosus* Abeille de Perrin**

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. Number of syntypes unknown.

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

Remarks. The area of Russian Turkestan comprised the republics of Kazakhstan, Kyrgyzstan, Tadjikistan, 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 [leg.] [Kerremans’ manuscript] \ nixius [sic!] Kerr. Type [Kerremans’ manuscript] \ Kerremans 1903–59. [p] \ *A. nixius* [sic!] Kerrem[ans]. Sumbawa [h]”. Number of syntypes unknown.

Type locality: [Indonesia, Nusa Tenggara Barat],

Sumbawa [= Sumbawa island, 8°40' S, 118°00' E].

Additional material examined.

Borneo. 1 ♀, EJC: “Borneo”. **Indonesia.** 1 ♀, EJC: “Indonezja [sic!], Bali [island], Gilimanuk [8°11' S, 114°26' E], 27. V. 1959, leg. B. Pisarski et J. Proszynski”.

Distribution. Indonesia and Malaysia: Borneo; Indonesia: Sumbawa and Bali islands.

***Agrilus nubilus* Kerremans**

Agrilus nubilus Kerremans, 1892a: 823–824. Lectotype ♀, MCSN, lectotype designated by DESCARPENTRIES & VILLIERS (1963b): “Bhamò Birmania Fea [leg.] [p] VI [h] 188 [p] 5 [h] \ Typus [p] [red ink, red border] \ nubilus Kerr. [h] [black border] \ A. nubilus Kerr. Typus ! [h] [yellow label] \ nubilus Kerr. Type [Kerremans' MS] \ Museo Civico di Genova [p]” and one paralectotype ♀, labeled: “Teinzo [site unlocated] Birmania [= Myanmar] Fea [leg.], Maggio 1886 [p] \ Museo Civ. Genova [p]”. Second paralectotype from “Bhamò Birmania” is preserved in BMNH. Number of syntypes unknown.

Type locality: Birmania [= Myanmar], [Kachin State], Bhamò [24°16' N, 97°14' E].

Remarks. The original description neither implies nor 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**

Agrilus obscuricollis Kiesenwetter, 1857: 125, 144–145. Lectotype ♀, ZSMC, by present designation: “Lyon [h] \ Kiesenwetter [p] \ Sammlung C. Müller [p] \ Type von [p] *Agrilus obscuricollis* Kiesw. [h] [red label] \ Holotypus [p] *Agrilus obscuricollis* Kiesenw. [h] Zool. Staatssammlg. München [p] [red label] \ Zool. Staatsslg. München [p] [blue label]”. Number of syntypes unknown.

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**

Agrilus octonotatus Saunders, 1866: 316–317. Lectotype ♀, BMNH, lectotype designation by DESCARPENTRIES & VILLIERS (1963a): “Type H. T. [p] [round label with red border] \ Type [p] \ Pach [?] [h] [illegible handwriting] Mouhot [leg.] [p] \

Saunders 74.18 [p] \ octonotatus Saund. [h] [yellow paper]”. Number of syntypes unknown.

Type locality: Laos, Pachbon.

Remarks. Described from “Pachbon [= ? Ban Pakbong (15°08' N, 106°49' E), Attapu province], Laos [= Laos]”. The original description neither implies nor requires that there were syntypes, then DESCARPENTRIES & VILLIERS (1963a: 60) by the mention about “the type”: “type: Laos (British Museum)” validly fixed the lectotype (Article 74.6.).

***Agrilus olivicolor* Kiesenwetter**

Agrilus olivicolor Kiesenwetter, 1857: 135–136. Lectotype ♂, ZSMC, by present designation: “[any locality data] Kiesenwetter [p] \ Sammlung Cl. Müller [p] \ Type von [p] *Agrilus olivicolor* Kiesw. [h] [red label] \ Holotypus [p] *Agrilus olivicolor* Kiesenw. [h] Zool. Staatssammlg. München [red label]”. Number of syntypes unknown.

Type locality: Germany.

Remarks. According to the indication in the description: “Durch ganz Deutschland” the type locality is Germany. There are two specimens in BMNH labeled as syntypes of *A. olivicolor* from “Vollhynie”, which status is ambiguous and they are not considered paralectotypes.

