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Taxonomic review of Chinese species of ground beetles of the subgenus *Pseudoophonus* (genus *Harpalus*) (Coleoptera: Carabidae)

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Abstract

A taxonomic review of 23 species of the subgenus *Pseudoophonus* Motschulsky, 1844, the genus *Harpalus* Latreille, 1802, occurring in China is given, and a key to these species is provided. The species are divided in three species groups and five subgroups, the distinctive characters of which are listed. The following new synonyms are established: *Harpalus calceatus* Duftschmid, 1812 = *Anisodactylus propinquus* Ballion, 1870, **syn. n.**; *H. davidi* (Tschitschérine, 1897) = *H. kailiensis* Huang, 1992, **syn. n.**; = *H. adenticulatus* Huang, 1992, **syn. n.**; = *H. cilihumerus* Huang, Hu & Sun, 1994, **syn. n.**; *H. fokiensis* Schaubberger, 1930 = *H. muciolus* Huang, 1992, **syn. n.**; *H. griseus* (Panzer, 1796) = *H. xinjiangensis* Huang, Hu & Sun, 1994, **syn. n.**; *H. hauserianus* Schaubberger, 1929 = *H. disaogashimensis* Huang, 1995, **syn. n.**; *H. pastor pastor* Motschulsky, 1844 = *H. penglainus* Huang, Hu & Sun, 1994, **syn. n.**; = *H. chiloschizontus* Huang, 1995, **syn. n.**; *H. rufipes* (DeGeer, 1774) = *H. scabripsectus* Huang, Hu & Sun, 1994, **syn. n.**; *H. singularis* Tschitschérine, 1906 = *H. chengjiangensis* Huang, 1993, **syn. n.**; *H. sinicus* Hope, 1845 = *H. periglabeus* Huang, 1992, **syn. n.**; = *H. longihornus* Lei & Huang, 1997, **syn. n.**; and *H. tridens* Morawitz, 1862 = *H. hypogeomysis* Huang, 1993, **syn. n.**; = *H. pilosus* Huang, 1995, **syn. n.** Statuses of *H. yinchuanensis* Huang, 1993 and *H. disimuciolus* Huang, Lei, Yan & Hu, 1996 are discussed. Lectotypes are designated for *H. capito* Morawitz, 1862, *H. japonicus* Morawitz, 1862 and *H. eous* Tschitschérine, 1901. New data on distribution of *Pseudoophonus* species in China are provided. *Harpalus babai* Habu, 1973 is reported from China (Jiangxi) for the first time. The following taxa are recorded from the following Chinese provinces for the first time: *H. ussuriensis* Chaudoir, 1863 from Hunan; *H. aenigma* (Tschitschérine, 1897) from Hubei, Jiangxi, and Guangxi; *H. pastor* Motschulsky, 1844 from Beijing and Xizang; *H. fokiensis* Schaubberger, 1930 from Anhui and Jiangxi; *H. simplicidens* Schaubberger, 1929 from Beijing, Shanghai, and Fujian; *H. coreanus* (Tschitschérine, 1895) from Anhui, Henan, Zhejiang, Shanghai, Hubei, and Guangdong; *H. suensoni* Kataev, 1997 from Yunnan; *H. sinicus* Hope, 1845 from Hainan; *H. davidi* (Tschitschérine, 1897) from Zhejiang, Hunan, and Guizhou; *H. pseudohauserianus* Kataev, 2001 from Sichuan; *H. indicus orientalis* Kataev, 2014 from Xizang, Guangxi, and Guangdong; *H. hauserianus* Schaubberger, 1929 from Xizang and Guizhou; *H. singularis* Tschitschérine, 1906 from Taiwan; and *H. calceatus* Duftschmid, 1812 from Guangxi. In addition, *H. sinicus* and *H. singularis* are reported from Laos for the first time.

