

New species of the genus *Olenecamptus* Chevrolat, 1835 (Coleoptera: Cerambycidae) from Russian Ussuri Region

Новый вид рода *Olenecamptus* Chevrolat, 1835 (Coleoptera: Cerambycidae) из Уссурийского края России

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КЛЮЧЕВЫЕ СЛОВА: Cerambycidae, таксономия, новый вид, Россия, Корея, Япония.

ABSTRACT. *Olenecamptus riparius* sp.n. is described from Russian Maritime Province (Partizansk). The new species is also distributed in Korean Peninsula, Tsushima Island and China, but absent in big Japan islands. A great number of specimens of the new species are well known in Russia with wrong name *O. clarus* auct. (not Pascoe, 1859). The new species was also published (mostly in Japan literature) as *O. subobliteratus* auct. (not Pic, 1923). The real nature of *Olenecamptus riparius* sp.n. was realized after study of the holotypes of *O. clarus* Pascoe, 1859 and *O. subobliteratus* Pic, 1923.

РЕЗЮМЕ. *Olenecamptus riparius* sp.n. описан с юга Приморского края (Партизанск), обитает также на Корейском п-ове, о-ве Цусима и в Китае, но отсутствует на больших островах Японии. Много экземпляров нового вида было известно в России под ошибочным названием *O. clarus* auct. (not Pascoe, 1859), а часто он публиковался (в основном в японской литературе) и под названием *O. subobliteratus* auct. (not Pic, 1923). Истинная природа *Olenecamptus riparius* sp.n. стала очевидна после изучения голотипов *O. clarus* Pascoe, 1859 и *O. subobliteratus* Pic, 1923.

The perception of many species of Palaearctic Cerambycidae is based up to now on generally accepted traditions. Original descriptions of old species are often not studied, neither type materials of old names. *Olenecamptus clarus* Pascoe, 1859 (Figs 6–8) was described from North China (without more precise indication of locality). The name was adequately used by Japan authors [K. Ohbayashi 1963; Kojima & Hayashi, 1969; Hayashi et al., 1984; Kusama & Takakuwa, 1984; N. Ohbayashi et al., 1992; Makihara, 2007] for the small species with 3 black spots on each elytron, which absent in Russia. But the name “*O. clarus*” was wrongly used for rather different big Russian species with two black spots on each elytron [Plavilstshikov, 1958; Lobanov et al., 1982; Tsherepanov, 1983; 1985; 1996; Lobl & Smetana, 2010].

O. clarus var. *subobliteratus* Pic, 1923 (Figs 3–5) was described from “Chine: Chang-Hai”. The name was used by Japan authors [Kusama & Takakuwa, 1984; N. Ohbayashi et al., 1992; Makihara, 2007 and others] for another, but very similar species known in Japan from Tsushima Island only, but widely distributed in Russian Maritime Province, as well as in Korea and China.

That big species with two black spots on each elytron widely distributed in the continent was never described.

Abbreviations of collections:

NHML — The Natural History Museum, London
ZMM — Zoological Museum of Moscow University
MPSU — Moscow Pedagogical State University
ELKU — Entomological Laboratory of Kyushu University
MNHP — Muséum Nationale d'histoire naturelle, Paris
MD — author's collection (Moscow)
RF — collection of Rostislav Filimonov (Sankt-Petersburg)
MH — collection of Michiaki Hasegawa (Toyohashi)
TI — collection of Toshihito Ito (Chiba)
HM — collection of Hiroshi Makihara (Morioka)
SM — collection of Sergey Murzin (Moscow)
AN — collection of Alexander Napolov (Riga)
NO — collection of Nobuo Ohbayashi (Miura-City)
AS — collection of Akiko Saito (Chiba)

Olenecamptus riparius sp.n.

Figs 1–2

Olenecamptus subobliteratus, Hayashi et al., 1984: 118; Kusama & Takakuwa, 1984: 459; Lee, 1987: 174; N. Ohbayashi et al., 1992: 601; Makihara, 2007: 610;

Olenecamptus clarus, Plavilstshikov, 1958: 579 (+ ab. *subobliteratus*, syn. nov.), part.; Tsherepanov & Tsherepanova, 1973: 44 (larvae, bionomy); Mamaev, Danilevsky, 1975: 237 (larvae, bionomy); Lobanov et al., 1982: 265; Tsherepanov, 1983: 174 (+ ab. *subobliteratus*), part.; 1985: 245; 1996: 129; Lobl & Smetana, 2010: 265, part.

