ACTA ENTOMOLOGICA
MUSEI NATIONALIS PRAGAE
ISSN 1804-6487 (online) – 0374-1036 (print)

2020
60(2): 391–396
doi: 10.37520/aemnp.2020.23
www.aemnp.eu

SHORT COMMUNICATION

Binhon atrum Pic – a junior synonym of *Plastocerus thoracicus*, with nomenclatural notes on *Plastocerus* (Coleoptera: Elateridae: Plastocerinae)

Jiří HÁJEK[1)], Michael A. IVIE[2)] & John F. LAWRENCE[3)]

[1)] Department of Entomology, National Museum, Cirkusová 1740, CZ-19300 Praha 9 – Horní Počernice, Czech Republic; e-mail: jiri_hajek@nm.cz
[2)] Montana Entomology Collection, Marsh Labs, Room 50, Montana State University, 1911 W. 6 Lincoln Street, Bozeman, MT 59717, USA; e-mail: mivie@montana.edu
[3)] Australian National Insect Collection, CSIRO, GPO 1700, Canberra, ACT and 61 Glenbar Road, The Palms, QLD, Australia; e-mail: coleop@bigpond.com

Accepted:
9th June 2020

Published online:
17th June 2020

Abstract. *Binhon atrum* Pic, 1922, an enigmatic genus and species described in the family Dascillidae based on a single female from Vietnam, is illustrated, diagnosed and formally synonymised with *Plastocerus thoracicus* Fleutiaux, 1918 (Elateridae: Plastocerinae). The species is recorded from China (Guangxi, Yunnan) for the first time. The taxonomic history of the genus *Plastocerus* Schaum, 1852 (not *Plastocerus* LeConte, 1853) with emphasis on its synonyms, is briefly summarised.

Key words. Coleoptera, Dascillidae, Elateridae, *Binhon*, *Plastocerus*, new synonym, new records, China, Vietnam, Oriental Region

Zoobank: http://zoobank.org/urn:lsid:zoobank.org:pub:AD67D5CD-E5B0-4CC6-8CA1-D11D2E6B6DDD

Introduction

Maurice Pic (1866–1957), an eminent French coleopterist of the turn of 19th and 20th Centuries, described more than 20,000 species and varieties as well as several hundred genera across many families of Coleoptera (Villiers 1958, Cambefort 2006). Like several entomologists in the 19th Century, Pic described taxa from almost all beetle groups from all parts of the world. Generally speaking, he described anything which did not have a name in his (rather chaotically organized) reference collection, without much effort to check for names that already existed elsewhere (Cambefort 2006). Consequently, he produced a great number of synonyms, including repeated descriptions of the same taxon. Among his contemporaries, Pic was already infamous for very short and uninformative descriptions, insufficient for recognition of the taxon concerned. A large proportion of these descriptions were published in his three private journals: *L'Échange, Révue Linnéenne* (1885–1956, 543 issues), *Mélanges Exotico-Entomologiques* (1911–1939, 71 issues), and *Opuscula Martialis* (1940–1944, 13 issues).

While the biggest problem in Pic's species-group taxa are the varieties – largely overlooked by other entomologists – but representing available (and in many case also valid) names (e.g. Hájek 2011, Bezděk & Regalin 2015), another problem is that his new genera sometimes lack explicit family assignment, which has led to misplacement or even omission of many taxa by subsequent entomologists. This problem has only been addressed recently, with the study of authentic material in Pic's collection (see, e.g., Ivie 2002, Pollock 2005, Ivie & Pollock 2012). One of the enigmatic genera described by Pic is the monotypic *Binhon* Pic, 1922, with the species *Binhon atrum* Pic, 1922 from the locality Hoa Binh in northern Vietnam (Pic 1922). The genus and species were described based on a single female, and placed in the family Dascillidae, but close to the Neotropical genus *Aploglossa* Guérin-Méneville, 1849 (currently Ptilodactylidae: Aploglossinae). Although Pic (1926) added subsequent information about the males of *Binhon*, neither the five-line long Latin description, nor the supplementary information, provide sufficient infor-