Key words: Coleoptera, Carabidae, Harpalini, *Harpalus*, *Pseudoophonus*, China, taxonomy, new synonyms, new records

Introduction

Pseudoophonus Motschulsky, 1844 is a moderately diverse Holarctic taxon treated here as a subgenus of the genus *Harpalus* Latreille, 1802 (Kataev *et al.* 2003; Kataev 2009), though some modern authors (for example, Martínez-Navarro *et al.* 2003, 2005) working mainly with limited material consider *Pseudoophonus* as a separate genus. Based on our treatment, *Pseudoophonus* belongs to the pseudoophonoid subgeneric complex of the genus *Harpalus*, which also includes the Palaearctic subgenus *Cephalophonus* Ganglbauer, 1892 and the Nearctic subgenera *Megapangus* Casey, 1914 and *Plectralidus* Casey, 1914, each of them with a unique combination of non-specific distinctive characters (Kataev 2006, 2009). *Pseudoophonus* comprises about 40 species, most of which (28 species) are distributed in the Palaearctic, predominantly in eastern Asia, and the northern portion of the Oriental Region; 12 species occur in North America, mostly in its eastern portion to south up to northern Mexico and Florida. Most species are widely distributed, many species occur sympatrically. The species of *Pseudoophonus* live in open areas, mainly meadows, and light deciduous forests; many species are common in agricultural landscapes and disturbed areas.

The American and Eurasian faunas have no common species and are taxonomically separated. The North American species were revised by Ball and Anderson (1962), and more recently one new species, *Harpalus poncei* Will, was described from Florida (Will 2001). The East Asian species were revised by Schaubberger (1929, 1930, 1932, 1933), and some additions were published by Mlynář (1974) and Kataev (1997, 2001, 2014). Regional reviews and revisions with keys were published by Habu (1968, 1973) for Japan (15 species), Lafer (1989) for the Russian Far East (12 species), and Moon and Paik (2006) for Korea (16 species). The fauna of China is most diverse and still poorly known. The most recent information on species and subspecies occurring in China and data on their distribution were published by Hua (2002) and Kataev *et al.* (2003); unfortunately, the former publication includes many taxonomic errors and at least some records need confirmation because they might be based on misidentification. Moreover, during two last decades 16 new species from China were described by Huang Tongling with coauthors (Huang 1992, 1993; Huang *et al.* 1994; Huang & Zhang 1995; Lei & Huang 1997), but the taxonomic status of these species was obscure and needed revision. Based on examination of the type specimens

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References

- Ball, G.E. & Anderson, J.N. (1962) *The taxonomy and speciation of Pseudophonus (a subgenus of Harpalus: Harpalini: Carabidae), known to occur in North America*. Catholic University of America Press, Washington, pp. 1–94.
- Ballion, E. (1870) Eine Centurie neuer Käfer aus der Fauna des russischen Reiches. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 43 (2), 320–353.
- Bates, H.W. (1873) On the Geodephagous Coleoptera of Japan. *The Transactions of the Royal Entomological Society of London*, 1873, 219–322.
- Bousquet, Y. (2002) Status of the new genus-group names of Carabidae (Coleoptera) introduced by Fischer von Waldheim in his catalogue of the Steven insect collection (1829). *Folia Heyrovskyana*, 10, 173–181.
- Chaudoir, M. de (1842) Catalogue des Carabiques recueillis dans la province Mazendéran près d'Astrabat par M. de Karéline. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 15 (4), 801–831.
- Chaudoir, M. de (1863) Enumeratio des cicindélètes et des carabiques recueillis dans la Russie méridionale, dans la Finlande septentrionale et dans la Sibérie orientale par MM. Alexandre et Artur de Nordmann. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 36 (1), 201–232.
- DeGeer, Ch. (1774) *Mémoires pour servir à l'histoire des insectes. Tome quadrième*. Hesselberg, Stockholm, xii + 457 pp.
- Desbrochers des Loges (1867) *Notice sur l'entomologie du Bourbonnais. Suivie de la description de trois espèces nouvelles*. Assises scientifiques du Bourbonnais, 44 pp.
- Duftschnid, C. (1812) *Fauna Austriae oder Beschreibung der österreichischen Insekten für angehende Freunde der Entomologie. 2. Teil*. Akademie Buchhandlung, Linz und Leipzig, viii + 311 pp.
- Fabricius, J.Ch. (1775) *Systema Entomologiae, sistens Insectorum classes, ordines, genera, species, adiectis synonymis, locis, descriptionibus, observationibus*. Kortii, Flensburgi et Lipsiae, xxxii + 832 pp.
- Fischer von Waldheim, G. (1829) *Museum Historiae Naturalis Universitatis Caesariae Mosquensis. Pars II. Insecta*. Typis Universitatis Caesariae, Mosquae, 143 pp.
- Fourcroy, A.F. (1785) *Entomologia Parisiensis; sive Catalogus Insectorum guae in Agro Parisiensi reperiuntur; secundum methodum Geoffraeanam in sectiones, genera & species distributus: cui addita sunt nomina trivalia & fere trecentae novae species. Pars I*. Parisiis, viii + 544 pp.