Olenecamptus octopustulatus, Lee: 1982: 60.

Olenecamptus clarus clarus, Hua, 2002: 221; Lobl & Smetana, 2010: 264, part.

MATERIAL. *O. riparius* sp.n.: holotype, ♂, Russia, Primorye Region, Suchan (now Partizansk) environs, 17.7.1985 [MD]; 40 paratypes: 1 ♂, same locality as in holotype, 4.8.1970, Yu. Elizarov leg. [MD]; 2 ♂♂, Russia, Primorye Region, South of Sikhote-Alin Ridge, Sokolchi, 18–20.6.1980, S.Murzin leg. [MD, SM]; 1 ♂, same locality, 3.7.1980, A.Komantzev leg. [MD]; 6 ♂♂, 1 ♀, same locality as in holotype, 15.8.1971, A.Sulkhanov leg. [ZMM]; 1 ♂, same locality as in holotype, 7.8.1970, Zaitsev leg. [ZMM]; 1 ♂, same locality as in holotype, 23.7.1930, Palshkov[?] leg. [ZMM]; 4 ♂♂, same locality as in holotype, 5–15.8.1970, Yu. Elizarov leg. [SM]; 1 ♂, Russia, Primorye Region, Lazo env., 43°22'43"N, 133°54'01"E, 13.8.2007, K. Makarov & A. Zaitsev leg. [MPSU]; 1 ♂, Russia, Primorye Region, Lazo Natural Reserve, 43°15'17"N, 134°07'59"E, 15.7.2005, Yu. Sundukov leg. [MPSU]; 1 ♂, 1 ♀, Russia, Primorye Region, Lazo env., 7–8.8.2005, Yu. Sundukov leg. [RF]; 1 ♂, Russia, Primorye Region, Lazo Natural Reserve, 2.9.2005, Yu. Sundukov leg. [RF]; 1 ♂, 1 ♀, Russia, Primorye Region, 93 km E Partizansk, Valentin, 18–21.7.2003, R. Filimonov leg. [AN, RF]; 1 ♂, 1 ♀, Japan, Tsushima Is., Sasuna, 27.7.1985, K. Shimizu leg. [MD]; 2 ♂♂, 3 ♀♀, Japan, Tsushima Is., Mt. Ohboshiyama, 17–18.6.1975, H. Makihara leg. [HM]; 4 ♂♂, 4 ♀♀, same locality, 5–9.7.1983, H. Makihara leg. [HM]; 2 ♂♂, same locality, 22–24.7.1985, H. Makihara leg. [HM]; 1 ♂, Tsushima Is., Komoda, 28.7.1930, Hori &

Cho leg. [ELKU]; 1 ♂, 1 ♀, Japan, Tsushima Is., Mt. Oboshiyama, Mine, 5–9.7.1983. H. Makihara leg. [NO]; 8 ♂♂, 6 ♀♀, same locality, 8–9.7.1983. Sh. Saito & A. Saito leg. [AS]; 1 ♂, 1 ♀, same locality, 22–24.7.1985. A. Saito leg. [AS]; 1 ♂, 1 ♀, Japan, Tsushima Is., Sasuna, 26–27. VI. 1986. K. Shimizu leg. [NO]; 2 ♂♂, 2 ♀♀ with same label [TI]; 1 ♂, 1 ♀, Japan, Tsushima Is., Mt. Ohboshi-yama, Mine, 8.7.1983. S. Saito leg. [MH]; 1 ♀, Japan, Tsushima Is., Kamitsushima, Izumi, 15–17.6.2001, M. Furukawa leg. [MH]; 1 ♂, China, Zhenjiang, Linan City, Mt. West-Tiamu, 30°20'N, 119°24'E, 3–6.6.1999, Li-Zhen Li leg. [NO]; 1 ♀, China, Yunnann, Zaotong Shi, Ludian Xian, Mt. Xiangmu-shan, 27°07'N, 103°17'E, 29.7.1973 [NO].

