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A review of the Old World species of the genus *Blera* Billberg, 1820 (Diptera, Syrphidae), with descriptions of two new species and a subspecies

Обзор видов рода *Blera* Billberg, 1820 (Diptera, Syrphidae) Старого Света с описанием двух новых видов и одного подвида

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Key words: hover flies, new species, identification key, distribution, *Blera*.

Ключевые слова: мухи-журчалки, новые виды, определительный ключ, распространение, *Blera.*

Abstract. The Old World species of the genus *Blera* Billb. are reviewed. Two new species, *Blera flavitarsis* **sp.n.** and *Blera similis* **sp.n.,** and a subspecies *Blera kiotoensis atrata* **ssp.n.** are described. Lectotypes of *Blera japonica* (Shiraki, 1930) and *Blera kiotoensis* (Shiraki, 1950) are designated. A list of 14 species and information on their distribution is given. It is established that the subgeneric name *Silvia* Barkalov et Mutin, 1991 is an incorrect spelling of the name *Silvina* Barkalov et Mutin, 1991. An illustrated identification key to all species is provided.

Резюме. Проведён обзор мух-журчалок рода *Blera* Billb. Старо Света. Описано два новых вида — *Blera flavitarsis* ***sp. n.*** и *Blera similis* **sp. n.** и один подвид — *Blera kiotoensis atrata* **ssp. n.** Обозначены лектотипы видов *Blera japonica* (Shiraki, 1930) и *Blera kiotoensis* (Shiraki, 1950). Дан список 14 видов с информацией об их распространении. Установлено, что подродовое название *Silvia* Barkalov et Mutin, 1991b является неправильным последующим написанием названия *Silvina* Barkalov et Mutin, 1991. Дана иллюстрированная определительная таблица всех видов.

Introduction

The species of the genus *Blera* Billberg are comparatively large, bright colored flies in appearance, similar to bees. The genus is characterized by the following characters: face with distinct central knob, less developed in females; frons distinctly produced; antennae shorter then head width, arista dorsal; body covered long sometimes dense hairs; legs simple (only *B. nigrescens* has process on hind femur); bare and undeveloped metasternite; short apical section of vein R_{4+5} and rather large, variable in characters male genitalia. The genus is mostly Holarctic in distribution; only one species was described from the Oriental Region [Thompson, 2000]. The first revision of the East Palaearctic species of *Blera* was carried out by Stackelberg [1928]. He recorded five species, two of which, *B. eoa* Stackelberg, 1928 and *B. ochrozona* Stackelberg, 1928, he described as new. Shiraki [1930] provided a key to three species from Japan, one of which he described as new (*B. japonica* Shiraki, 1930). Later, Shiraki [1968] excluded *Blera fallax* Linnaeus, 1758 from the list of Japanese species because described on base of its material the new species — *Blera nipponica* Shiraki, 1968. In the same work he described another one new species —*Blera nigrescens* Shiraki, 1968. The genus was revised by Barkalov and Mutin [1991a, b]. According to this work, 10 species of *Blera,* belonging to two subgenera, were established for the Palaearctic Region. The revision included the description of two new species (*B. violovitshi* Mutin ex Barkalov et Mutin, 1991 and *B. yudini* Barkalov ex Barkalov et Mutin, 1991) and a new subgenus — *Silvina* Barkalov et Mutin. In the second part of this revision [Barkalov, Mutin, 1991b] this name was erroneously written as *Silvia*. The name *Silvia* Barkalov et Mutin, 1991b according article 33.3 of the International Code of Zoological Nomenclature [1999] is an incorrect subsequent spelling of the name *Silvina* Barkalov et Mutin, 1991. In a review of the Chinese species of the genus *Blera* [Barkalov, Cheng, 2011], five species were recorded from China, one of which was described as new (*B. longiseta* Barkalov et Cheng, 2011). Thus, at the beginning of the present review, twelve species of the genus *Blera* were known from the Old World.

Material and methods

The specimens examined, including type material of many species, are deposited in the following collections: SZMN — Siberian Zoological Museum of the Institute of Systematics and Ecology of Animals, Sibe-

rian Branch of the Russian Academy of Sciences (Novosibirsk, Russia); ZIN — Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia); OMNH — Osaka Museum of Natural History (Osaka, Japan); NIAES — National Institute for Agro-Environmental Sciences (Tsukuba, Japan); SEHU — Systematic Entomology, Hokkaido University (Sapporo, Japan); KIc — Private collection of Katsuyoshi Ichige (Ibaraki, Japan); KKc — Private collection of Kohjiro Katsura (Osaka, Japan); TBc — Private collection of Takamori Befu (Kochi, Japan); MTc — Private collection of Masato Takeuchi (Tokyo, Japan); IZCB — Institute of Zoology, Chinese Academy of Sciences (China, Beijing).

Species identification was established with the key in the 1991 revision of *Blera* [Barkalov, Mutin, 1991a, 1991b] and with the key to Japanese Syrphidae [Shiraki, 1930, 1968]. Drawings of male genitalia are given from the lateral side without selection of aedeagus. All drawings except *Blera himalaya* Thompson, 2000. are original and were prepared with the aid of an ocular grid and graph paper. Photos were taken with a Canon EOS 550D (Kiss X4) DSLR camera, and Canon EF-S 60 mm macro lens. Several photos of each specimen were taken in the same plane by moving the camera with a StackShot macro rail of Cognisys, Inc. After that, image stacks were aligned and assembled with the computer software Zerene Stacker, Zerene Systems LLC. For many species, we provide photos of male and female habitus, figures of male genitalia and female abdomen in dorsal view. Body length was measured dorsally from the anterior margin of the lunula to the tip of the abdomen. Wing length was measured from the tip of the wing to its base. Male genitalia were dissected and prepared for study following Hippa [1968]. Only references to literary sources that solved taxonomic questions are provided in the species accounts.

Holotypes and some paratypes of the new species are deposited in the Osaka Museum of Natural History (OMNH).

The list of species

Blera (*Silvina*) *eoa* (Stackelberg, 1928)

Figs 1A, B; 3A–B.

Cynorrhina eoa Stackelberg, 1928: Konowia, 7, 3: 255; the holotype is deposited in ZIN.

= *Blera velox* Violovitsh, 1976: 126.

Blera eoa: Violovitsh, 1983: 139; Barkalov, Mutin, 1991a: 206; 1991b: 743; van Veen, 2004: 40; Bartsch, 2009: 354.

Material. **Russia:** 1♂, environs Novosibirsk City, 11.06.1984, leg. N. Violovitsh, SZMN; 1♂, 1♀, Krasnoyarsk Territory, Central'nosibirskij Reserve, 20.06.2016, leg. A. Barkalov, SZMN; 1♀, Irkutsk Region, Slyudyanskij District, valley of Slenskaya River, 1974, SZMN; 1♂, Republic of Buryatia, Kokorino village, 5.07.1973, leg. Morozova, ZIN; 1♂, 2♀♀, Republic of Buryatia, Baikal Reserve, Tankhoj Station, 13.06.1980, leg. A. Barkalov, SZMN; 1♂, Republic of Buryatia, nothern slope of the Khamar-Daban ridge, 19.07.1986, leg Yu. Chekanov, SZMN; 1♂ Chita Area, Sokhondo Reserve, 12.06.1991, leg. V. Pekin, D. Logunov; 2♂♂, Primorskii Territory, environs Ussurijsk town, 15–17.06.1978, leg. A. Barkalov, SZMN; 2♂♂, Sakhalin Island, Ushno-Sakhalinsk town, 8.07.1957, leg. N. Violovitsh, SZMN; 1♂, Sakhalin Island, Kholmskij District, Slepikovskogo Foreland, 6–7.06.1991, leg. A. Basarukin, SZMN; 1♂, Kamtshatka, NW Nachiki settlement, 7.08.1967, leg. N. Violovitsh, SZMN. **Japan:** 1♀, Hokkaido, Mt. Shokan, 1.07.1971, leg. M. Suwa, SEHU; 1♀, Hokkaido, Mt. Daisetu, Kamikawa T., 18.07.2008, leg. K. Ichige, KIc; 3♂♂, 2♀♀, Honshu, Tochigi Pref., Okukinu-Rindo, Nikko C., 19.07.2013, leg. K. Ichige, KIc; 9♂♂, 3♀♀, Honshu, Yamanashi Pref., Makioka, Yamanashi C., 14.06.2008, leg. K. Ichige, KIc; 2♂♂, 1♀, Honshu, Nagano Pref., Mt. Torikura, Ohshika-mura, 22.06.2003, leg. K. Ichige, KIc; 1♂, Honshu, Hida, Yari-daira, 17.07.1969, leg. A. Nagatomi, OMNH; 1♂, Honshu, Gifu Pref., Abou Pass, Takayama C., 8–9.07.2013, leg. K. Ichige, KIc.

Distribution. Northern Sweden; Northern Finland; Northern Asia from Novosibirsk Region to Kamchatka and Sakhalin, Japan: Hokkaido, Honshu.

Blera (*Blera*) *fallax* (Linnaeus, 1758)

Figs 3C–D.

Musca fallax Linnaeus, 1758: 592; the lectotype is deposited in the Linnean Society of London.

= *Musca ruficaudis* Degeer, 1776: 127;

= *Syrphus seminiger* Panzer, 1804: 153;

= *Syrphus semirufus* Fabricius, 1794: 301;

= *Blera nipponica* Shiraki, 1968: 68.