***Agrilus ostrinus* Kerremans**

Agrilus ostrinus Kerremans, 1892a: 819–820. Lectotype ♀, MCSN, by present designation: “Carin Cheba 900–1100 m L. Fea V XII – [18]88 [p] \ Typus [p] [red ink, red border] \ ostrinus Kerr. [h] [black border] \ ostrinus Kerr. Type [Kerremans' MS] \ *Agrilus ostrinus* Kerr. typus! [h] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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 peregrinus* Kiesenwetter**

Agrilus peregrinus Kiesenwetter, 1879: 145. Lectotype ♀, ZSMC, by present designation: “Amur [h] \ Kiesenwetter [p] \ Sammlung Cl. Müller [p] \ Type von [p] *Agrilus peregrinus* Kiesw. [h] [red label] \ Holotypus [sic!] [p] *Agrilus peregrinus* Kiesenw. [h] Zool. Staatssammlg. München [red label]”. Number of syntypes unknown.

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

***Agrilus perviridis* Kerremans**

Agrilus perviridis Kerremans, 1894: 530–531. Lectotype ♂, MCSN, by present designation: “SUMATRA PANGHERANG-PISANG X. [18]90 e III. [18]91 E. Modigliani [leg.] [p] \ TYPUS [p] [red ink, red border] \ perviridis Kerrem. [h] \ perviridis Kerrem. Type [Kerremans’ MS] \ Museo Civico di Genova [p]”. Number of syntypes unknown.

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

***Agrilus piliventris* Deyrolle**

Agrilus piliventris Deyrolle, 1864: 138, 157–158. Lectotype designated by JENDEK (1998: 328).

Agrilus takedai Tôyama, 1987: 316–318, Figs 17, 33. **syn. nov.** Holotype, sex not examined, NSMT: “nr. Keningau, Sabah, Borneo 25. V. 1983 M. Takeda lgt. [h] \ HOLOTYPE [p] *Agrilus takedai* M. Tôyama, 1986 [h] [red label]”. Described from single male.

Agrilus takehiroï Tôyama, 1987: 318, Figs 18, 34. **syn. nov.** Holotype, sex not examined [male is indicated in description], NSMT: “Cameron – Highlands C. Malaya [p] III. [h] 19 [p] 86 [h] \ HOLOTYPE [p] *Agrilus takehiroï* Tôyama, 1986 [h] [red label]”. Described from 2 specimens, male and female.

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

***Agrilus pseudocyaneus* Kiesenwetter**

Agrilus pseudocyaneus Kiesenwetter, 1857: 126, 150–151. Lectotype designated by JENDEK (1995b: 172–173).

Agrilus foveola Roubal, 1919: 37–38. Holotype by monotypy ♂, SNMB: “Ca[ucasus]. b[orealis]. Teberda VI. [1]912 Roubal [leg.] [p] [yellow label] foveola mihi Roubal type [h] \ Slov. nár. múz. Kat. No. [p] 1004 [h]”. Described from single male.

Type locality: [Russia, Karachayevo-Cherkesiya], 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* Roubal not *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 [p] Pubiventris (Laferté) Oran Mars type [h] \ MUSÉUM PARIS 1952 COLL. R. OBERTHUR [p] [yellow label]”. Number of syntypes unknown.

Type locality: Nordafrika, [Algeria], Oran [34°42’ N, 0°38’ W].

Remarks. Described from Algeria: “In Nordafrika bei Oran gefunden”. Kiesenwetter attributed an authorship to Laferté with note “ined” (ineditet = 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

ignoratus Obenberger, 1924

prinadai Fisher, 1925

bakinensis Obenberger, 1935

freyi Théry, 1939

iturupicus Alexeev, 1979

Agrilus ribbei Kiesenwetter, 1879: 255. Lectotype ♀, ZSMC, by present designation: “Sibirien Amur Christoph [18]77 [p] \ Kiesenwetter [p] \ Sammlung Cl. Müller [p] \ Type von [p] *Agrilus Ribbei* Kiesw. [h] [red label] \ Holotypus [p] *Agrilus ribbei* Kiesenw. [h] Zool. Staatssammlg. München [p] [red label]”. Number of syntypes unknown.

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 cohabit, 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**

Agrilus semiaeneus Deyrolle, 1864: 137, 157. Lectotype designated by JENDEK (1998: 326).

Agrilus nagaii Tôyama, 1988: 763–764, Figs 7, 14. **syn. nov.** Holotype, sex not examined, NSMT: “Crocker Range, 16 M[iles]. NW Keningau, N. Borneo, 26. V. 1982, S. Nagai [leg.] \ HOLOTYPE [p] *Agrilus nagaii* Tôyama, 1987 [h] [red label]”. Described from single male.