mation to allow recognition of the beetle. Therefore, it is not surprising that *Binhon* has never been mentioned in any entomological literature since 1926, either within Dascillidae (cf. Jin et al. 2013), or Ptilodactylidae (cf. Stribling 1986). Only the finding of the type specimen of *Binhon* in Pic's collection of Dascillidae in the Muséum national d'Histoire naturelle, Paris, enabled us to clarify the identity of this enigmatic beetle and propose the following synonymy with *Plastocerus* Schaum, 1852. As the classification of *Plastocerus* Schaum, 1852 (not *Plastocerus* LeConte, 1853) is rather complicated, and several of its synonymies are missing from the recent literature (cf. Bocák 2007), the taxonomic history of the genus *Plastocerus* Schaum is summarised.

Materials and methods

Habitus photographs were taken using a Canon EOS 550D digital camera with an attached Canon MP-E65mm f/2.8 1–5× macro lens, as numerous separate images at different focal planes and afterwards combined using Helicon Focus 6.3.0 software.

See Branham (2010) and Bocak et al. (2018) for morphological terminology and detailed redescription of *Plastocerus*.

The material mentioned in this study is deposited in the following collections:

ANIC Australian National Insect Collection, CSIRO Australian National Research Collections, Canberra, ACT, Australia;
MNHN Muséum national d'Histoire naturelle, Paris, France;
NHMB Naturhistorisches Museum Basel, Switzerland;
NMPC National Museum, Prague, Czech Republic.

Systematics

Plastocerus Schaum, 1852

Plastocerus Schaum, 1852: 49. Type species: *Callirhipis angulosus* Germar, 1844 (by monotypy).

Ceroplastus Heyden, 1883 in Heyden et al. (1883: 111), as an unnecessary replacement name for *Plastocerus* Schaum, 1852 [not *Plastocerus* LeConte, 1853].

Pseudophyllocerus Reitter, 1896: 234. Type species: *Pseudophyllocerus atricolor* Reitter, 1896 (by monotypy); synonymized by Schwarz (1897: 64).

Cladocerus Schwarz, 1902: 200, as an unnecessary replacement name for '*Plastocerus* Cand.' [= *Plastocerus* sensu Candèze (1863); i.e. *Plastocerus* Schaum, not *Plastocerus* LeConte].

Binhon Pic, 1922: 29. Type species: *Binhon atrum* Pic, 1922 (by monotypy); **syn. nov.**

Comments on the classification. The genus *Plastocerus* was proposed by Schaum (1852) in his '*Catalogus Coleopterorum Europae*' for *Callirhipis angulosus* Germar, 1824, an enigmatic elaterid species from the Eastern Mediterranean (Greece, Turkey, Syria and Israel – see Platia & Németh 2011). Although Schaum's act fully conforms with the conditions of ICZN (1999: Article 12.2.5), many subsequent authors considered the genus a *nomen nudum* and thus formally unavailable. Most importantly of the authors who thought Schaum's name invalid, LeConte (1853) validated a new version of the name *Plastocerus*, following an identification by Schaum of a newly described Californian species, *Plastocerus schaumii* LeConte, 1853, which led to a different, broader concept of the genus for many years. Lacordaire (1857) and Candèze (1863) correctly attributed *Plastocerus* to Schaum, but accepted LeConte's broad definition to include both the Palaearctic and Nearctic species. Subsequently, apparently considering the Nearctic species as the 'true' *Plastocerus*, Heyden (1883) proposed a new genus name *Ceroplastus* for the Palaearctic taxon; unfortunately, as he did it again only in a catalogue and without description, several authors considered the name as unavailable. These authors (e.g. Hyslop 1921) incorrectly attributed the name *Ceroplastus* to Seidlitz (1888a,b), who gave a redescription of the taxon in the generic part of both his '*Fauna Baltica*' and '*Fauna Transsylvanica*'.