Stackelberg [1928: 254] (*Cynorrhina*); Hippa [1978: 12]; Violovitsh [1983: 139]; Stubbs, Falk [1983: 109]; Torp [1984: 25]; Barkalov, Mutin [1991a: 206; 1991b:739]; van Veen [2004: 40]; Bartsch [2009: 355]; Barkalov, Cheng [2011: 353].

Material. **Finland**: 1♀, N: Tammisaari, Gullo, 665:29, 25.06.1988, leg. A. Barkalov, SZMN; **Russia:** 1♂, Moscow, Petrovsk-Razumovsk, 16.05.1932, leg. N. Violovitsh, SZMN; 1♂ Republic Altai, environs of Gorno-Altaisk town, 24.07.1979, leg. A. Barkalov, SZMN; Republic Altai, 2♂♂, Republic Altai, 7 km West Katanda settlement, 26, 30.06.1983, leg. A. Barkalov, SZMN; 3♂♂, 1♀, Republic Altai, 15 km South Katanda settlement, 8–24.07.1983, leg. A. Barkalov, SZMN; 1♀, Republic Altai, 10 km South-West Katanda settlement, 6.07.1983, leg. A. Barkalov, SZMN; 1♀, Republic Altai, 30 km South-West Abai settlement, 9.07.1964, leg. N. Violovitsh; 1♂, West Sayan, Bol'shoj On settlement, 19.06.1981, leg. A. Barkalov, SZMN; 6♂♂, 7♀♀, Krasnoyarsk Territory, Central'nosibirskij Reserve, Kulingda cordon, 4, 9.07.2016, leg. A. Barkalov, SZMN; 6♂♂, 8♀♀, Krasnoyarsk Territory, Central'nosibirskij Reserve, Stolbovaya cordon, 15–24.07.2016, leg. A. Barkalov, V. Zinchenko, SZMN; 1♀, Republic Tuva, Southern slope Khundurgun Ridge, 13.07.1963, leg. N. Violovitsh, SZMN; 1♂, Republic Tuva, Chagytai Lake, 15.08.1963, leg. N. Violovitsh, SZMN; 6♂♂, Republic Tuva, 20–25 km South Balgasyn, 10.07.1993, leg. A. Barkalov, SZMN; 1♀, Irkutsk Region, Listvenichnoe settlement, 19.07.1963, leg. Popova, SZMN; 4♂♂, 1♀, Irkutsk Region, mouth Khara-Murin river, 9.07–1.08.1984, leg. A. Barkalov, A. Ermolenko, SZMN; 1♀ Irkutsk Region, 20 km East Slyudyanka settlement, 22.07.1984, leg. A. Ermolenko, SZMN; 1♂, Irkutsk Region, 26 km East Baikalsk settlement, 30.07.1984, leg. A. Ermolenko, SZMN; 1♂, Irkutsk city, 23.07.1970, leg. S. Kulik; 1♀, Republic Buryatia, Bajkal'skij Reserve, Mishikha river, 24.06.1984, leg. B. Zakharov, SZMN; 4♂♂, 1♀ Baikal Reserve, Tankhoi settlement, 16–18.07.1980, leg. A. Barkalov, SZMN; 1♂, Republic Buryatia, nothern slope of the Khamar-Daban ridge, 19.07.1986, leg. Yu. Chekanov, SZMN; 2♂♂, Republis Buryatia, environs Kurumkan settlement, 25–26.06.1980, leg. A. Barkalov, SZMN; 1♀, Republic Buryatia, Taseevo settlement, 7.07.1973, leg. N. Kolomietz, SZMN; 3♀♀, Republic Buryatia, Temnic River, Taezhnyj settlement, 22.07.1985, leg. B. Zakharov; 1♀, Chita Region, Sokhondinskij Reserve, Ernistyj cordon, 12.08.1991, leg. A. Barkalov; 3♂♂, Chita Region, Sokhondinskij Reserve, Bukukunskoe Lake, 4–6.08.1991, leg. A. Barkalov, V. Pekin; 1♂, Republic of Buryatia, northern slope of the Khamar-Daban ridge, 19.07.1986, leg. Chekanov, SZMN;

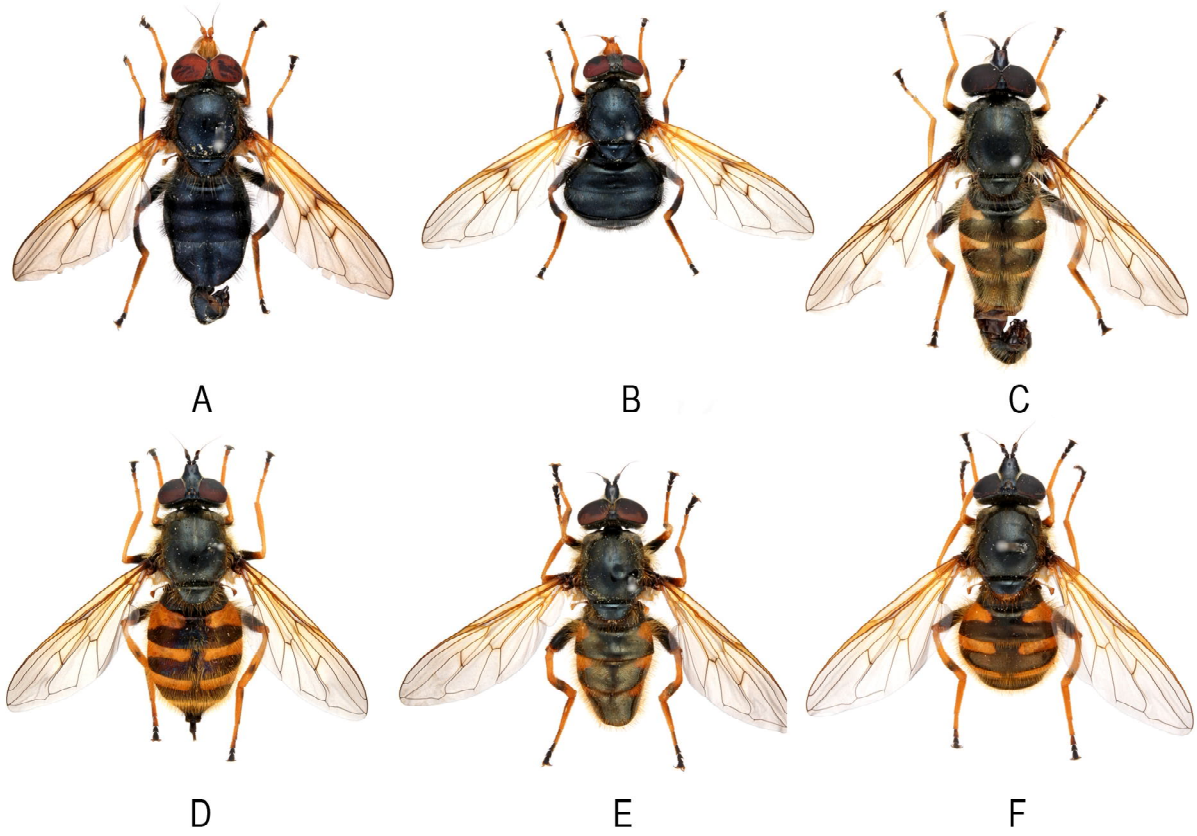

Fig. 1. *Blera* spp., dorsal view. A — *B. eoa* male. B — *B. eoa* female. C — *B. japonica* male. D — *B. japonica* female. E — *B. kiotoensis kiotoensis* male. F — *B. kiotoensis kiotoensis* female.

Рис. 1. *Blera* spp., вид сверху. A — *B. eoa* самец. B — *B. eoa* самка. C — *B. japonica* самец. D — *B. japonica* самка. E — *B. kiotoensis kiotoensis* самец. F — *B. kiotoensis kiotoensis* самка.

17♂♂, 1♀, Republic Sakha (Yakutia), 232 km from Khandyga to Magadan, 7.07–6.08.1985, leg. A. Barkalov, SZMN; 1♀, Magadan Region, South-East end of Bol'shoj Annachas Mountain Ridge, Sibit River, 15.07.1977, leg. S. Budarin, SZMN; 1♀, Primorskii Territory, Ussurijskij Reserve, 24.07.1978, leg. A. Barkalov, SZMN; 1♂, Sakhalin Island, Yushno-Sakhalinsk town, 24.07.1952, leg. N. Violovitsh. **Japan**: 1♂, Hokkaido, Teshio, 12.07.1916, leg. T. Isshiki, NIAES, the holotype of *Blera nipponica*; 1♂, 1♀, Hokkaido, Mt. Asahidake, Higashikawa T., 22.07.2001, leg. K. Katsura, KKc; 3♂♂, Hokkaido, Mt. Mokoto, Ozora T., 29.06.2008, leg. K. Ichige, KIc; **China:** 2♂♂, Nei Mongol Province, Suge River, 20.06.1957, IZCB; 1♀, Heilongjiang Province, Xinlin, 10.07.1970, IZCB.

Distribution. Coniferous forests of the Palaearctic from Scotland to the Magadan Region of Russia and North-East China; Japan: Hokkaido.

Blera (*Blera*) *flavitarsis* Ichige et Barkalov, **sp.n.**

Figs 4A–F.