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

***Agrilus senilis* Kerremans**

Correction. In the first part of the studies of *Agrilus* (JENDEK, 2000: 506) the lectotype designation of *A. senilis* Kerremans, 1914 was proposed. Due to a typographical error, the paragraph with *A. senilis* was combined with the previous 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) Caucase Typ Gory [h] \ MUSÉUM 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, North 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*, Ménétriés”.

***Agrilus shibatai* Kurosawa**

Agrilus hornianus shibatai Kurosawa, 1964: 323. Holotype ♂, NSMT: “HATSUNO [site unlocated] AMAMI IS[lands, Kagoshima prefecture, Japan]. [p] 25. V. [h] 19 [p] 60 [h] T. Shibata [leg.] [p] \ HOLOTYPE [p] *Agrilus hornianus shibatai* Y. Kurosawa, 1964 [h] [red label with black border]”. Described from eight specimens.

Agrilus hokkaidoensis Tôyama, 1985a: 45–47, Figs 17, 38. **syn. nov.** Holotype ♂, NSMT: “Horoka [site unlocated] [h] Hokkaido [Japan] [p]

25. VII. [h] 19 [p] 69 [h] H. Kawai [leg.] [p] [scratched] \ HOLOTYPE [p] *Agrilus hokkaidoensis* Tôyama, 1985 [h] [red label]”. Described from single specimen.

Remarks. *Agrilus shibatai* Kurosawa was erected to species status by AKIYAMA & OHMOMO (1997: 4, 38). The examination of holotypes of *A. shibatai* and *A. hokkaidoensis* revealed their conspecificity.

***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* Obenberger, 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**

Agrilus suginoi Tôyama, 1985a: 21–23, Figs 1, 20. Holotype ♀, NSMT: “(showed) at Nishinomiya 10. V. 1973 K. Sugino leg. [h] \ Kanpira (is. Iriomote [24°20' N, 123°50' E]) [Okinawa prefecture, Japan] K. Sugino leg. [h] \ HOLOTYPE [p] *Agrilus suginoi* Tôyama, 1985 [h] [red label]”. Described from two females.

Remarks. *Agrilus suginoi*, along with *A. adelphinus* Kerremans, is closely related to the West Palaearctic *A. sulcicollis* Lacordaire. *Agrilus suginoi* differs from *A. adelphinus* by having more convex pronotum, with more shallow lateral impressions; sharper prehumeral and by distinctly arcuate elytral apices (apices at *A. adelphinus* 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. adelphinus* is proximal part of tegmen convex.

Additional material examined.

JAPAN: Honshū Island: Fukushima Prefecture: 1 ♂, SOCI: “1998. 06. 06., Yatakezawa, Tateiwa [37°05' N, 139°31' E], Fukushima pref., S. Ohmomo leg.”; 2 ♂♂, SOCI: “Akané Rindô, Haramomachi City [37°37' N, 140°57' E], Fukushima

Pref., 23. VI. 1980, S. Ohmomo leg.". Tochigi Prefecture: 1 ♂, SOCI: "1994. 05. 22., Kido, Motegi [36°31' N, 140°11' E], Tochigi Pref. S. Ohmomo leg."; 1 ♂, SOCI: "1996. 06. 21., Teraku, Kuroiso [36°58' N, 140°03' E], Tochigi Pref. S. Ohmomo leg.". Ibaraki Prefecture: 1 ♂, SOCI: "2001. 04. 29., Mt. Tsukuba [36°13' N, 140°06' E], Makabe, Ibaraki, S. Ohmomo leg."; 1 ♂, SOCI: "1989. 5. 5., Migimomi, Tsuchiura [36°04' N, 140°12' E], Ibaraki Pref. S. Ohmomo leg."; 1 ♂, SOCI: "1988. 6. 11, Mt. Hanazono [36°52' N, 140°37' E], Kita-Ibaraki, Ibaraki, K. Ichige leg.". Kyūshū island: Ōita Prefecture: 2 ♂♂, EJCB: "Japan, Kyushu, Ōita Pref., Kujū [33°01' N, 131°18' E] Mts. Kurodake, 25-26.v.1991, Ryō Noda leg."; 2 ♂♂, SOCI: "Mt. Kurodake, Mts. Kujyusan [33°04' N, 131°15' E], Ōita Pref., 1. VI. 1991, S. Ohmomo leg."; 1 ♂, SOCI: "2001. 6 .3., Tsukahara H. S., Yufuin [33°15' N, 131°21' E], Ōita Pref. Y. Tsutsumiuchi leg.".