The female of *Plastocerus angulosus* was described by Reitter (1896) as a new genus and species: *Pseudophyllocerus atricolor* Reitter, 1896; but its synonymy was soon recognized by Schwarz (1897). Schwarz (1902) was the first author to explicitly state that the Palaearctic and Nearctic *Plastocerus* species were not congeneric. He attributed the Palaearctic taxon name to Candèze (1863) and thus incorrectly considered it junior to LeConte's name, so he proposed another replacement name, *Cladocerus* Schwarz, 1902. Schwarz's name was immediately synonymised by Heyden (1902), who pointed out that his name *Ceroplastus* was senior – although he mentioned the later '*Catalogus coleopterorum Europae, Caucasi et Armeniae rossicae*' (Heyden et al. 1891), and not the original '*Catalogus coleopterorum Europae et Caucasi*' (Heyden et al. 1883). In addition, Heyden (1902) noted that *Cladocerus* Schwarz is a junior homonym of *Cladocerus* Kirsch, 1865: 68 (Coleoptera: Lycidae) [in fact, Kirsch (1865) described *Cladoceras*; *Cladocerus* is its unjustified emendation by Gemminger & Harold (1869: 1633)]. For the next 70 years, *Plastocerus* was considered to be an American genus and *Ceroplastus* was the genus occurring in the Old World, until Crowson (1972) corrected the usage: recognizing *Plastocerus* Schaum, with *Ceroplastus* as its junior synonym, for the Mediterranean species, and replaced *Plastocerus* LeConte with its junior synonym *Octinodes* Candèze, 1863.

Schaum (1852) originally placed *Plastocerus* in the family Cebrionidae. However, Lacordaire (1857) included *Plastocerus* in the family Elateridae, where, with the single sojourn to the Rhipiceridae in Hyslop (1921), it remained until Crowson (1972) placed it in its own family, Plastoceridae. Quite recently, Bocak et al. (2018) and Kusy et al. (2018) revised the taxonomic placement of *Plastocerus* using molecular analysis and downgraded its status to the subfamily Plastocerinae, back in the family Elateridae. However, the family group name Plastoceridae Crowson, 1972 is a junior homonym of Plastocerini LeConte, 1861. Although Bouchard et al. (2011) called for a petition to the International Commission on Zoological Nomenclature to suppress the LeConte name, no such petition is listed on the ICZN website, so the name is still officially invalid (https://www.iczn.org/cases/all-cases/).

Plastocerus thoracicus Fleutiaux, 1918

(Figs 1–10)

Plastocerus thoracicus Fleutiaux, 1918: 236 (original description). Type locality: 'Environs de Tuyen-Quan' [Vietnam, Tuyên Quang Province, Tuyên Quang city, ca. 21°49′N 105°13′E].