Material. *Holotype*. ♂, **Japan:** Kyushu, Kumamoto Pref., Mt. Takatsukayama, Itsuki 26.05.2015, leg. K. Ichige, OMNH. *Paratypes*. **Japan:** 1♀, Honshu, Iwate Pref., Mt. Ohmori, Ohshu C., 19.06.2016, leg. K. Ichige, KIc; 1♂, Honshu, Yamagata Pref., Gomisawa, Oguni T., 30.05.2002, leg. M. Takeuchi, MTc; 2♂♂, 1♀, Honshu, Ibaraki Pref., Mt. Yamizo, 26.05.2002, leg. K. Ichige, KIc; 3♂♂, same locality and collector, 23.05.2009, KIc; 1♀, Honshu, Niigata Pref., Mt. Akakuzure, Uonuma C., 23.07.2007, leg. M. Takeuchi, MTc; 5♂♂, Shikoku, Kochi Pref., Mt. Kamegamori, 10.07.2011, leg. T. Befu, TBc; 1♀, Shikoku, Kochi Pref., Shiraidani, Ino T., 27.05.2012, leg. T. Befu, TBc; 1♂, Kyushu, Kumamoto Pref., Mt. Shiratori Yama, Yatsushiro C., 23.05.2015, leg. K. Ichige leg., SZMN; 1♀, same locality and collector, 24.05.2015, SZMN; 1♀, same data as holotype, KIc; 1♂, Kyushu, Nagasaki Pref., Mt. Taradake, 3.06.2001, leg. S. Murayama, KIc.

Diagnosis. This new species belongs to the nominative subgenus where it is close to *B. nitens*, *B. japonica* and *B. kiotoensis*. *B. flavitarsis* differs from these species in yellow 5th segments of all tarsi, distinctly dichoptic eyes of males (Fig. 4E) and characters of the male genitalia (Fig 4B). In *B. nitens*, *B. japonica* and *B. kiotoensis* the 5th segments of all tarsi black, eyes of males distincly holoptic or not so divided as on Fig. 4E, male genitalaia as on Figs 6D, 5B, 5D.

Description. *Male.* Body length 12.5–14.5 mm, wing length 9.5–11.0 mm. *Head.* Face with a deep depression in the dorsal third and with weak central knob (Fig. 4A), yellow, with comparatively broad black medial stripe. Cheeks, covered with dense whitish dusting, on eye-margins and on dorsal 1/3 with fine yellow hairs. Frons protruded anteriorly, shiny-black with narrow silver stripes laterally. Eyes distinctly dichoptic, bare (Fig. 4E). Antennae: scape and pedicel small black with gray dusting, basoflagellomere irregular shape, typical dark-orange ventrally and brown dorsally (Fig. 4D), arista bare, yellow in basal half and dark in apical half. Color of basoflagellomere varies from typical to almost dark-brown with only posteroventral angle yellowish. Vertex shiny-black, covered with predominantly black hairs, some yellow hairs posteriorly; ocellar triangle variable in shape — from isosceles to equilateral. *Thorax.* Humeral callus black with gray

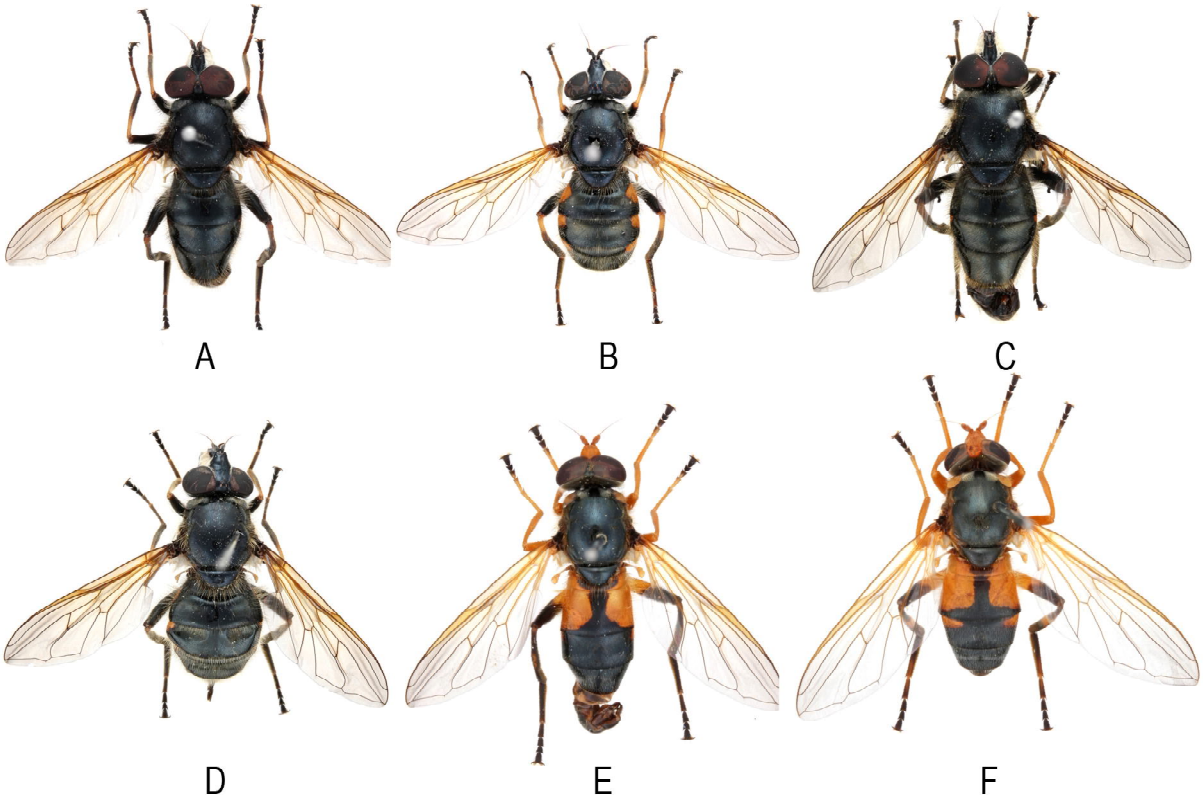

Fig. 2. *Blera* spp., dorsal view. A — *B. kiotoensis atrata* male. B — *B. kiotoensis atrata* female. C — *B. nigrescens* male. D — *B. nigrescens* female. E — *B. shirakii* male. F — *B. shirakii* female.

Рис. 2. *Blera* spp., вид сверху. A — *B. kiotoensis atrata* самец. B — *B. kiotoensis atrata* самка. C — *B. nigrescens* самец. D — *B. nigrescens* самка. E — *B. shirakii* самец. F — *B. shirakii* самка.

dusting and yellow hairs. Mesonotum shiny-black with bluish reflection, on anterior part and laterally with narrow stripes of gray dusting; covered with dense, erect, golden hairs. Scutellum black in anterior 2/3–1/2 and yellow in posterior part, covered with golden hairs. Pleura black with dense gray dusting and yellow hairs. *Legs* simple without process on hind femur and with straight femur and tibia. Coxae black with gray dusting and yellow hairs; trochanters shiny-black; fore femur black with extreme apex yellow, mid femur mostly black with narrowly yellow base and apex, hind femur without ventral process, yellow on basal ¼ and extreme apex and black otherwise, hairs on femora long yellow, only apex of hind femur with black hairs ventrally; tibia broadly yellow in basal part, narrowly yellow on tips and black in apical part, yellow parts on hind tibia shorter; tarsi yellow, segments 2-4 of fore tarsus brownish in basal part, hind basitarsus brownish dorsally. *Wing*. Translucent, veins yellowish in basal half and black in apical half, cell BM without microtrichia in basal 5/6, cell CuP without microtrichia in upper basal half; pterostigma yellowish. Halter and squama light-yellow. *Abdomen*. Elongate, oval, in broadest part narrower than scutum at level of wing base, predominantly black, only antero-lateral corner of tergite II and narrow spots on anterior part of tergites III–IV yellow (Fig. 4F); covered with erect yellow hairs, pregenital segments with black and yellow hairs. *Genitalia*. As in Fig. 4B.

Female. Body length 12.5–13.5 mm, wing length 11.0–12.5 mm. Similar to male except for sexual dimorphism. Frons broad, lateral silver stripes broader than in male. *Legs*. Color of femora varies very much — fore femur black with yellow tip or with yellow basal 1/3 and tip; mid femur black with yellow basal 1/5 and narrow ventral stripe, or yellow in basal half and black in apical half; hind femur yellow, with black apical 1/3–1/2; fore and mid tibia yellow with narrow brownish stripe on anterior half, hind tibia yellow with narrow black ring on apical 1/3. Abdomen broad oval, distinctly broader than scutum at level of wings base, yellow spots distinctly broader than in male (Fig. 4C), covered with yellow hairs, on tip of tergite V with some black hairs. Otherwise as in male.

Etymology. The species name reflects its characteristic feature, completely yellow tarsi.

Distribution. Japan: Honshu, Shikoku, Kyushu.

Blera (?) *himalaya* Thompson, 2000

Figs 5E–F.

Blera himalaya Thompson, 2000: Ent. News, 11, 3:181; the holotype is deposited in the Natural History Museum, London.

Distribution. India: Himachal Pradesh.

Notes. The subgeneric position of this species is not clear — the presence of yellow marks on abdomen suggest that *B. himalaya* can be attributed to nominative subgenus, but the morphology of the male genitalia, specifically absence of a lower lobe on the surstylus is similar to the subgenus *Silvina*. These morphological characters are also found in *B. longiseta*. To accurately establish the systematic position of these species, it is necessary to conduct a phylogenetic analysis incorporating DNA data.