Distribution. Japan: Fukushima, Tochigi, Ibaraki, Ōita and Okinawa Prefectures.

Agrilus suturaalba Deyrolle

Agrilus suturaalba Deyrolle, 1864: 139, 168–169. Lectotype designated by JENDEK (1998).

Agrilus abreuvi Fisher, 1930: 70–72. **syn. nov.** Holotype by monotypy, sex not examined [female is indicated in description], USNM: "N. BORNEO BETTOTAN NR. SANDAKAN [p] Aug. 21st [h] 1927 [p]; [underside] C. B. K[loss]. & H. M. P[endlebury]. [leg.] F. M. S. Museums. [p] [pink label] \ TypeNo [p] 57430 [h] USNM [p] [red label] \ *Agrilus abreuvi* Fisher [p]". Described from a single female.

Type locality: [Malaysia, Sabah] North Borneo, Near Sandakan, Bettotan [Betotan, Sungai (river, creek), 5°47' N, 117°52' E].

Remarks. The comparison of lectotype of *A. suturaalba* with holotype of *A. abreuvi* revealed their conspecificity.

Agrilus taveuniensis Théry

Agrilus taveuniensis Théry, 1934: 145–148. Lectotype ♀, BMNH, by present designation: "Type [p] [round label with red border] \ 2087 [or 1?]. 24 [h] \ Taveuni, Fiji, Silvester Evans [leg.] [p] 18. X. 1924 [h] \ Press. by Imp. Inst. Ent. Brit. Mus. 1932-412. [p] \ Exemplair dessine [p] \ *Agrilus* sp. [h] det. K. G. Blair [p] \ *Agrilus taveuniensis* Théry [h] TYPE [p] [red label]". Number of syntypes unknown.

Type locality: Fiji [islands], Taveuni [island, 16°50' S, 179°56' W].

Agrilus transversus Kerremans

Agrilus transversus Kerremans, 1894: 531–532. Lectotype ♂, MCSN, by present designation: "SUMATRA SI-RAMBÉ XII. [18]90 – III. [18]91 E. MODIGLIANI [leg.] [p] \ TYPUS [p] [red ink, red label] \ transversus Kerrem. [h] \ transversus Kerrem. Type [Kerremans' MS] \ Museo Civico di Genova [p]". Number of syntypes unknown.

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

Agrilus validus Deyrolle, 1864: 144, 192–193. Lectotype designated by JENDEK (1998: 332).

Agrilus nobuyukii Tōyama, 1987: 310–311, Figs 11, 27. **syn. nov.** Holotype, sex not examined [female is indicated], NSMT: "Tohjangbu [= Tojangbu, 2°56' S, 120°06' E], 400–1000 m Nr. Palopo, Sul[awesi]. Sel[atan]. INDONESIA 12th V. 1985 N. Kobayashi leg. \ HOLOTYPE [p] *Agrilus nobuyukii* Tōyama, 1986 [h] [red label]". Described from single female.

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

Agrilus villosotriatus Thomson

Agrilus villosotriatus Thomson, 1879: 72. Lectotype, male, MNHN, by present designation: "Th[omson]. Type [p] [black border] \ India Orien. Mhora [h] [yellow label] \ Villosotriatus Reiche M. ss. Th. Type Ap. I. 72 [h] [Thomson's MS] \ Ex Musaeo James Thomson [p] \ Kerremans Vedit 1892 [p] \ collectio Oberthür [p]". Number of syntypes unknown.

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

Agrilus villosotriatus Kerremans, 1892b: 214–215.

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. villosotriatus* Kerremans is conspecific with *A. villosotriatus* 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. villosotriatus* Thomson.

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

Remarks. Described along with *A. villosotriatus* Kerremans as his variety: "Var. B. carmineus".

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.

syn. nov.

Remarks. Proposed as a replacement name for *A. villosotriatus* Kerremans, 1892 not *A. villosotriatus* Thomson, 1879.