- Gmelin, J.F. (1790) *Caroli a Linné Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima tertia, aucta, reformata. Tomus I. Pars 4*. Beer, Lipsiae, pp. 1517–2224
- Goeze, J.A.E. (1777) *Entomologische Beyträge zu des Ritter Linné zwölfte Ausgabe des Natursystems. Erster Theil*. Wiedmanns Erben und Reich, Leipzig, xvi + 736 pp.
- Gozis, M. des (1882) Mémoire sur les pores sétigères prothoraciques dans la tribu des Carnivores. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 6, 285–300.
- Gusenleitner, F. (1990) Die Typen der Carabidae-Sammlung Dr. Erwin Schaubberger am Oberösterreichischen Landesmuseum in Linz, Austria (Insecta: Coleoptera: Carabidae). *Linzer biologische Beiträge*, 22 (2), 725–785.
- Habu, A. (1954) Descriptions of some new Carabid-beetles (Coleoptera) from Japan. *Bulletin of the National Institute of Agricultural Sciences (Japan)*, Series C, 4, 281–285.
- Habu, A. (1957) On some species of the Carabidae from Aogashima taken by Miss. S. Kobayashi. *Kontyû*, 25, 66–72.
- Habu, A. (1968) Revision of the Japanese species belonging to the subgenus-group *Ophonus* of the genus *Harpalus* (Coleoptera, Carabidae). *Bulletin of the National Institute of Agricultural Sciences (Japan)*, Series C, 22, 283–327.
- Habu, A. (1973) *Carabidae: Harpalini (Insecta, Coleoptera). Fauna Japonica*. Keigaku Publishing Co., Tokio, xiii + 430 pp.
- Habu, A. (1977) Occurrence of *Harpalus (Pseudoophonus) horni* Jedlička in Honshu, Japan (Coleoptera, Carabidae). *Entomological Review of Japan*, 30 (1–2), 7–10.
- Hope, F.W. (1845) On the entomology of China, with descriptions of the species sent by Dr. Cantor from Chusan et Canton. *The Transactions of the Royal Entomological Society of London*, 4, 4–17.
<http://dx.doi.org/10.1111/j.1365-2311.1845.tb01326.x>
- Hua, L. (2002) *List of Chinese Insects. Vol. II. Zhongshan* (Sun Yat-sen) University Press, Guangzhou, 612 pp.
- Huang, T. (1992) Four new species of the genus *Harpalus* Latreille (Coleoptera: Carabidae). *Entomotaxonomia*, 14 (1), 59–65.
- Huang, T. (1993) Three new species of the genus *Harpalus* from China (Coleoptera: Carabidae). *Acta Zootaxonomica Sinica*, 18 (4), 451–455.
- Huang, T., Hu, J. & Sun, D. (1994) Four new species of the genus *Harpalus* Latreille (Coleoptera: Carabidae) from China. *Entomotaxonomia*, 16 (4), 263–268.
- Huang, T., Lei, H., Yan, G. & Hu, J. (1996) A new subgenus and two new species of the genus *Harpalus* Latreille (Coleoptera: Carabidae) from China. *Entomotaxonomia*, 18 (2), 120–124.
- Huang, T. & Zhang, J. (1995) Three new species of the genus *Harpalus* Latreille (Coleoptera: Carabidae). *Entomotaxonomia*, 17 (2),

- ICZN (1999) *International Code of Zoological Nomenclature, fourth edition, adopted by the International Union of Biological Sciences*. International Trust for Zoological Nomenclature, London, xxix + 306 pp.
- Jedlička, A. (1928a) Neue paläarktische Carabiden. *Entomologische Mitteilungen (Berlin–Dahlem)*, 17, 44–46.
- Jedlička, A. (1928b) Neue paläarktische Carabiden. II. (Coleoptera). *Wiener Entomologische Zeitung*, 45(2–3), 92–96.
- Jedlička, A. (1958) Beitrag zur Kenntnis der paläarktischen Carabiden (Coleoptera). *Acta Entomologica Musei Nationalis Pragae*, 32 (498), 223–246.
- Jedlička, A. (1961) Neue Carabiden aus der paläarktischen Region (Col.). *Acta Entomologica Musei Nationalis Pragae*, 34 (584), 155–166.