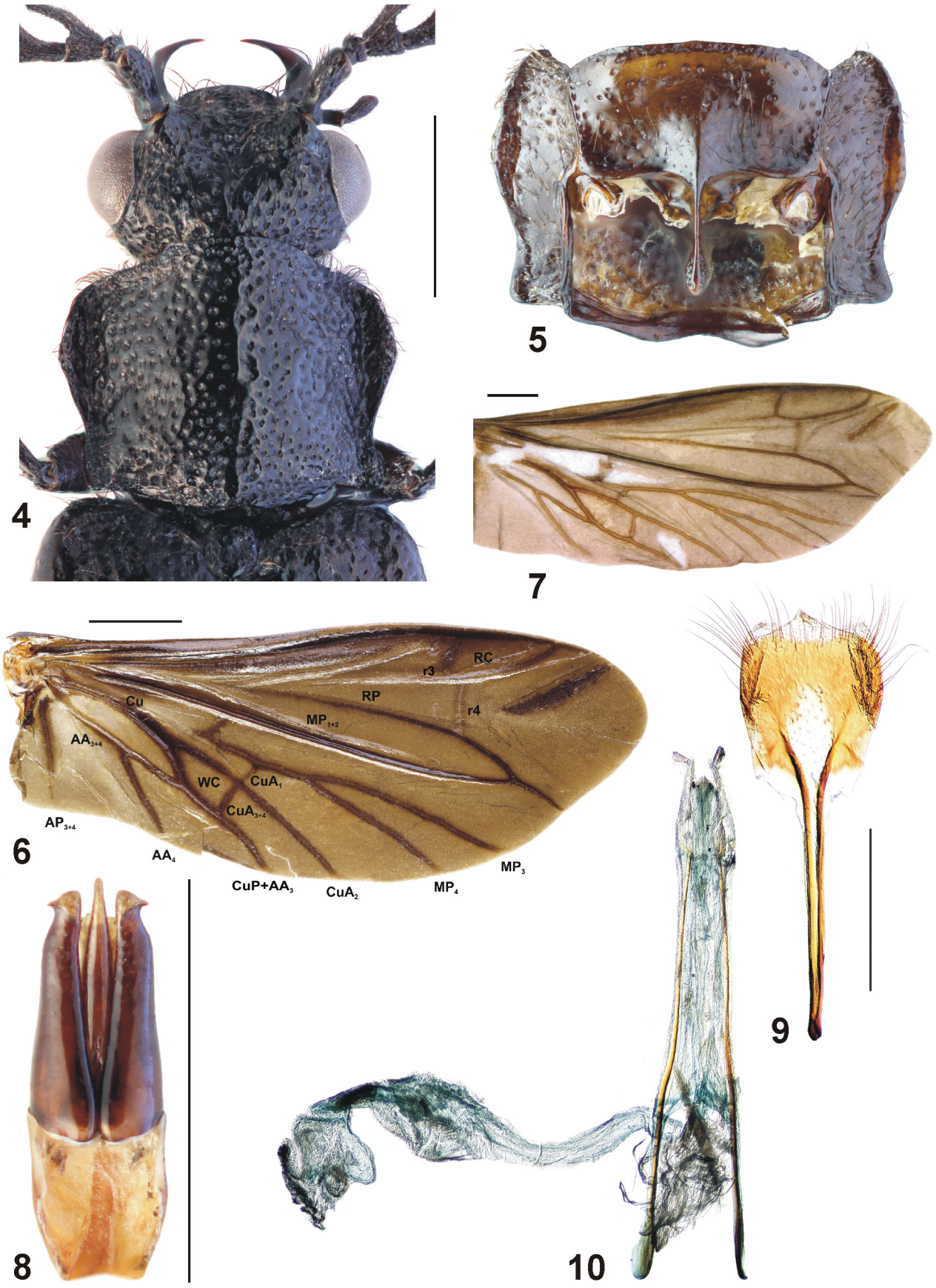
Binhon atrum Pic, 1922: 29 (original description). Type locality: Not specified in the description; 'Tonkin, Hoa Binh' [Vietnam, Hoa Binh Province, Hòa Bình, ca. 20°48′N 105°20′E] based on labels under the type specimen); **syn. nov.**

Type material. *Plastocerus thoracicus*: Holotype: ♂, not located in MNHN (A. Mantilleri, pers. comm. 2019). *Binhon atrum*: Holotype: ♀ (Figs 1, 3), labelled: 'Hoa Binh / Tonkin [hw Pic] // type [hw Pic] // TYPE [p, red label] // Binhon / ng. / atrum Pic [hw Pic]' (MNHN).

Additional material studied. CHINA: Guangxi: 1 ♂, 'China: Kwangsi [Guangxi], Hsiangshien 1935, G. Liu.' (ANIC; completely dissected); 1 ♀. **Yunnan:** 'China, Prov. / Yunnan,Gbg. / b.Mengtze. [= mountains near Mengzi]' (NHMB). **VIETNAM:** 8 ♂♂, 'Hoa / Binh [hw Pic] // ♂ de / Binhon [hw Pic]' (MNHN); 1 ♂, 'Vietnam N / Tam dao 26.5.-3.6.1986 / Vinh phu prov. / Strnad Jan lgt. [p]' (NMPC).