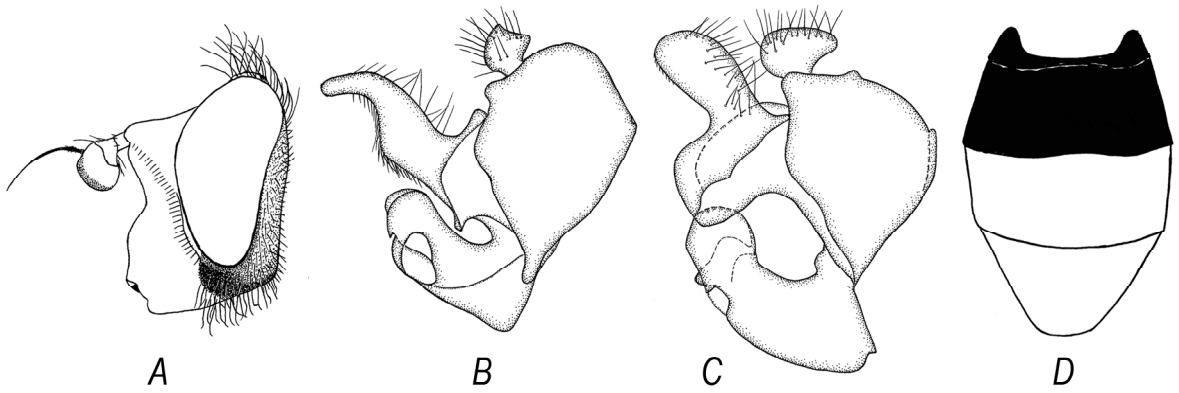

Fig. 3. A–B — *B. eoa:* A — male head, lateral view; B – male genitalia, lateral view. C–D — *Blera fallax:* C — male genitalia, lateral view; D — male abdomen, dorsal view.

Рис. 3. A–B — *Blera eoa*: A — голова самца, вид сбоку; B — гениталии самца, вид сбоку. C–D — *Blera fallax: C* — гениталии самца, вид сбоку; D — брюшко самца, вид сверху.

Blera (*Blera*) *japonica* (Shiraki, 1930)

Figs 1C–D, 5A–B, 11D–E.

Cynorrhina japonica Shiraki, 1930: 60; the lectotype is deposited in NIAES.

Violovitsh, 1983: 139; Barkalov, Mutin, 1991b: 743; Barkalov, Cheng, 2011: 353.

Material. **Russia:** 1♀, Primorskii Territory, Ussurijsk town, 19.06.1929, SZMN; 1♀, Primorskii Territory, Partizansk District, 15.06.1927, leg. Stackelberg, SZMN; 1♀, Sakhalin Island, 1.08.1959, leg. Violovitsh, SZMN; 1♀, Khabarovsk Territory, Bol'she-Khekhcirskij Reserve, environs of Bychikha settlement, 11.06.2005, leg. Dubatolov, SZMN. **Japan:** 2♀♀, Hokkaido, Tomakomai C., Misawa, 14.06.2006, leg. K. Ichige, KIc; 1♀, Hokkaido, Mt., Daisetu, Kamikawa T., 18.07.2008, leg. K. Ichige, KIc; 2♂♂, Hokkaido, Mt. Mokoto, Ozora T., 29.06.2008, leg. K. Ichige, KIc; 1♀, Honshu, Iwate, Ogasawara leg, NIAES, syntype of *Cynorrhina japonica*; 2♀♀, Honshu, Iwate Pref., Annaizawa, Kuzumaki T., 4.06.2016, leg. K. Ichige, KIc; 11♂♂, 1♀, Honshu, Tochigi Pref., Okukinu-Rindo, Nikko C., 24.06.2015, leg. K. Ichige; 1♂, 1♀, same place, time and collector, SZMN; 15♂♂, 5♀♀, Honshu, Yamanashi Pref., Makioka, Yamanashi C., 14.06.2008, leg. K. Ichige, KIc; 7♂♂, 2♀♀, Honshu, Gifu Pref., Abou Pass, Takayama C., 8–9.07.2013, leg. K. Ichige, KIc; 1♂, Honshu, Shin-hodaka, Hida, 13.07.1969, leg. A. Nagatomi, OMNH; 1♂, 1♀, Shikoku, Kochi Pref., Miyabino-oka, Kami C., 20–21.07.2014, leg. K. Ichige, KIc. **China:** 1♀, Nei Mongol Province, Manzhouli, 13.06.1940, IZCB.

Notes. Shiraki based this species on two females from different localities in Japan, such as Iwate and Shinano, but did not designate a holotype in his work. Amongst the syntype, deposited in the NIAES, there is a pinned female labeled 'olwate/gasaawra' (missepellings Iwate /ogasawara), '*Cynorrhina*/ *japonica* nsp. / Det. T. Shiraki' (handwritten except third line), 'Type' (round, in red) 'LECTOTYPE/ *Blera*/*japonica*/des. K.Ichige 2017' (yellow, printed). This specimen is here designated as the lectotype to fix and ensure the universal and consistent interpretation of the name. Specimen from Shinano is missing.

Distribution. Russia: Far East; Japan: Hokkaido, Honshu, Shikoku; China: Nei Mongol Province.

Blera (*Blera*) *kiotoensis* (Shiraki, 1950)

Figs 1E–F, 2A–B, 5C–D.

Cynorrhina kiotoensis Shiraki, 1950: fig. 4696; the lectotype is deposited in NIAES.

= *Cynorrhina kyotoensis* Shiraki, 1952.

Blera kyotoensis: Barkalov, Mutin, 1991b: 743.

Notes. Shiraki based this species on some male and females from Kyoto in Japan, but he did not designate the holotype. Amongst the syntypes, deposited in the NIAES, there is a pinned male labeled 'Kyoto/V.15.1949/T.Kimura' (some letters blurred), '*Cynorrhina* Type/*kiotoensis* sp.n./ Det. T. Shiraki' (handwritten except third line, Type in red), 'HOLOTYPE' (red plastic paper, label added later) 'LECTOTYPE/ *Blera*/*kiotoensis*/des. K. Ichige 2017' (yellow, printed). This specimen is here designated as the lectotype to fix and ensure the universal and consistent interpretation of the name. The other female syntype has been labeled as a paralectotype.

Blera kiotoensis has two morphs that differ strikingly in the color of the legs, abdomen and body pile. These differences are reflected in Table 1.

Table 1. Differences of morphological characters in males of *Blera kiotoensis*
Таблица 1. Различия морфологических признаков у самцов *Blera kiotoensis*

Black morph	Light morph
Vertex and occiput in dorsal part with mainly black hairs, only individual yellow hairs present on vertex	Vertex and occiput with yellow hairs, only individual black hairs present on dorsal part of occiput
Scutum and scutellum with black hairs, only postalar calli and hind margin of scutellum with yellow hairs	Scutum and scutellum with yellow hairs, only narrow strip of black hairs between wing base
Tibiae black, with yellow basal 1/2–1/3	Tibiae yellow, only hind tibia with narrow black band medially
Segments 1–2 of fore tarsus brown dorsally, segments 3–5 black; segments 1–2 of mid tarsus yellow, segments 3–5 black; hind tarsi black	Segments 1–2 of all tarsi yellow, segments 3–5 black
Abdomen with small yellow spots on anterior corners of tergites II–III, tergite IV with small almost invisible yellow spot (Figs 2A–B)	Abdomen with large, distinct triangular yellow spots on tergites II–IV (Figs 1F–G)
Hairs yellow on anterior corners of tergites I-III and almost completely on tergite IV	Hairs on abdominal tergites completely yellow