O. subobliteratus Pic, 1923: ♀ (15.3mm), holotype with 6 labels, 1) «Type» [red], 2) type, 3) «Zi-ka-wei [a town in western Shanghai] / 15.6.23», 4) «clarus // var.», 5) «*v. subobliteratus* // Pic», 6) «76» [MNHP]; 2 ♂♂ (8.3mm and 12mm), China, Beijing City Botanical Garden, Haidian area, 1.7.1992, R. Iwata leg. [HM].

According to the personal message (followed by corresponding photos) by M. Lin, several specimens *O. subobliteratus* are preserved in the collection of National Zoological Museum of China (Beijing): 4 ♂♂, 2 ♀♀, Jiangsu (Jiangsu), Shanghai, Zi-ka-wei, 12.7.1920–18.6.1925; 1 ♀, Zhejiang, Yangzhou, 1936; 1 ♂, Beijing, Daxing, Lixian, 11.7.1971; 1 ♂, Beijing, Xiangshan, 8.7.1948, leg. Wang



Figs 1–5. *Olenecamptus* spp.: 1–2 — *O. riparius*, sp.n.; 3–5 — *O. subobliterarus*; 1–2 — male, holotype; 3–4 — female, holotype; 5 — holotype, set of labels; 1, 3 — dorsal view; 2, 4 — lateral view.

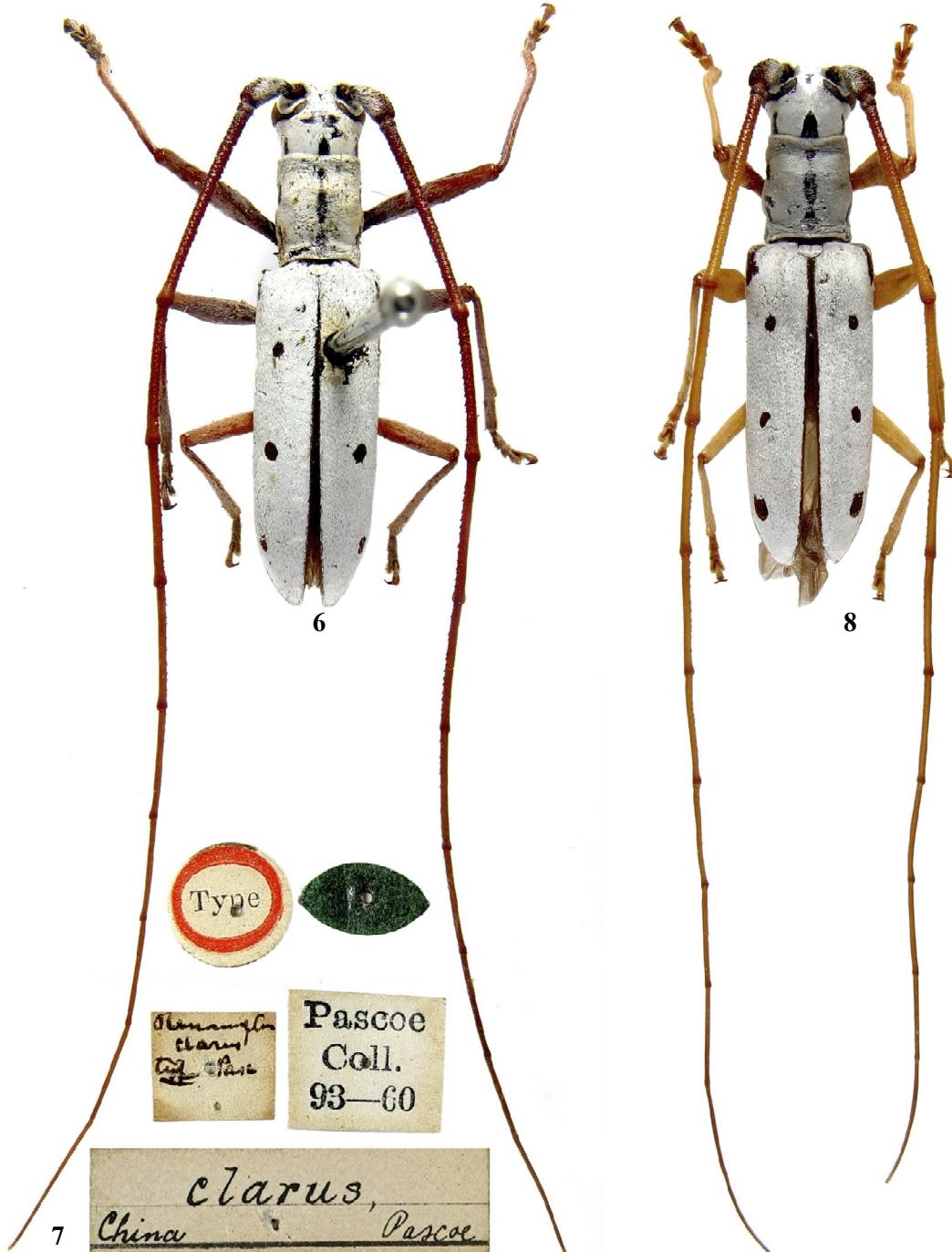
Рис. 1–5. *Olenecamptus* spp.: 1–2 — *O. riparius*, sp.n.; 3–5 — *O. subobliterarus*; 1–2 — самец, голотип; 3–4 — самка, голотип; 5 — этикетки голотипа; 1, 3 — сверху; 2, 4 — сбоку.