Diagnosis. Body elongate; total length: ♂♂ 7–9 mm, ♀♀ 10–12 mm. Colouration pitchy brownish-black; surface shiny with sparse greyish setation (Figs 1, 3). Head coarsely and irregularly punctured, distance between punctures slightly greater than puncture diameter in depression between eyes, but much less than puncture diameter in other parts of head;

Figs 1–3. *Plastocerus thoracicus* Fleutiaux, 1918. 1 – female holotype of *Binhon atrum* Pic, 1922; 2 – labels of the type specimen; 3 – males of *Binhon* (Vietnam, Hoa Binh).



Figs 4–10. *Plastocerus thoracicus* Fleutiaux, 1918. 4 – detail of male head and pronotum (Vietnam, Tam Dao); 5 – prosternum (China, Yunnan); 6 – metathoracic wing (Vietnam, Tam Dao); 7 – metathoracic wing (China, Yunnan); 8 – aedeagus (Vietnam, Tam Dao); 9 – female abdominal sternite VIII (China, Yunnan); 10 – ovipositor (China, Yunnan). Scale bars 1 mm.

eyes large, hemisphaerical; antennae with 11 antennomeres: scape large, pedicel ring-shaped, antennomeres 3–10 elongate with distinct rami, antennomere 11 long and slender; male with antennomeres 3–11 increasing in length (length ratios as follows: 4.0–1.0–2.0–3.0–3.3–3.5–3.9–4.4–4.5–5.0–12.0), rami more than twice as long as length of respective antennomere; female with antennomere 3 longer than antennomeres 4–11 which are of same length (length ratios as follows: 3.5–1.0–2.7–2.3–2.3–2.3–2.3–2.3–2.3–2.3–2.3), rami of similar length to length of respective antennomere; mandibles slender, sickle-shaped, without additional teeth. Pronotum transverse, widest at anterior third; sides distinctly sinuate and explanate, posterior angles weakly produced; posterior edge with narrow median incision; disc convex, entire surface irregularly punctate, punctures finer and sparser medially on disc, becoming coarser and denser laterally (Fig. 4). Prosternum transverse; prosternal process slender, apically slightly broadened (Fig. 5); promesothoracic interlocking mechanism weakly developed. Elytra slightly broadened in apical fourth of its length, then attenuated to rounded apex; lateral margin visible except in anterior third; surface of elytra with more or less serial, irregular shallow depressions; punctation consisting of fine setigerous punctures placed both in depressions and on raised surface between them, punctures often clustered and confluent in depression, but sparse on other surfaces with distances between punctures much greater than puncture diameter. Metathoracic wing with venation as in Fig. 6 (female from China displaying remarkable aberration in one wing with bifurcation of vein MP_4, see Fig. 7; the other wing conforms with the male illustration). All legs slender; tarsi longer than tibiae, tarsomeres 1–4 decreasing in length, tarsomere 5 longest; claws simple. Male with seven ventrites (sternites III–IX), female with six ventrites; however, exposition of apical ventrite varying in both sexes. Male genitalia: aedeagus trilobate, penis narrowly acute at apex, parameres hooked subapically (Fig. 8). Female genitalia: female abdominal sternite VIII as in Fig. 9; ovipositor long, slender, barely sclerotized; paraprocts about 4.5 times as long as gonocoxites, gonostyli present (Fig. 10).