Agrilus binominatus var. *carmineicolor* Obenberger, 1936b: 91. **unavailable name**

Remarks. Proposed as a replacement name for *A. binominatus* var. *carmineus* Kerremans, 1892 (unavailable name) not *A. carmineus* Dugès, 1891.

Agrilus zigzag Marseul

Agrilus zigzag Marseul, 1866: 439, 478–479.

Agrilus clermontianus Roubal, 1925: 71–72.

syn. nov. Holotype by monotypy ♂, SNMB: “Sarepta v. Bodemeyer [p] \ Agr. Clermontianus m. type [h] \ Slov. nár. múz. Kat. No. [p] 1003 [h]”. Described from single male.

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. clermontianus* is judged from the generally accepted concept of *A. zigzag*.

Acknowledgements

I would like to thank the curators of the collections for allowing me the privilege of examining material in their care. I particularly thank R. POGGI (MCSN) who provided me with help in the location of historical localities of L. FEA in Myanmar. My sincere thanks are due to S. BÍLÝ (NMPC) for critical review of the manuscript and C. L. BELLAMY (Sacramento, California, USA) for the linguistic revision. This work was partially supported by Grant No. 2/7176/20 from the Grant Agency of Ministry of Education and Slovak Academy of Sciences.

References

- ABEILLE DE PERRIN, E. 1891. Contribution aux Buprestides paléarctiques (Coleoptera). Rev. Ent. **10**: 257–288.
- ABEILLE DE PERRIN, E. 1897. Notes sur les Buprestides paléarctiques (Suite). Rev. Ent. **16**: 1–33.
- ABEILLE DE PERRIN, E. 1900. Diagnoses de Coléoptères présumés nouveaux. Bulletin de l'Académie de Marseille **1900**: 3–23.
- AKIYAMA, K. & OHMOMO, S. 1997. A check list of the Japanese Buprestidae. Gekkan-Mushi, Suppl. 1, 67 pp.
- BOURGOIN, A. 1922. Description d'un *Heterosoma* nouveau de Madagascar et diagnoses préliminaires de quatre *Agrilus* nouveaux de l'Indo-Chine française (Col.). Bull. Soc. Ent. France **1922**: 167–169.
- DANIEL, K. & DANIEL, J. 1898. Coleopteren-studien. II. München, Kgl. Hof- und Universitäts-Buchdruckerei von Dr. C. Wolf & Sohn, 88 pp.
- DESCARPENTRIES, A. & VILLIERS, A. 1963a. Catalogue raisonné des Buprestidae d'Indochine. I. Agrilini, genre *Agrilus* (1re partie). Rev. franç. Ent. **30** (1): 49–62.
- DESCARPENTRIES, A. & VILLIERS, A. 1963b. Catalogue raisonné des Buprestidae d'Indochine. II. Agrilini, genre *Agrilus* (2e partie). Rev. franç. Ent. **30** (2): 104–119.
- DESCARPENTRIES, A. & VILLIERS, A. 1963c. Catalogue raisonné des Buprestidae d'Indochine. III. Agrilini, genre *Agrilus* (troisième partie). Bull. Inst. roy. Sci. natur. Belg. **39** (11): 1–23.
- DESCARPENTRIES, A. & VILLIERS, A. 1967. Catalogue raisonné des Buprestidae d'Indochine. XIV. Coraebini (4e partie). Ann. Soc. ent. France (N. S.) **3** (4): 989–1008.
- DEYROLLE, H. 1864. Description des Buprestides de la Malaisie recueillis par M. Wallace. Ann. Soc. ent. Belg. **8**: 1–272, 305–312.
- FISHER, W. S. 1930. New Bornean Buprestidae. Journal of the Federated Malay States Museums **16**: 58–97.
- GORY, H. L. & LAPORTE DE CASTELNAU, F. L. 1837. Histoire naturelle et iconographie des insectes coléoptères, publiée par monographies séparées. Suite aux buprestides. Tome II, Livraisons 12–16, Paris, P. Duménil, genera paged separately, [genera: *Colobogaster*, *Chrysobothris*, *Agrilus*].
- ICZN (International Commission on Zoological Nomenclature) 1999: International Code of Zoological Nomenclature. Fourth Edition, adopted by the International Union of Biological Sciences. London, International Trust for Zoological Nomenclature, xxix & 306 pp.
- IGA, M. 1955. Buprestidae, pp. 73–82. In: NAKANE, T. (ed.) Coloured illustrations of the insects of Japan. Coleoptera. Enlarged and revised edition. Osaka, Hoikusha, 274 pp. [In Japanese with English subtitle].
- JENDEK, E. 1994. Studies in the East Palaearctic species of the genus *Agrilus* Dahl, 1823 (Coleoptera: Buprestidae). Part I. Entomological Problems **25**: 9–24.