- Kataev, B.M. (1995) On similar anomalies in the structure of male genitalia in some species of the carabid genera *Harpalus* Latr. and *Ophonus* Dej. (Coleoptera, Carabidae) and their significance for reconstruction of the phylogeny of the Harpali genus group. *Entomologicheskoe obozrenie*, 74 (4), 795–810. [in Russian; translated in English: *Entomological Review*, 1996, 75 (9), 151–166].
- Kataev, B.M. (1997) Ground beetles of the genus *Harpalus* (Insecta, Coleoptera, Carabidae) from East Asia. *Steenstrupia*, 23, 123–160.
- Kataev, B.M. (2001) To the knowledge of species of the subgenus *Pseudoophonus* (genus *Harpalus*) from the Himalayan region and Southern China (Coleoptera: Carabidae). *Zoosystematica Rossica*, 9 (2), 2000, 391–407.
- Kataev, B.M. (2002) On the types of some Palearctic *Harpalus* in the Muséum National d'Histoire Naturelle, Paris. *Russian Entomological Journal*, 11 (2), 191–195.
- Kataev, B.M. (2006) To the knowledge of the genus *Harpalus* Latreille, 1802 of Eastern Palearctic (Coleoptera: Carabidae). *Proceeding of the Russian Entomological Society*, 77, 137–165.
- Kataev, B.M. (2009) *Ground-beetles of the genus Harpalus Latr. (Coleoptera, Carabidae) of the world: systematics, zoogeography, phylogeny*. Abstract of the PhD thesis. Saint Petersburg, 23 pp. [in Russian]
- Kataev, B.M. (2012) Ground-beetles of the subgenus *Cryptophonus* Brandm. et Z. Brandm., genus *Harpalus* Latr. (Coleoptera, Carabidae). *Entomologicheskoe obozrenie*, 91 (4), 800–831. [in Russian; translated in English: *Entomological Review*, 2013, 93 (3), 370–397]
- Kataev, B.M. (2014) Systematic and nomenclatorial notes on some taxa of Zabryni and Harpalini from the Palearctic, Oriental and Australian regions (Coleoptera: Carabidae). *Proceedings of the Zoological Institute of the Russian Academy of Sciences*, 318 (3), 252–267.
- Kataev, B.M., Wrase, D.W. & Ito, N. (2003) Harpalina. In: Löbl, L. & Smetana, A. (Eds.), *Catalogue of Palearctic Coleoptera. Vol. 1. Archostemata – Myxophaga – Adephaga*. Apollo Books, Stenstrup, pp. 367–397.
- Kerzhner, I.M. (1972) Historical survey of studies of the insect fauna of the Mongolian People's Republic. *Nasekomye Mongolii*, 1, 57–112. [in Russian]
- Krynicky, J. (1832) Enumeratio Coleopterorum Rossiae meridionalis et praecipue in Universitatis Caesariae Charcoviensis circulo obvenerunt, quae annorum 1827–1831 spatio observavit. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 5, 69–179 + 2 pls.
- Kryzhanovskij, O.L., Belousov, I.A., Kabak, I.I., Kataev, B. M., Makarov, K.V., Shilenkov, V.G. (1995) *A checklist of the ground-beetles of Russia and adjacent lands (Insecta, Coleoptera, Carabidae)*. Pensoft Publishers, Sofia–Moscow, 272 pp.
- Lafer, G.Sh. (1989) Fam. Carabidae—The ground-beetles. In: Lehr, P.A. (Ed.), *Opredelitel' nasekomykh Dal'nego Vostoka SSSR v shesti tomakh. Tom III. Zhestkokrylye, ili zhuki. Chast' 1*. Nauka, Leningrad, pp. 70–222. [in Russian]
- Lafer, G.Sh. (1996) Notes on some species of the subtribe Harpalina (Coleoptera, Carabidae, Harpalinae) from Korea and adjacent areas. *Insecta Koreana*, 13, 77–89.
- Lei, H. & Huang, T. (1997) A new species of the genus *Harpalus* (Coleoptera: Carabidae) from China. *Entomotaxonomia*, 19 (2), 111–113.