The two species of *Plastocerus* are similar morphologically, but differ in body colouration (uniformly blackish in *P. thoracicus*; ochreous elytra with distinctly darker head and pronotum in *P. angulosus*), shape of pronotum (widest anteriorly, with explanate sides, weakly produced posterior angles and posterior median incision in *P. thoracicus*; widest posteriorly, with straight, converging, non-explanate sides, strongly produced posterior angles and weak posterior emargination in *P. angulosus*), and differences in male genitalia (apex of penis subacute with finely rounded tip, parameres broad with ventral side almost straight, apex of paramere broadly obtuse in *P. thoracicus*; apex of penis narrowly acute, laterally somewhat compressed, parameres slender with ventral side sinuate, apex of paramere narrowly obtuse in *P. angulosus*).

Variability. Both the Vietnamese and Chinese specimens show slight variability in the shape of the explanate lateral part of pronotum, and in the punctation of the dorsal surface. However, with the limited material available, we consider the differences as intraspecific variability.

Comments to classification. Fleutiaux (1918) described *Plastocerus thoracicus* based on a single male from 'Tonkin' (northern Vietnam), without any mention of its relationships with either the Mediterranean or American taxa. However, Fleutiaux (1940) mentioned the species in combination with *Ceroplastus,* linking it with the Mediterranean *Plastocerus angulosus*. The species is well characterised by its blackish colouration and especially the explanate medial parts of the sides of pronotum (cf. Figs 1 and 3). Unfortunately, the type specimen could not be located in the collection of MNHN (A. Mantilleri, pers. comm. 2019) thus the direct comparison of both holotypes is not possible. Nevertheless, as *Binhon atrum* fits completely with current concept of *Plastocerus* Schaum and to the description of *P. thoracicus*, and no other *Plastocerus* species is known from North Vietnam or neighbouring countries, there is little doubt that *Plastocerus thoracicus* and *Binhon atrum* are conspecific. Therefore, we establish the following new synonymies: *Plastocerus* Schaum, 1852 = *Binhon* Pic, 1922, **syn. nov.**, and *Plastocerus thoracicus* Fleutiaux, 1918 = *Binhon atrum* Pic, 1922, **syn. nov.**

Distribution. *Plastocerus thoracicus* is so far known only from northern Vietnam (provinces of Hoa Binh, Tuyên Quang and Vính Phúc), and here it is recorded for the first time from southern China (Yunnan and Guangxi).

Acknowledgements

JH is obliged to Mrs. Azadeh Taghavian and Dr. Antoine Mantilleri (both MNHN) for their kind assistance during his visit to MNHN in November 2018. MAI thanks the late Michel Brancucci for the loan of the NHMB specimen. Special thanks are due to Maxwell V. L. Barclay (Natural History Museum, London, UK), Paul J. Johnson (South Dakota State University, Brookings, SD, USA), Robin Kundrata (Palacký University, Olomouc, Czech Republic) and Alexander S. Prosvirov (Lomonosov Moscow State University, Moscow, Russia) for valuable comments on the manuscript. This work was supported in part by the Ministry of Culture of the Czech Republic (DKRVO 2019–2023/5.I.b, National Museum, 00023272). This is a contribution of the Montana Agriculture Experiment Station.

References

BEZDĚK J. & REGALIN R. 2015: Identity of species-group taxa of the Western Palaearctic Clytrini (Coleoptera: Chrysomelidae) described by Maurice Pic and Louis Kocher. *Acta Entomologica Musei Nationalis Pragae* **55(Supplementum)**: 1–114.

BOCÁK L. 2007: Family Plastoceridae Crowson, 1972. P. 209. In: LÖBL I. & SMETANA A. (eds): *Catalogue of Palaearctic Coleoptera. Volume 4. Elateroidea – Derodontoidea – Bostrichoidea – Lymexyloidea – Cleroidea – Cucujoidea.* Apollo Books, Stenstrup, 935 pp.