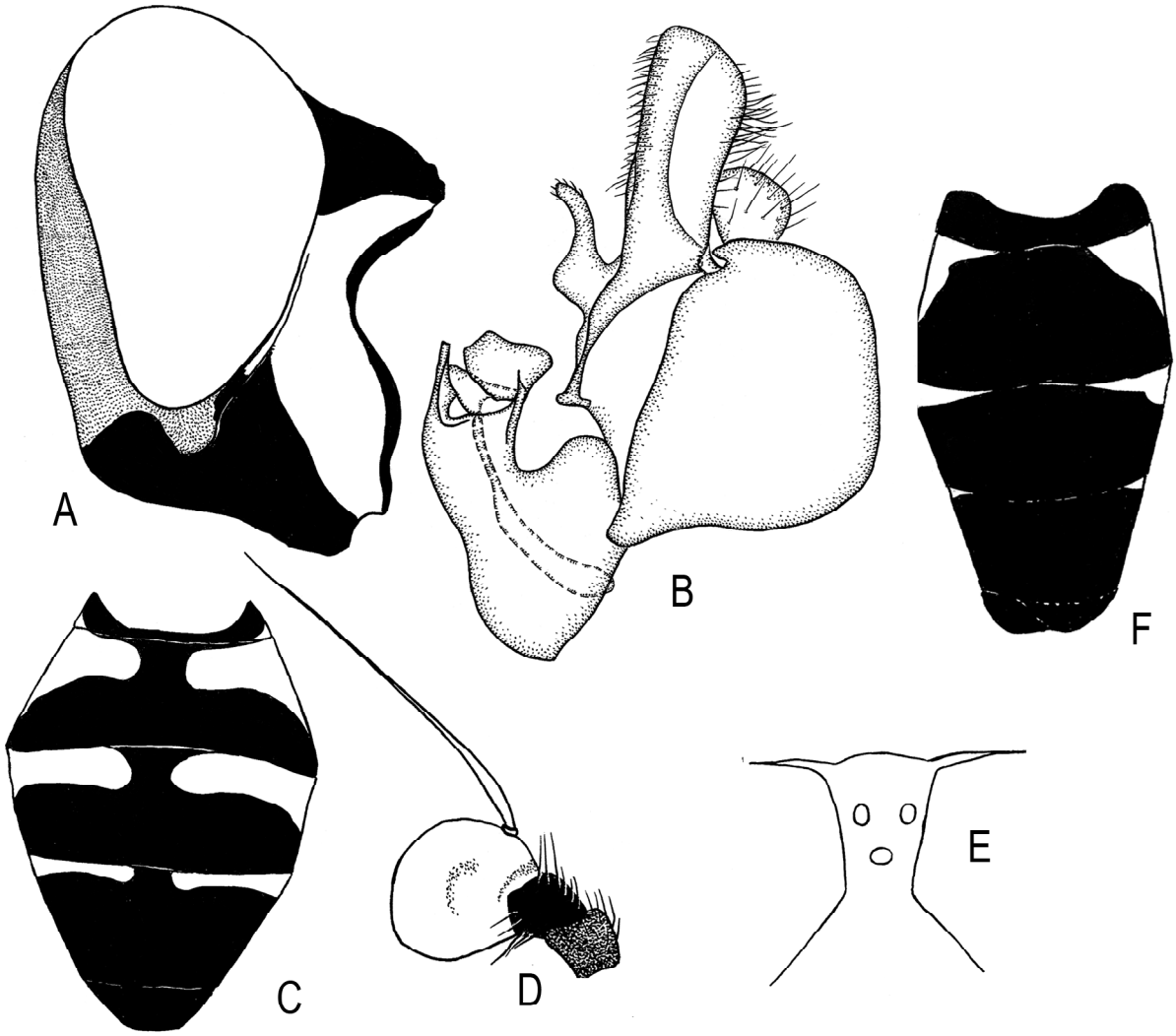

Fig. 4. *Blera flavitarsis* sp.n. A — male head, lateral view. B — male genitalia, lateral view. C — female abdomen, dorsal view. D — antenna, lateral view. E — male frons and occiput, dorsal view. F — male abdomen, dorsal view.

Рис. 4. *Blera flavitarsis* sp.n. A — голова самца, вид сбоку. B — гениталии самца, вид сбоку. C — брюшко самки, вид сверху. D — усик, вид сбоку. E — лоб и затылок самца, вид сверху. F — брюшко самца, вид сверху.

These two morphs also have distributional differences — the black one inhabits Shikoku Island and the South-West part of Honshu Island. The light morph inhabits the North-East to central part of Honshu Island (Fig. 7). All these differences are sufficient to distinguish two independent taxa of subspecies level — *Blera kiotoensis kiotoensis* (Shiraki, 1950), light morph and *Blera kiotoensis atratus* ssp.n., black morph.

Blera (*Blera*) *kiotoensis kiotoensis* (Shiraki, 1950)

Figs 1E–F, 5C–D.

Material. **Japan:** 1♂, Honshu, Iwate Pref., Mt. Ohmori, Ohshu C., 19.06.2016, leg. K. Ichige, KIc; 1♂, 4♀♀, Honshu, Ibaraki Pref., Mt. Yamizo, 23.V.2008, leg. K. Ichige, KIc; 2♂♂, 1♀, same locality and collector, 23.05.2009, KIc; 1♂, 1♀, Honshu, Tochigi Pref., Okukinu-Rindo, Nikko C., 19.07.2013, leg. K. Ichige, SZMN; 2♂♂, 1♀, Honshu, Tochigi Pref., Yunoko, Nikko C., 10.06.2015, leg. K. Ichige, KIc; 2♂♂, 2♀♀, Honshu, Tochigi Pref., Meotobuchi spa, Nikko C., 11.05.2015, leg. K. Ichige, KIc; 1♂, 1♀, Honshu, Yamanashi Pref., Makioka, Yamanashi C., 14.06.2008, leg. K. Ichige, KIc; 1♂, 1♀, Honshu, Gifu Pref., Abou Pass, Takayama C., Gifu Pref., 8–9.07.2013, leg. K. Ichige, KIc; 1♂, 1♀, Honshu, Kyoto, 15.05, leg. T. Kimura, NIAES, syntypes of *Blera kiotoensis*.

Blera (*Blera*) *kiotoensis atrata* Ichige et Barkalov, **ssp.n.**

Figs 2A–B.

Material. *Holotype.* ♂, **Japan:** Shikoku, Tokushima Pref., Nakaoyama, Mima C., 23.05.2014, leg. K. Ichige, OMNH. *Paratypes.* **Japan:** 2♂♂, Honshu, Nara Pref., Tenkawa V., 28.06.2003, leg. K. Katsura, KKc; 1♂, Honshu, Nara Pref., Mt. Wasamata-yama, 4.05.1998, leg. K. Katsura, KKc; 1♂, Honshu, Yamaguchi Pref., Mt. Jyakuchi, 5.06.2004, leg. S. Tanaka, KIc; 1♂, same locality and collector, 2.06.2004, KIc; 1♀, Honshu, Yamaguchi Pref., Kawazu-kyo, 17.05.2003, leg. S. Tanaka, KIc; 2♂♂, Shikoku, Ehime Pref., Mt. Kanpuzan, Saijo C., 19.05.2014, leg. K. Ichige, KIc; 2♂♂, 1♀, same data as holotype, KIc: 1♂, same data as holotype, SZMN; 1♂,

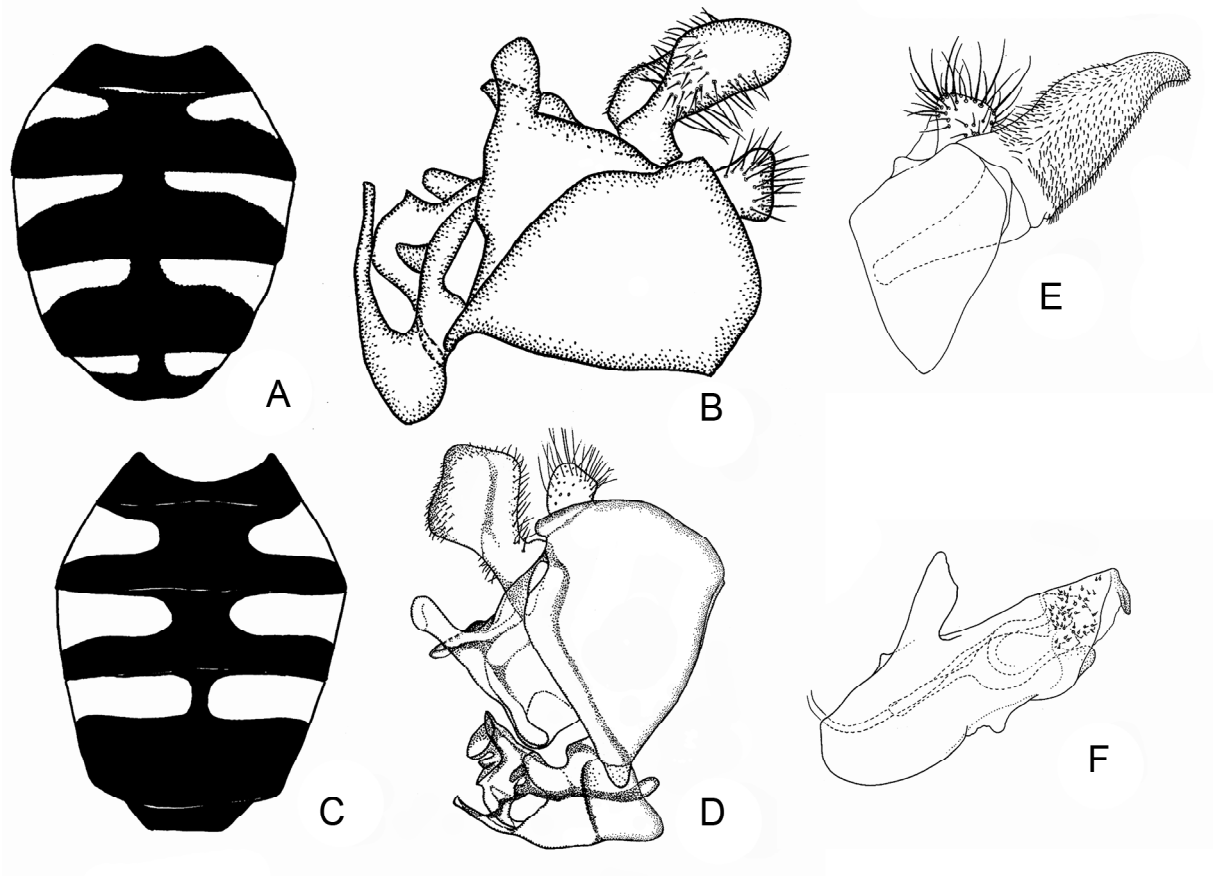

Fig. 5. *Blera japonica* A–B. *Blera kiotoensis kiotoensis* C–D. *Blera himalaya* E, F. A, C: female abdomen, dorsal view. B, D, E, F: male genitalia, lateral view. After Thompson, 2000 (Figs E-F) and original.

Рис. 5. *Blera japonica* A–B. *Blera kiotoensis kiotoensis* C–D. *Blera himalaya* E, F. A, C: брюшко самки, вид сверху. B, D, E, F: гениталии самца, вид сбоку. По Томпсону [Thompson, 2000] — Рис. E-F и оригинал.