- JENDEK, E. 1995a. Studies in the East Palaearctic species of the genus *Agrilus* (Coleoptera: Buprestidae). Part II. Entomological Problems **26**: 137–150.
- JENDEK, E. 1995b. Taxonomical notes on the *Agrilus betuleti* species group with description of two new species (Coleoptera: Buprestidae). Koleopt. Rdsch. **65**: 171–178.
- JENDEK, E. 1998. Lectotype designations in the Palaearctic and Oriental *Agrilus* species (Coleoptera: Buprestidae) of the Oberthür's collection in the Muséum national d'Histoire naturelle, Paris. Acta Soc. zool. Bohem. **62**: 315–333.
- JENDEK, E. 2000. Studies in the Palaearctic and Oriental *Agrilus* (Coleoptera, Buprestidae). I. Biologia, Bratislava **55**: 501–508.
- JENDEK, E. 2001. Studies in the Palaearctic and Oriental *Agrilus* (Coleoptera, Buprestidae). II. Biologia, Bratislava **56**: 171–174.
- KERREMANS, C. 1892a. Viaggio di Leonardo Fea in Birmania e regioni vicine. XLIX. Buprestides. Annali del Museo Civico di Storia Naturale di Genova Serie 2, **12 (32)**: 809–832.
- KERREMANS, C. 1892b. Coléoptères du Bengale occidental. 19me mémoire. Buprestides de l'Inde. Ann. Soc. ent. Belg. **36**: 171–226.
- KERREMANS, C. 1893. Additions aux Buprestides des Indes Orientales. Ann. Soc. ent. Belg. **37**: 326–357.
- KERREMANS, C. 1894. Énumération des Buprestides recueillies par Mr. le Dr. E. Modigliani a Sumatra dans la région du lac Toba. Annali del Museo Civico di Storia Naturale di Genova, Ser. 2, **14 (34)**: 526–541.
- KERREMANS, C. 1896. Énumération des Buprestides recueillies par M. le Docteur E. Modigliani a Sumatra et dans les îles Mentawai. Annali del Museo Civico di Storia Naturale di Genova, Ser. 2, **16 (36)**: 361–371.
- KERREMANS, C. 1900a. Contribution à l'étude de la faune entomologique de Sumatra (Côte ouest – Vice-résidence de Painan). Chasses de M. J.-L. Weyers VI. Buprestides. Mém. Soc. ent. Belg. **7**: 1–60.
- KERREMANS, C. 1900b. Buprestides nouveaux et remarques synonymiques. Ann. Soc. ent. Belg. **44**: 282–351.
- KERREMANS, C. 1912a. A contribution to the study of the insect fauna of Borneo. A list of the Bornean Buprestidae (Part II.). Sarawak Museum Journal **1 (2)**: 68–82.
- KERREMANS, C. 1912b. H. Sauter's Formosa-Ausbeute. Buprestiden. Arch. Naturgesch. **78**, Abt. A, Heft **7**: 203–209.
- KIESENWETTER, H. von, 1857. Buprestidae, Eucnemidae, Bogen 1–11, [Part of: Kiesenwetter H. von 1857–1863: Vierter Band, Buprestidae-Lymexyliidae, Nachträge, Zusätze und Berichtigungen, VI & 746 pp.], pp. 1–176. In: ERICHSON, W. F., SCHAUM, H., KRAATZ, G. & KIESENWETTER, H. von (eds) Naturgeschichte der Insecten Deutschlands. Erste Abtheilung. Coleoptera. 4 Bände. Nicolai, Berlin.
- KIESENWETTER, H. von, 1879. Neue Amur-Käfer. Dtsch. ent. Z. **23 (1)**: 145–146.
- KUROSAWA, Y. 1963. Buprestidae. 147–156 [Buprestidae], 167–168, 187–188. In: NAKANE, T. (ed), Iconographia Insectorum Japonicorum. Colore naturali edita. Vol. 2. Tokyo, Hokuryu-kan. [In Japanese].
- KUROSAWA, Y. 1964. Descriptions of several new species and subspecies of the genus *Agrilus* Curtis from Amami-Oshima of the Loo-Choo Archipelago. Kontyû, Tokyo **32 (2)**: 323–334.
- KUROSAWA, Y. 1974a. Introduction to Japanese Buprestidae (10). Coleopterists' News, Tokyo **17/18**: 1–4. [In Japanese].
- KUROSAWA, Y. 1974b. Introduction to Japanese Buprestidae (12). Coleopterists' News, Tokyo **23/24**: 1–4. [In Japanese].
- KUROSAWA, Y. 1975. [Introduction to Japanese Buprestidae (13)]. Coleopterists' News, Tokyo **25/26**: 1–2. [In Japanese].
- MARSEUL, S. A. DE 1866. Monographie des buprestides d'Europe, du nord de l'Afrique et de l'Asie. L'Abeille, Mémoires d'Entomologie **2**: 397–540.
- OBNENBERGER, J. 1935. Synonymia Agrilorum (Col. Bupr.) II. Čas. českoslov. Společ. ent. **32**: 121.
- OBNENBERGER, J. 1936a. Buprestidae V., pp. 935–1246. In: JUNK, W. & SCHENKLING, S. (eds) Coleopterorum Catalogus, Volumen XIII, Pars 152, Gravenhage, Verlag für Naturwissenschaften, W. Junk, 311 pp.
- OBNENBERGER, J. 1936b. Synonymia Agrilorum (Col. Bupr.) II. Čas. českoslov. Společ. ent. **33**: 91–92.
- OBNENBERGER, J. 1937. Synonymia Agrilorum IV. (Palaearctica) (Bupr.). Čas. českoslov. Společ. ent. **34**: 58.
- OBNENBERGER, J. 1960. Notes et études buprestologiques I. (Coleoptera). Buprestodologické studie I. Acta Univ. Carol., Biol. **2**: 125–153.
- ROUBAL, J. 1919. Sechs neue palaearktische Coleopteren. Arch. Naturgesch. (1917), Abt. A, **83 (7)**: 36–39.
- ROUBAL, J. 1925. *Agrilus clermontianus* n. m. Čas. českoslov. Společ. ent. **11**: 71–72.
- SAUNDERS, E. 1866. Catalogue of Buprestidae collected by the late M. Mouhot, in Siam, & c., with descriptions of new species. Trans. Ent. Soc. London **5 (3)**: 297–322.
- SEMENOV-TIAN-SHANSKIĬ, A. 1903. Analecta coleopterologica. III. Rev. Russ. Ent. **3**: 169–173.
- SOLSKY, S. 1875. Matériaux pour l'entomologie des provinces asiatiques de la Russie. Tr. Russ. Ent. Obshch. **11**: 253–299.
- THÉRY, A. 1934. Études sur les Buprestides (quatrième partie). Bull. Ann. Soc. ent. Belg. **74**: 131–151.
- THÉRY, A. 1936. Notes synonymiques sur les Buprestides (Col.). Bull. Soc. ent. France **41 (4)**: 59–61.