Linyao; 1 ♂, Hebei, Wugong, 4.7.1977; 1 ♂, Gansu, Kangxian, Qinghelinchang, alt. 1400m, 2.7.1999, leg. Chou Wen-I.

O. clarus Pascoe, 1859: ♂ (16mm), holotype with 5 labels, 1) «Type» [white circle with red ring], 2) [green metallic oval], 3) «*Olenecamptus // clarus // type Pascoe*», 4) «*Pascoe // Coll. // 93–60*», 5) «*clarus, // Pascoe // Chinax*» [NHML]; 1 ♂, Kochino, C. Kônan, Aichi Pref., Japan, 29.5.1980, N. Yuzawa leg. [MD]; 1 ♂, Ohtaki-Zawa, Akabira-city, Hokkaido, Japan, 3.8.1986, R. Saitô leg. [MD]; 1 ♂, Saga-city, Saga, Kyushu, Japan, 4.4.1978, Coll. K. Shimizu [MD]; 1 ♂ and 1 ♀, Yamabe, Furano-city, Hokkaido, Japan, 26.7.1986, R. Saitô leg. [MD].

DESCRIPTION. The species was described in details [Plavilshikov, 1958; Tsherepanov, 1983] several times under the name “*Olenecamptus clarus*”. The color photos of males and females of *O. riparius* sp.n. were often published as *O. octopustulatus* [Lee, 1982: Pl. 7–156], or *O. subobliteratus* [Hayashi et al., 1984: Pl. 24–8; Kusama & Takakuwa, 1984: Pl. 77–521ab; Lee, 1987: Pl. 21–233; Makihara, 2007: Pl. 67–8].

The most important characters are of the new species are: body dorsally with very dense white pubescence totally hiding dark-brown cuticula, ventrally dark-brown, with rather sparse



Figs 6–8. *Olenecamptus clarus*: 6 — male, holotype; 7 — holotype, set of labels; 8 — male, “Japan, Aichi Pref., Kochino, C. Konan, 29.5.1980, N.Yuzawa leg.”; 6, 8 — dorsal view.