Shikoku, Kochi Pref., Tengu-Kogen, Tsuno T., 13.05.2007, leg. T. Befu, TBc; 4♂♂, Shikoku, Kochi Pref., Shiraidani, Tsuno T., 4.06.2011, leg. T. Befu, TBc.

Etymology. The subspecies name reflects its characteristic feature, almost completely black abdomen with reduced yellow spots.

Blera (?) *longiseta* Barkalov et Cheng, 2011

Figs 8A–D.

Blera longiseta Barkalov et Cheng, 2011: 351; the holotype is deposited in IZCB.

Material. Only the holotype was studied. It has following label: Xizang, Milin, N of Duoxiongla Shan, 4000 m, 13 Aug. 1975 (in Chinese), IZCB.

Distribution. China: the South-East of Tibet.

Notes. The lack of a subgeneric position of this species was discussed under *B. himalaya*.

Blera (*Blera*) *nigrescens* Shiraki, 1968

Figs 2C–D, 6A–B.

Blera nigrescens Shiraki, 1968: 71; the holotype is deposited in NIAES.

Barkalov, Mutin, 1991b: 737.

Material. **Japan:** 1♂, Kyushu, Hikosan, 23.05.1950, leg. N. Fukuhara, NIAES, the holotype of *Blera nigrescens*; 1♂, Kyushu, Hikosan, 24.05.1950, leg. N. Fukuhara, NIAES, the paratype of *Blera nigrescens*; 6♂♂, 1♀, Kyushu, Kumamoto Pref., Mt. Shiratori, Yatsushiro C., 23.05.2015, leg. K. Ichige, KIc; 3♂♂, 1♀, same place, time and collector, SZMN; 10♂♂, same locality and collector, 24.05.2015 KIc; 1♀, Kyushu, Kumamoto Pref., Mt. Takatsukiyama, Itsuki, 26.05.2015, leg. K. Ichige, KIc.

Distribution. Japan: Kyushu.

Blera (*Blera*) *nitens* (Stackelberg, 1923)

Figs 6C–D, 11C.

Cynorrhina nitens Stackelberg, 1923: 22; the holotype is deposited in ZIN.

= *Cynorrhina pallipes* Stackelberg, 1928: 254.

Cynorrhina nitens: Stackelberg, 1928: 255;

Blera nitida Stackelberg: Hippa, 1978: 12, figure of genitalia of *B. japonica* Shir. as *B. nitida* Stack.;

Blera nitens:Violovitsh, 1983: 138; Barkalov, Mutin, 1991a: 207, 1991b: 743; Barkalov, Cheng, 2011: 354.

Material. **Russia:** 1♂, West Sayan Mountain ridge, environs Bol'shoi On settlement, 17.06.1981, leg. A. Barkalov, SZMN; 1♂, Republic Tuva, Southern slope of Khundurgun Mountain ridge, 13.07.1963, leg. N. Violovitsh, SZMN; 1♂, 1♀, Republic Buryatia, Baikal'skij Reserve, Tankhoi settlement, 16, 18.07.1980, leg. A. Barkalov, SZMN; 7♂♂, Republic Sakha (Yakutia), 232 km from Khandyga to Magadan, 7–26.07.1985, leg. A. Barkalov, SZMN; 1♂, 1♀, Primorskii Territory, Sikhote-Alin' Mountain ridge, 20, 24.06.1929, ZIN; 1♂, Khabarovsk Territory, environs of Khabarovsk city, Bol'shekhekcirskij Reserve, 28–29.06.2013, leg. V. Dubatolov, SZMN; 1♂, Primorskii Territory, Partizanskij Region, Tigrovaya settlement, 10.06.1927, leg. A. Stackelberg; **China:** 1♂, Jilin Province, Changbai Shan, 21.07.1966, IZCB.

Distribution. Russia: from the Ural to Primorskii Territory; China: Jilin Province; Korea.

Blera (*Blera*) *ochrozona* (Stackelberg, 1928)

Figs 6E–F.

Cynorrhina ochrozona Stackelberg, 1928: 256; the holotype is deposited in ZIN.

Blera ochrozona: Violovitsh, 1983: 139; Barkalov, Mutin, 1991b: 739.

Material. 1♂, 1♀, **Primorskii Territory,** environs Ussurijsk town, 14.06.1978, leg. A. Barkalov, SZMN.

Distribution. Russia: South of Far East.

Blera (*Blera*) *shirakii* Barkalov et Mutin, 1991

Figs 2E–F, 9G.

Xylota basalis Shiraki, 1968:101; the holotype is deposited in NIAES.

Blera shirakii Barkalov et Mutin, 1991a: 207; Barkalov, Mutin, 1991b: 739.

Material. **Japan**: 2♂♂, 4♀♀, Honshu, Ibaraki Pref., Mt. Yamizo, 23.05.2008, leg. K. Ichige, KIc; 1♀, same place, time and collector, SZMN; 2♂♂, Honshu, Tochigi, Pref., Meotobuchi spa, Nikko C., 24.05.2012, leg. K. Ichige, KIc; 2♂♂, same place, time and collector, SZMN; 1♀, Honshu, Kamikochi, 25.07.1931, leg. T. Iida, the holotype of *Xylota basalis,* NIAES; 2♀♀, Shikoku, Ehime Pref., Kanayamadami, Kumakogen T., 19.05.2014, leg. K. Ichige, KIc.

Distribution. Japan: Hokkaido, Honshu, Shikoku.

Blera (*Blera*) *similis* Ichige et Barkalov, **sp.n.**

Figs 9A–F, H.

Material. *Holotype:* ♂, **Japan:** Kyushu, Kumamoto Pref., Mt. Shiratori Yama, Yatsushiro C., 23.05.2015, leg. K. Ichige, OMNH. *Paratypes:* **Japan:** 2♂♂, Honshu, Iwate Pref., Annaizawa, Kuzumaki T., 4.06.2016, leg. K. Ichige, KIc; 1♂, Honshu, Yamagata Pref., Fubokaku, Yonezawa C., 17.06.2007, leg. M. Takeuchi, MTc; 4♂♂, Honshu, Ibaraki Pref., Mt. Yamizo, 23.05.2009, leg. K. Ichige, KIc; 2♂♂, 1f♂♂, Honshu, Tochigi, Pref., Meotobuchi spa, Nikko C., 14.05.2015, leg. K. Ichige, KIc; 1♂, 1♀, Honshu, Yamanashi Pref., Makioka, Yamanashi C., 9-10.06.2008, leg. K. Ichige, KIc; 1♂, Honshu, Yamaguchi Pref., Mt. Jyakuchi, 6.06.2005, leg. S. Tanaka, KIc; 7♂♂, Shikoku, Tokushima Pref., Nakaoyama, Mima C., 23.05.2014, leg. K. Ichige, KIc; 1♀, Shikoku, Kochi Pref., Miyabino-oka, Kami C., 20–21.07.2014, leg. K. Ichige, KIc; 2♂♂, 1f♂♂, Shikoku, Kochi Pref., Shiraidani, Ino T., 27.05.2012, leg. T. Befu, TBc;