- THOMSON, J. 1879. *Typi buprestidarum musaei Thomsoniani*. Appendix 1a. Paris, E. Deyrolle, 87 pp.
- TÔYAMA, M. 1985a. The buprestid beetles of the subfamily Agrilinae from Japan (Coleoptera, Buprestidae). *Elytra* **13** (1): 19–47.
- TÔYAMA, M. 1985b. Agrilinae, pp. 13–32. In: KUROSAWA, Y., HISAMATSU, S., & SASAJI, H. (eds) *Coloured illustrations of the Coleoptera of Japan*. Vol. III. Osaka, Hoikusha Publishing, first edition, 500 pp. [In Japanese].
- TÔYAMA, M. 1987. New agriline buprestid beetles (Coleoptera, Buprestidae) from Asia (I). *Kontyû*, Tokyo **55** (2): 298–323.
- TÔYAMA, M. 1988. New agriline buprestid beetles (Coleoptera, Buprestidae) from Asia (II). *Kontyû*, Tokyo **56** (4): 752–765.
- TÔYAMA, M. 1989. Buprestidae, pp. 320–327. In: SATO, M. (ed.) *A check list of Japanese insects*. I. Fukuoka, Kyushu Univ. Express, 1967 pp.

Received March 5, 2002
Accepted November 28, 2002