- Liang, H.-B. & Liu, Y. (2007) Carabids of Leigongshan Reserve in Guizhou Province. In: Li, Z. Zh., Yang, M.-F. & Jin, D.-Ch. (Eds.), *Insects from Leigongshan Landscape*. Guizhou Science and Technology Publishing House, Guiyang, pp. 236–247. [in Chinese with English summary]
- Liang, H.-B. & Huang, X.-L. (2013) Coleoptera, Carabidae. In: Bai, X.-Sh., Cai, W.-Zh. & Nonnaizab (Eds.), *Insects from Helanshan Mountain of Nei Mongol*. Nei Mongol People Publishing House, Hohhot, pp. 285–301. [in Chinese]
- Liang, H.-B. & Yu, P.-Y. (2000) Species of ground beetles (Coleoptera: Carabidae) predating oriental armyworm (Lepidoptera: Noctuidae) in China. *Natural Enemies of Insects*, 22 (4), 160–167. [in Chinese with English summary]
- Lutshnik, V. (1909) *Ophonus (Pseudophonus) sagowskii* sp. n. *Berliner Entomologische Zeitschrift*, 54, 108–109.
- Marsham, Th. (1802) *Entomologia Britannica, sistens Insecta Britanniae indigena, secundum, methodum Linnaeanam disposita. Tomus I. Coleoptera*. White, Londini, xxxi + 547 + 1 pp.
- Mamkaev, Yu.V. (1968) A comparative study of morphological differences in the lower and higher groups of a uniform phylogenetic stock. *Zhurnal obshchey biologii*, 29 (1), 48–56. [in Russian]
- Mamkaev, Yu.V. (1979) The principle of morphological diversity as a method for investigation of phylogenetical relationships. In: Sokolov, V.E. (Ed.), *Proceedings of the All-Union Conference "The State and Prospects of Development of Morphology"*. Nauka, Moskva, pp. 376–377. [in Russian]
- Martínez-Navarro, E.M., Galian, J. & Serrano, J. (2003) Phylogenetic relationships among subtribes of Harpalini Bonelli 1810 (Coleoptera, Carabidae), and *Harpalus* Latreille 1802 and some related Western Palearctic taxa. A preliminary cladistic analysis using morphological and karyotypic characters. *Acta Entomológica Ibérica e Macaronésica*, 1, 59–66.
- Martínez-Navarro, E.M., Galian, J. & Serrano, J. (2005) Phylogeny and molecular evolution of the tribe Harpalini (Coleoptera, Carabidae) inferred from mitochondrial cytochrome-oxidase I. *Molecular Phylogenetics and Evolution*, 35, 127–146. <http://dx.doi.org/10.1016/j.ympev.2004.11.009>
- Ménétriés, E. (1848) Catalogue des insectes recueillis par feu M. Lehmann avec les descriptions des nouvelles espèces. Coléoptères Pentamères. *Mémoires de l'Académie Impériale des Sciences de Saint-Petersbourg, VI-me série, Sciences Mathématiques, Physiques et Naturelles. Second partie: Sciences naturelles*, 8, 1–2, 17–66 + 2 pls.
- Mlynář, Z. (1974) Beitrag zur Kenntnis der Ostasiatischen Harpalinae s.str. (Coleoptera, Carabidae). *Acta Zoologica Cracoviensia*, 19 (6), 105–124.

- Moon, Ch.-S. & Paik, J.-Ch. (2006) Notes on Harpalini (Coleoptera, Carabidae) from Korea (1-3). *Korean Journal of Soil Zoology*, 11 (1-2), 30-84.
- Morawitz, A. (1862a) Vorläufige Diagnosen neuer Coleopteren aus Südost-Sibirien. *Bulletin de l'Académie Impériale des Sciences de St.-Petersbourg*, 5, 231-265.
- Morawitz, A. (1862b) Vorläufige Diagnosen neuer Carabiden aus Hakodate. *Bulletin de l'Académie Impériale des Sciences de St.-Petersbourg*, 5, 321-328.
- Motschulsky, V. (1844) Insectes de la Sibérie rapportés d'un Voyage fait en 1839 et 1840. *Mémoires présentés à l'Académie Impériale des Sciences de St.-Petersbourg par divers savans et lus dans ses assemblées*, 5 (1-3), xv + 274 pp. + 10 pls.
- Motschulsky, V. (1860) Insectes du Japon. *Etudes Entomologiques*, 9, 4-39.
- Motschulsky, V. (1861) Insectes du Japon. *Etudes Entomologiques*, 10, 3-24.
- Motschulsky, V. (1864) Énumération des nouvelles espèces de coléoptères rapportés de ses voyages. 4-ème article. *Bulletin de la Société Impériale des Naturalistes de Moscou*, 37 (3), 171-240.