Рис. 6–8. *Olenecamptus clarus*: 6 — голотип, самец; 7 — этикетки голотипа; 8 — самец, “Japan, Aichi Pref., Kochino, C. Konan, 29.5.1980, N.Yuzawa leg.”; 6, 8 — сверху.

pubescence; metathoracic episterna also dark-brown; 1st antennal joint with more or less rough granulation, granulation of 3rd joint smaller, but still very dense, it becomes finer and sparser posteriorly from joint to joint and totally disappears apically to about 9th joint or earlier; the antennal granulation of Tsushima specimens are usually much finer specially in females, but such antennal sculpture can be also sometimes observed in the specimens from the continent; antennae and legs red; prothorax with central dorsal glabrous spot, which is usually more or less elongated, its cuticula transversally rugose; each lateral side of prothorax with a pair of glabrous spots, anterior spots finally transversally rugose; each elytron with a pair of round glabrous spots and a humeral elongated glabrous spot; elytra; apices narrowly rounded; metathoracic episterna dark brown because of rather sparse pale pubescence (Fig. 2); abdomen with relatively sparse brownish pubescence, not hiding cuticula, and so uniformly dark-brown because of cuticula color. Abdominal sternites of specimens from Tsushima with rather distinct lateral black spots, which are indistinct in the continental specimens (at least in specimens from Russia).

Body length in available males: 11.0–22.0 mm; width: 2.5–4.6 mm; body length in available females: 17.6–20.6 mm, width at humeri: 3.6–4.5 mm. The smallest ever published length of the species was 13 mm [Makihara, 2007]. There is a male from near Partizansk (Russia) in Zoological Museum of Moscow University of 11 mm long.

DIFFERENTIAL DIAGNOSIS. The new species is very close to Chinese *O. subobliteratus* Pic, 1923 (Fig. 3) described from near Shanghai (Fig. 5) and also known from near Beijing by similar elytral design with two pairs of black spots. But *O. subobliteratus* has white episterna of metathorax (Fig. 4) because of dense white pubescence, while in *O. riparius* sp.n. metathoracic episterna dark brown (Fig. 2) because of sparse pale pubescence; abdomen with dense white setae, concentrated laterally and so with lateral white stripes, absent in new species, which has much darker abdomen because of sparse brownish pubescence; lateral dark spots of abdominal sternites in *O. subobliteratus* are hardly pronounced; first antennal joints relatively smooth, 3rd joint with only a few very small scattered granules.

O. clarus Pascoe, 1859 is not close to the new species. It is usually much smaller, the length of specimens from about 9 mm to about 15 mm; elytra always with three pairs of discal spots; ventral side of the body with relatively dense pale pubescence; lateral dark spots of abdominal sternites distinct. Most probably there are several species in Japan with the name «*O. clarus*».

REMARK. Plavilstshikov [1958] and then Tsherepanov [1983] declared the presence in Russia of a form with three pairs of central elytral spots as in *O. clarus*, but such specimens are not known from Russia. Later [Tsherepanov, 1996] that character was not mentioned for the species. The real *O. clarus* Pascoe, 1859 is known from China, Korea and big Japan islands.

The taxonomy position of Tsushima population is not clear. It can represent another taxon, because differs by several characters: first antennal joints are usually much smoother, abdominal sternites usually with black spots, which are indistinct in continental specimens, but stability of the distinguishing characters of Tsushima populations is not quite evident. Another food plant (*Morus bombycina*) of Tsushima population is also an evidence of another taxon.

DISTRIBUTION. The new species is rather common in the south part of Russian Primorye Region. Most of specimens were collected in Partizansk environs, others — nearby in Lazo Natural Reserve, including Sokolchi environs. It is also known all over Korean Peninsula, rather numerous in Tsushima Island, but absent in big Japan islands. *O. riparius* sp.n. must be widely distributed in China as two specimens are known from two very distant localities: Mt. Xiangmu-shan in Yunnan (27°07'N, 103°17'E) and Mt. West-Tianmu in Zhenjiang (30°20'N, 119°24'E).

BIOLOGY. In Russia larvae live [Tsherepanov & Tsherepanova, 1973] under the dead bark of Manchurian walnut

(*Juglans mandshurica* Maximowicz, 1856). In Tsushima Island the food plant is Satin mulberry (*Morus bombycina* Koidzumi, 1917) Pupation inside the wood in June. The generation lasts two years [Tsherepanov, 1985]. Imagoes are active from June to August, often attracted by light.

ETYMOLOGY. “*riparius*” — means “coastal” in Latin, that reflects the maritime Russian, Japan and Korean parts of the species area.