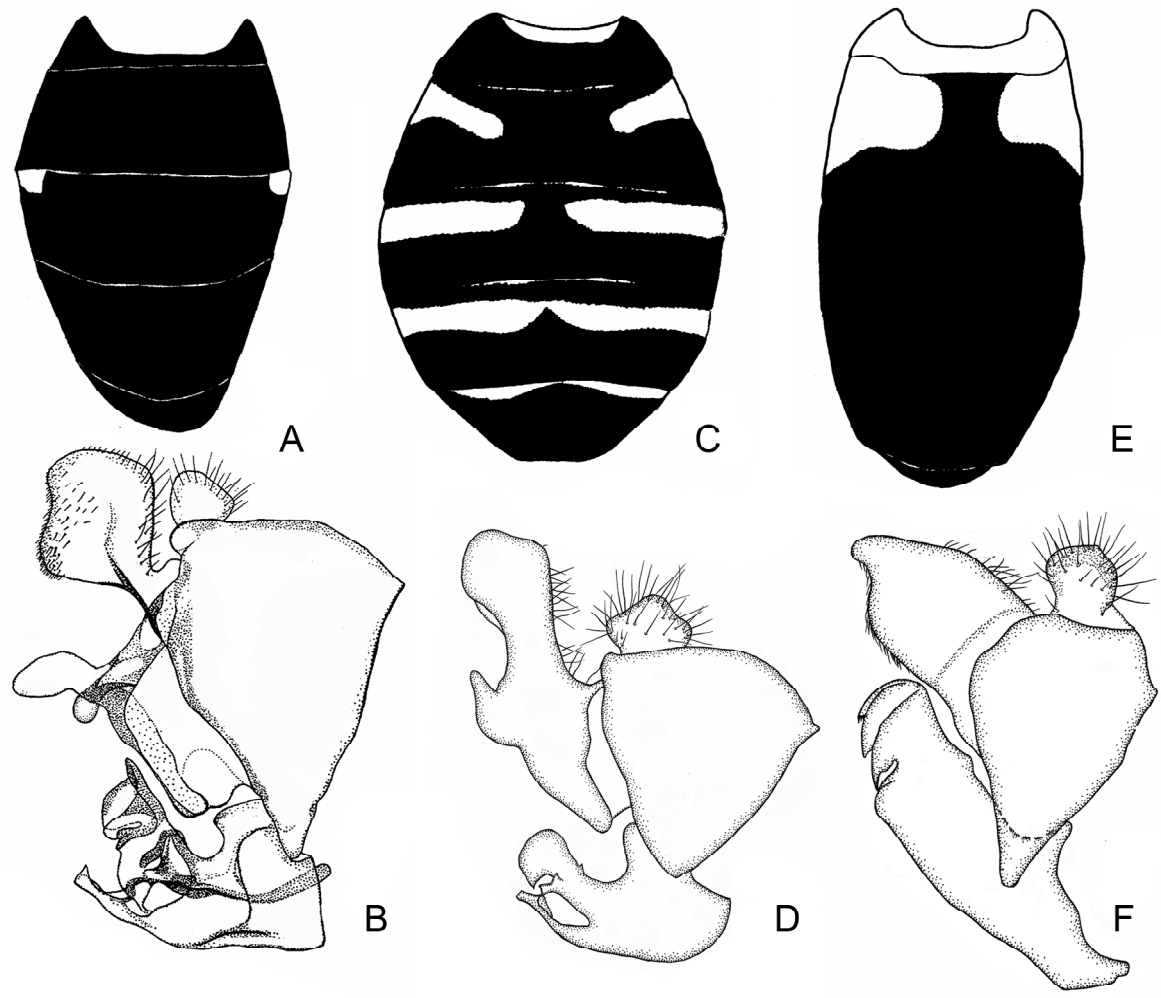

Fig. 6. *Blera nigrescens* A–B. *Blera nitens* C–D. *Blera ochrosona* E–F. A, E: male abdomen, dorsal view. C: female abdomen, dorsal view. B, D, F: male genitalia lateral view.

Рис. 6. *Blera nigrescens* A–B. *Blera nitens* C–D. *Blera ochrosona* E–F. A, E: брюшко самца, вид сверху. C: брюшко самки, вид сверху. B, D, F: гениталии самца, вид сбоку.

10♂♂, 1♀, same data as holotype, KIc; 2♂♂, 2♀♀, same data as holotype, SZMN; 9♂♂, 8♀♀, same locality and collector as holotype, 24.05.2015, KIc.

Diagnosis. The new species belongs to nominative subgenus. It is close to *B. nitens* and *B. japonica* but differs in presence of notch in the middle part of posterior margin of sternite IV and by characters of male genitalia (Fig. 9B).

Description. *Male.* Body length 11.0–15.0 mm, wing length 9.0–12.0 mm. *Head.* Face distinctly protruded anteroventrally with central knob finely developed, yellow with narrow, black medial stripe and broad black stripe in ventral part (Fig. 9A), covered with comparatively long yellow hairs in dorsal third and on eye-margin. Cheeks with long, dense, waving on tops hairs. Frons protruded anteriorly, black. Antenna black, scape and postpedicel with gray dusting; arista long yellow in basal half and black in apical half (Fig. 9C). Eyes distinctly dichoptic (Fig. 9F), bare. Vertex shiny, covered with long golden hairs and some black hairs on hind sides; ocellar triangle equilateral. *Thorax.* Postpronotum with dense gray dusting and golden hairs. Mesonotum shiny-black, with long, dense erect, yellow hairs and with stripe of same length, dense black hairs between bases of wings. Scutellum black in anterior half and yellow in posterior half, covered with long golden hairs. Pleura black with dense gray dusting and long, wavy golden hairs. Legs: coxae black with gray dusting and golden hairs; femora black with yellow apices, covered with yellow hairs and some black hairs on apical third of each femur; hind femur without ventral process; tibiae yellow, hind tibia with narrow black ring medially; tarsi with yellow segments 1–2, brown segment 3 and black segments 4–5. *Wing:* hyaline, veins yellow in basal half and black in apical half; cell BM completely microtrichose, cell CuP with narrow bare stripe near vena spuria. Halter and squama yellow. *Abdomen:* oval, in broadest part approximately equal to breadth of scutum at level of wing base, predominantly black, tergites II–IV with triangular yellow spots (Fig. 9D), covered with long, dense, erect, orange hairs; sternite IV with notch in the middle of posterior margin (Fig. 9H). *Genitalia.* As in Fig. 9B.

Female. Body length 12.5–14.5 mm, wing length 11.0–12.5 mm. Similar to male except for sexual dimorphism. Frons comparatively narrow, black, shiny except narrow stripes of gray dusting laterally, with yellow hairs; vertex with black and yellow hairs. All tarsi with segments 1–3 yellow and black segments 4–5. Abdomen rounded, distinctly broader then scutum at level of wing base, tergites II–IV with big orange spots almost completely occupying tergites (Fig. 9E), covered with orange hairs. Otherwise — as in the male.

Etymology. The species is named after its external similarity to *Blera japonica*.

Distribution. Japan: Honshu, Shikoku, Kyushu.

Blera (*Blera*) *violovitshi* Mutin ex Barkalov et Mutin, 1991

Figs 10A–C.

Blera violovitshi Mutin ex Barkalov et Mutin, 1991a: 209; the holotype is deposited in ZIN; Barkalov, Mutin, 1991b: 740; Barkalov, Cheng, 2011: 354.

Material. **Russia:** 1♂, 1♀, Krasnoyarsk Territory, Central'nosibirskij Reserve, Komsa cordon, 19–23.06.2016, leg. A. Barkalov, V. Zinchenko, SZMN; 1♂, 1♀, Republic Sakha (Yakutia), 232 km from Khandyga to Magadan, 1–7.07.1985, leg. A. Barkalov, SZMN; 1♀, Khabarovskij Territory, Tugur settlement, 17.07.1943, leg. Kuznetsov, SZMN; 1♂, Magadan Region, Lamutskoe settlement, 28.06.1968, leg. Novikova, SZMN.

Distribution. Russia: East Siberia, Khabarovsk Territory.

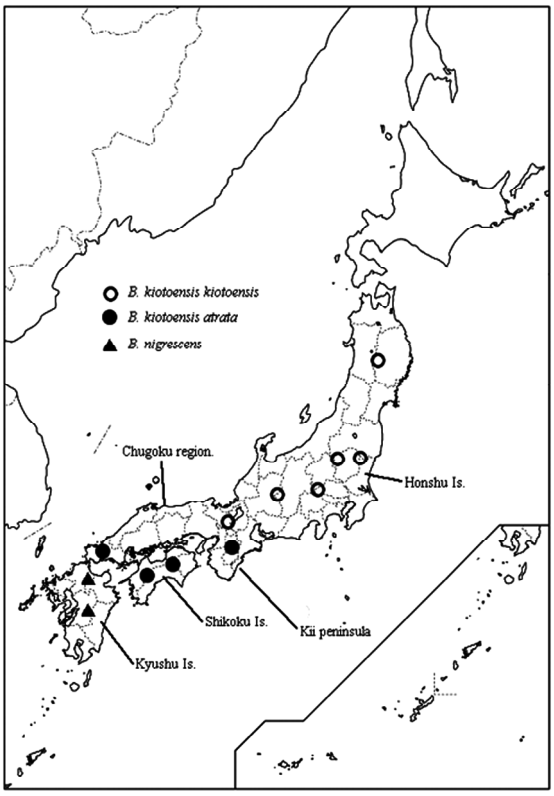

Fig. 7. Map of distribution *Blera kiotoensis kiotoensis*, *Blera kiotoensis atrata* and *Blera nigrescens*.

Рис. 7. Карта распространения *Blera kiotoensis kiotoensis*, *Blera kiotoensis atrata* и *Blera nigrescens*.

Blera (*Silvina*) *yudini* Barkalov ex Barkalov et Mutin, 1991

Figs 10D–G.

Blera (*Silvina*) *yudini* Barkalov ex Barkalov et Mutin, 1991a: 211; the holotype is deposited in ZIN; Barkalov, Mutin, 1991b: 743.

Material. **Russia:** 2♂♂, 1♀, Republic Sakha (Yakutia), 232 km from Khandyga to Magadan, 1–7.07.1985, leg. A. Barkalov, the Holotype and Paratypes, ZIN and SZMN; 1♂, Republic Sakha (Yakutia), Khandyga settlement, 12.06.1985, leg. A. Barkalov, SZMN; 1♀, Republic Sakha (Yakutia), environs Ust'-Maya settlement, 23.05.1976, leg. A. Bagatshanova, SZMN; 1♂, Magadan Region, Lamutskoe settlement, 28.06.1968, leg., Novikova, SZMN; 1♀ Khabarovsk Territory, Sikhote-Alin' Mountain range, Botchinskij Reserve, 48°18'N, 139°35'E, 23.06.2016, leg. V. Dubatolov, SZMN.

Distribution. Russia: East Siberia, Yakutia and Khabarovsk Teritory.