BOCAK L., MOTYKA M., BOCEK M. & BOCAKOVA M. 2018: Incomplete sclerotization and phylogeny: The phylogenetic classification of Plastocerus (Coleoptera: Elateroidea). *PLoS ONE* **13(3) (e0194026)**: 1–11. https://doi.org/10.1371/journal.pone.0194026

BOUCHARD P., BOUSQUET Y., DAVIES A. E., ALONSO-ZARAZAGA M. A., LAWRENCE J. F., LYAL C. H. C., NEWTON A. F., REID

C. A. M., SCHMITT M., ŚLIPIŃSKI S. A. & SMITH A. B. T. 2011: Family-group names in Coleoptera (Insecta). *ZooKeys* **88**: 1–972.

BRANHAM M. A. 2010: 4.8. Plastoceridae Crowson, 1972. Pp. 103–104. In: LESCHEN R. A. B., BEUTEL R. G. & LAWRENCE J. F. (eds): *Handbook of Zoology. Coleoptera, Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim)*. Walter de Gruyter, Berlin, New York, xiii + 786 pp.

CAMBEFORT Y. 2006: *Des coléoptères, des collections & des hommes.* Publications Scientifique du Muséum national d'Histoire naturelles, Paris, 375 pp.

CANDÈZE E. 1863: Monographie des élatérides, tome quatrième. *Mémoires de la Société Royale des Sciences de Liége* **17**: 1–534 + VI pls.

CROWSON R. A. 1972: A review of the classification of Cantharoidea (Coleoptera), with the definition of two new families, Cneoglossidae and Omethidae. *Revista de la Universidad de Madrid* **21(82)**: 35–77.

FLEUTIAUX E. 1918: Coléoptères élatérides indochinois de la collection du Muséum d'Histoire Naturelle de Paris. Catalogue et description des espèces nouvelles. *Bulletin du Muséum National d'Histoire Naturelle* **24**: 205–236.

FLEUTIAUX E. 1940: Les élatérides de l'Indo-chine française. *Annales de Société Entomologique de France* **109**: 19–40.

GEMMINGER M. & HAROLD B. DE 1869: *Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus. Tom. VI. Rhipidoceridae, Dascillidae, Malacodermidae, Cleridae, Lymexylonidae, Cupesidae, Ptinidae, Bostrychidae, Cioidae.* E. H. Gummi, Monachii, pp. 1609–1800.

HÁJEK J. 2011: World catalogue of the family Callirhipidae (Coleoptera: Elateriformia), with nomenclatural notes. *Zootaxa* **2914**: 1–66.

HEYDEN L. VON, REITTER E. & WEISE J. 1883: *Catalogus coleopterorum Europae et Caucasi. Editio tertia.* Edw. Janson, Londini; Nicolai, Berolini; Luc. Buquet, Parisiis, [2] + 228 pp.

HEYDEN L. VON, REITTER E. & WEISE J. 1891: *Catalogus coleopterorum Europae, Caucasi et Armeniae rossicae.* E. Friedländer, Berlin; Edmund Reitter, Modling; Revue d'Entomologie, Caen, viii + 420 pp.

HEYDEN L. VON 1902: Bemerkung zu der Arbeit des Herrn O. Schwarz über die Elateriden-Gattungen Plastocerus Leconte und Candèze. *Deutsche Entomologische Zeitschrift* **1902**: 152.

HYSLOP J. A. 1921: Genotypes of the elaterid beetles of the World. *Proceedings of the U. S. National Museum* **58**: 621–680.

ICZN 1999: *International Code of Zoological Nomenclature. Fourth Edition.* International Trust for Zoological Nomenclature, London, xxix + 306 pp.

IVIE M. A. 2002: The transfer of Pseudokarumia Pic from Dascillidae (Karumiinae) to Telegeusidae, with a key to world genera of Telegeusidae. *Coleopterists Bulletin* **56**: 582–584.

IVIE M. A. & POLLOCK D. A. 2012: The familial placement of Cladobradus Pic (Coleoptera: Ptilodactylidae, Dascillidae, Mycteridae). *Coleopterists Bulletin* **66**: 7–13.

JIN Z., ŚLIPIŃSKI A. & PANG H. 2013: Genera of Dascillinae (Coleoptera: Dascillidae) with a review of the Asian species of Dascillus Latreille, Petalon Schonherr and Sinocaulus Fairmaire. *Annales Zoologici* **63**: 551–652.