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References

- Hayashi M., Morimoto K. & Kimoto Sh. 1984. The Coleoptera of Japan in Color. Vol.4. Osaka: Hoikusha Publishing. 438pp.
- Hua L.-Z. 2002. Cerambycidae [pp. 189–237] // List of Chinese Insects. Vol. 2. Guangzhou: Zhongshan (Sun Yat-sen) University Press. 612 pp.
- Kojima K. & Hayashi M. 1969. Insects' Life in Japan. Vol. 1. Longicorn Beetles. Osaka: Hoikusha Publishing. 295pp.
- Kusama K. & Takakuwa M. 1984. Lamiinae (part.). P.374–461. // K. Kusama & M. Takakuwa (eds). The Longicorn-beetles of Japan in Color. Tokyo: Kodansha. 565 pp. 96 pls.
- Lee S.-M. 1982. Longicorn beetles of Korea (Col., Cer.). Insecta Koreana. Vol.1. 101 pp.
- Lee S.-M., 1987. The longicorn beetles of Korean Peninsula. Seoul: 287 pp. 26 pls.
- Lobanov A.L., Danilevsky M.L. & Murzin S.V. 1982. Sistematischeskiy spisok usachei (Coleoptera, Cerambycidae) fauny SSSR. II. // Entomologicheskoe Obozrenie. Vol.61. No.2. P.784–803.
- Lobl I. & Smetana A. (ed.), 2010. Catalogue of Palaearctic Coleoptera, Vol.6. Chrysomeloidea. Stenstrup: Apollo Books. 924 pp.
- Makihara H. 1976. [Cerambycidae of Tsushima Island. P. 371–383 // Biology of Tsushima Island. Nagasaki: Nagasaki Biological Society.] P.1–360. [In Japanese]
- Makihara H. 2007. Tribe Dorcaschematini Thomson 1860. P.608–612. // N. Ohbayashi & T. Niisato (eds). Longicorn beetles of Japan. Kanagawa: Tokai Univ. Press. 821pp.
- Mamaev B. M., Danilevsky M. L. 1975. Lichinki zhukov-drovosekov. Moscow: Nauka. 285pp.
- Ohbayashi K. 1963. Iconographia Insectorum Japonicum Color Naturali Edita. Vol.2. (Coleoptera). Family Cerambycidae. Tokyo. P.267–318.
- Ohbayashi N., Sato M. & Kojima K. 1992. An Illustrated Guide to Identification of Longicorn Beetles of Japan. Tokio: Tokai University Press. 697pp.
- Pascoe F.P. 1859. On new genera and species of longicorn Coleoptera. Part IV // The Transactions of the Entomological Society of London. Vol.5. Pt.2. P.12–61, pl. II.
- Pic M. 1923. Nouveautés diverses // Mélanges Exotico-Entomologiques. Fasc.40. P.1–32.
- Plavilstshikov N.N. 1958. Fauna SSSR. Zhestokrylye. T.23. Vyp.1. Zhuki-drovoseki. Ch.3. Podsemeistva Lamiinae. Ch.1. M.–L.: Izdatel'stvo Akademii Nauk SSSR, 591 + [1] pp.
- Tsherepanov A.I. 1983. Usachi Severnoy Azii (Lamiinae: Dorcadionini – Apomecynini). Novosibirsk: Nauka, 223 pp.
- Tsherepanov A.I. 1985. Usachi Severnoy Azii (Lamiinae: Saperdini, Tetraopini). Novosibirsk: Nauka. 256 pp. [in Russian].
- Tsherepanov A.I. 1996. [104. Fam. Cerambycidae — Longicorn or Timber beetles.] // Key to the insects of Russian Far East. Vol.III. Coleoptera. Pt.3. Vladivostok: Dal'nauka. P.56–140. [in Russian].
- Tsherepanov A. I. & Tsherepanova N. E. 1973. Morfologia lichinok i biologiya usachej gruppy Monochamus (Coleoptera, Cerambycidae), naselyayushchikh lesa Sibiri. P.38–70. In: Novye i maloizvestnye vidy fauny Sibiri. Vol.7. Novosibirsk: Nauka. 148 pp.