- Müller, O.F. (1776) *Zoologiae Danicae prodromus, seu animalium Daniae et Norvegiae indigenarum characteres, nomina, et synonyma imprimis popularium*. Hallageriis, Hafniae, xxxii + 282 pp.
- Noonan, G.R. (1976) Synopsis of the supra-specific taxa of the tribe Harpalini (Coleoptera: Carabidae). *Quaestiones Entomologicae*, 12, 3-87.
- Noonan, G.R. (1996) Classification, cladistics, and natural history of species of the subgenus *Anisodactylus* Dejean (Insecta: Coleoptera: Carabidae: Harpalini: *Anisodactylus*). *Contributions in Biology and Geology, Milwaukee Public Museum*, 89, i-iii, 1-210.
- Panzer, G.W.F. (1796) *Faunae Insectorum Germaniae initia oder Deutschlands Insecten gesammelt und herausgegeben*. 38. Felseckerscken Buchhandlung, Nürnberg, 24 pp. + 24 pls.
- Paik, J.-Ch. & Jung, S.-H. (2004) Some ground beetles (Coleoptera, Carabidae) from Jeju Island (VI). *Korean Journal of Soil Zoology*, 9 (1-2), 32-43.
- Paik, J.-Ch. & Moon, Ch.-S. (2005) Some ground beetles (Coleoptera, Carabidae) from Korea (15). *Korean Journal of Soil Zoology*, 10 (1-2), 42-54.
- Park, J.K., Lu, L. & Kim, D.Y. (2001) Carabidae (Coleoptera) from Mt. Changbai-shan in China, part 1. *Insecta Koreana*, 18 (2), 201-209.
- Rossi, P. (1790) *Fauna Etrusca, sistens Insecta, quae in provinciis Florentina et Pisana praesertim collegit. Tomus primus*. Masi & Sociorum, Liburni, 272 pp. + 10 pls.
- Schauberger, E. (1929) Beitrag zur Kenntnis der paläarktischen Harpalinen (V. Beitrag). *Coleopterologisches Centralblatt*, 3 (5-6), 179-196.
- Schauberger, E. (1930) Zur Kenntnis der paläarktischen Harpalinen (VII. Beitrag). *Coleopterologisches Centralblatt*, 4, 169-218.
- Schauberger, E. (1932) Zur Kenntnis der paläarktischen Harpalinen (X. Beitrag). *Wiener Entomologische Zeitung*, 49 (1), 23-44.
- Schauberger, E. (1933) Zur Kenntnis der paläarktischen Harpalinen (XII. Beitrag). *Wiener Entomologische Zeitung*, 50 (1-2), 64-78.
- Schauberger, E. (1935) Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas, unter Leitung von Dr. Sven Hedin und Prof. Sü Ping-chang. Insekten gesammelt vom schwedischen Arzt der Expedition Dr. David Hummel 1927-1930. 18. Coleoptera. 4. Carabidae und Cicindelidae. A. Harpalinae s. str. *Arkiv för Zoologi*, 27A (4), 1-27.
- Tschitschérine, T. (1895) Supplement à la faune des Carabiques de la Corée. *Horae Societatis Entomologicae Rossicae*, 29, 154-188.
- Tschitschérine, T. (1897) Carabiques nouveaux ou peu connus. *L'Abeille*, 29, 45-75.
- Tschitschérine, T. (1901) Genera des Harpalini des région Paléarctique et Paléanarctique. *Horae Societatis Entomologicae Rossicae*, 35, 217-251.
- Tschitschérine, T. (1906) Notes détachées sur les Harpalini de l'Asie orientale. *Horae Societatis Entomologicae Rossicae*, 37 (3/4), 247-292.
- Will, K.W. (2001) A new species of *Harpalus* Latreille (Coleoptera: Carabidae) from southeastern North America. *The Coleopterists Bulletin*, 55 (4), 447-452.
[http://dx.doi.org/10.1649/0010-065X\(2001\)055\[0447:ANSOHL\]2.0.CO;2](http://dx.doi.org/10.1649/0010-065X(2001)055[0447:ANSOHL]2.0.CO;2)
- Wrase, D.W. (2005) Nomenclatorial, taxonomic and faunistic notes on some Palaearctic genera and species of ground-beetles (Coleoptera, Carabidae: Apotomini, Chlaeniini, Cyclosomini, Harpalini, Lebiini, Licinini, Platynini, Siagonini, Sphodrini). *Linzer biologische Beiträge*, 37 (1), 815-874.