KIRSCH T. 1865: Beiträge zur Käferfauna von Bogotà. *Berliner Entomologische Zeitschrift* **9**: 40–104 + pl. III.

KUSY D., MOTYKA M., BOCEK M., VOGLER A. P. & BOCAK L. 2018: Genome sequences identify three families of Coleoptera as morphologically derived click beetles (Elateridae). *Scientific Reports* **8 (17084)**: 1–9. https://doi.org/10.1038/s41598-018-35328-0

LACORDAIRE J. T. 1857: *Histoire naturelle des insectes. Genera des coléoptères ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes. Tome quatrième contenant les familles des buprestides, throscides, eucnémides, élatérides, cébrionides, cérophytides, rhipicérides, dascyllides, malacodermes, clérides, lyméxylones, cupésides, ptiniores, bostrichides et cissides.* Roret, Paris, 579 pp.

LECONTE J. L. 1853: Revision of the Elateridae of the United States. *Transactions of the American Philosophical Society, New Series* **10**: 405–508.

PIC M. 1922: Nouveautés diverses. *Mélanges Exotico-Entomologiques* **36**: 1–32.

PIC M. 1926: Coléoptères exotiques nouveaux ou peu connus. *Annales de la Société Linnéenne de Lyon et des Société Botanique de Lyon, Société d'Anthropologie et de Biologie de Lyon Réunies* **72** [1925]: 73–77.

PLATIA G. & NÉMETH T. 2011: On some Palaearctic click beetles deposited in the Hungarian Natural History Museum (Coleoptera: Elateridae). *Annales Historico-Naturales Musei Nationalis Hungarici* **103**: 65–106.

POLLOCK D. A. 2005: Nomenclatural changes in eurypine Mycteridae (Coleoptera), with special reference to taxa described by Maurice Pic. *Coleopterists Bulletin* **59**: 250–255.

REITTER E. 1896: Abbildungen mit Beschreibungen zehn neuer Coleopteren aus der palearctischen Fauna. *Wiener Entomologische Zeitung* **15**: 233–240 + pl. III.

SCHAUM H. R. 1852: *Catalogus Coleopterorum Europae. Vierte Auflage.* Entomologische Verein in Stettin, Berlin, v + 98 + 12 pp.

SEIDLITZ G. 1887–1891a: *Fauna Baltica. Die Kaefer (Coleoptera) der deutschen Ostseeprovinzen Russlands. Zweite neu bearbeitete Auflage. Mit 1 Tafel.* Hartung, Königsberg, lvi + 192 [Gattungen] + 818 [Arten, Nachträge, Register] pp. + 1 pl. [Pp. 17–48 [Gattungen] + 97–224 [Arten] published in 1888.]

SEIDLITZ G. 1888–1891b: *Fauna Transsylvanica. Die Kaefer (Coleoptera) Siebenbürgens. Mit 1 Tafel.* Hartung, Königsberg. lvi + 192 [Gattungen] + 914 [Arten, Nachträge, Register] pp. + 1 pl. [Pp. i–xl + 1–48 [Gattungen] + 1–240 [Arten] published in 1888.]

STRIBLING J. B. 1986: *World generic revision of Ptilodactylidae (Coleoptera: Dryopoidea)*. PhD Dissertation, Ohio State University, xv + 200 pp.

SCHWARZ O. 1897: Pseudophyllocerus atricolor Reitt. = Plastocerus angulosus Germ. ♀. *Deutsche Entomologische Zeitschrift* **1897(1)**: 64.

SCHWARZ O. 1902: Ueber die Elateriden-Gattungen Plastocerus Le Conte und Octinodes Cand. *Deutsche Entomologische Zeitschrift* **1901(2)**: 199–201.

VILLIERS A. 1958: Maurice Pic †. *Entomologische Blätter* **54**: 3–4.