Key to species of Old World *Blera*

1. Postpronotum yellow at least ventrally 2
— Postpronotum black or black with gray or yellow dusting 5
2. Scutellum and hind femur black. Male genitalia as in Fig. 9G ..... *B. shirakii*
— Scutellum at least in apical half yellow, hind femur yellow on basal 2/3 and black on apical 1/3 or yellow in base and apex, black elsewhere 3

3. Mesonotum without yellow-brown or orange lateral stripes. Male genitalia as in Fig. 8C ..... *B. longiseta*
— Mesonotum with yellowish-brown or orange lateral stripes 4
4. Scutellum completely yellow, hind femur yellow apically. Male genitalia as in Figs 5E–F ..... *B. himalaya*
— Scutellum dark-brown on basal half, hind femur black apically. Male genitalia as in Fig. 6F ..... *B. ochrozona*
5. Abdominal tergites IV-V reddish-yellow. Male genitalia as in Fig. 3C ..... *B. fallax*
— Abdominal tergites IV–V entirely black or black with yellow spots, or with narrow yellow stripes 6
6. Face yellow, without medial black stripe 7
— Face yellow with black medial stripe 8
7. All tarsi with segments 1–3 yellow contrasting with black segments 4 and 5, abdominal tergites III–IV predominantly black haired. Male genitalia as in Fig. 3B ..... *B. eoa*
— All segments of tarsi dark-brown to black, abdominal tergites III–IV with only yellow hairs or with some black hairs along posterior margin of tergite III. Male genitalia as in Fig. 10F ..... *B. yudini*
8. Fore tarsus entirely yellow. Male genitalia as in Fig. 4B ..... *B. flavitarsis* sp.n.
— At least 2 apical segments of fore tarsus black 9
9. Yellow spots on tergite III large, connected, and forming broad stripe (Fig. 10B). Male genitalia as in Fig. 10C ... . *B. violovitshi*
— Yellow spots on tergite III narrower, not connecting or without spots. Male genitalia are different 10
10. Males 11
— Females 16
11. Hind tibia distinctly curved (Fig. 11A–B) 12
— Hind tibia straight, not curved (Fig. 11E) 14
12. Hind femur in apical 1/3 with black process which is covered with black setae (Fig. 11A) ..... *B. nigrescens*
— Hind femur without such process (Fig. 11B) 13
13. Abdomen with large, distinct, triangular yellow spots (Fig. 1E), hairs on abdomen completely yellow .... *B. kiotoensis kiotoensis*
— Abdomen with small yellow spots on anterior corners of tergites II–III, tergite IV with very small or without yellow spots (Fig. 2A); hairs on abdomen yellow on anterior corners of tergites I–III and almost completely on tergite IV, black elsewhere ..... *B. kiotoensis atrata* ssp.n.
14. Epandrium with two large lateral triangular processes (Fig. 9B), posterior margin of sternite IV with notch in the middle (Fig. 9H) ..... *B. similis* sp.n.
— Epandrium without such process, rounded (Figs 5B, 6D), posterior margin of sternite IV without such notch 15
15. Hind femur anteriorly and ventrally with many long yellow hairs, these more than width of femur (Fig. 11D). Genitalia as in Fig. 5B ..... *B. japonica*
— Hind femur anteriorly without long hairs, ventrally with only few long hairs (Fig. 11C). Genitalia as in Fig. 6D .... *B. nitens*
16. 3rd segment of fore tarsus yellow; hind femur straight (Fig. 11E) 17
— 3rd segment of fore tarsus black or brown; hind femur finely curved (Fig. 11F) 18
17. Apex of scutellum black ..... *B. japonica, B. nitens*
— Apex of scutellum yellow ..... *B. similis* sp.n.
18. Apex of scutellum yellow ..... *B. kiotoensis*
— Scutellum completely black ..... *B. nigrescens*

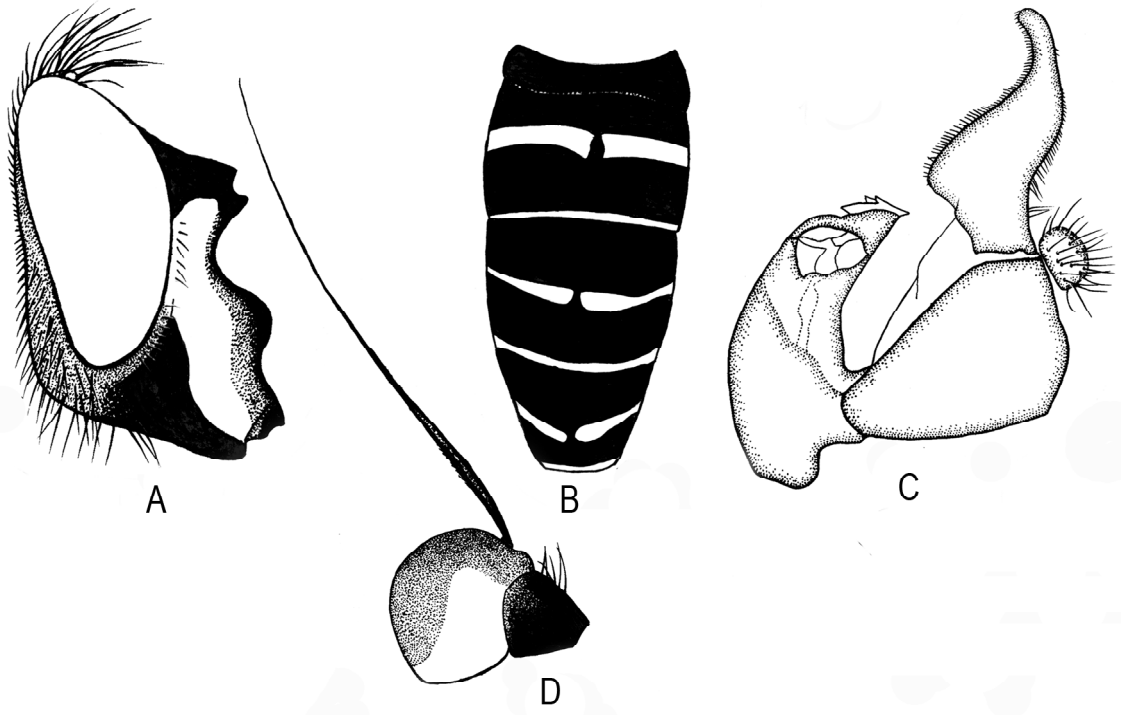

Fig. 8. *Blera longiseta* male. A: head, lateral view. B: abdomen, dorsal view. C: genitalia, lateral view. D: antenna, lateral view. After Barkalov, Cheng, 2011.

Рис. 8. *Blera longiseta* самец. A: голова, вид сбоку. B: брюшко, вид сверху. C: гениталии, вид сбоку. D: усик, вид сбоку. По Barkalov, Cheng, 2011.

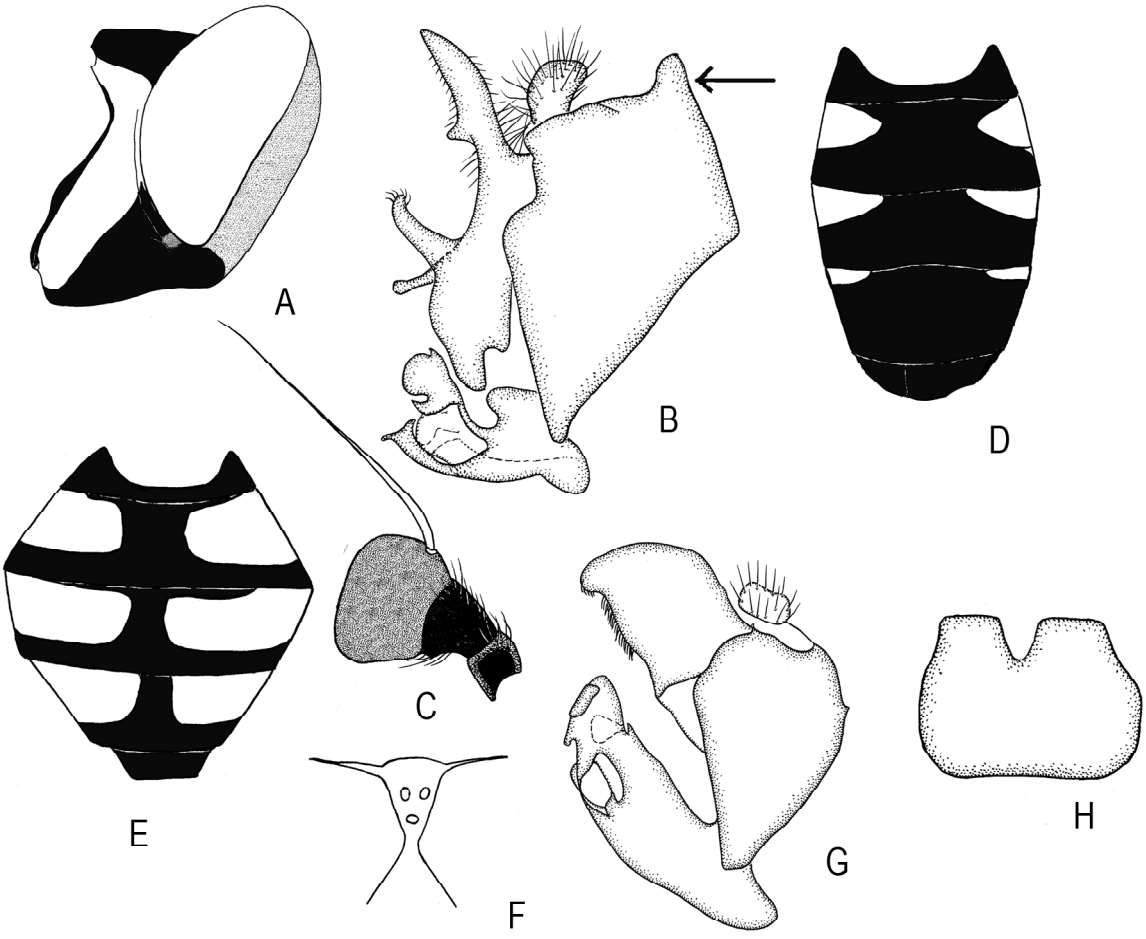

Fig. 9. *Blera similis* sp.n. A–F, H. *Blera shirakii* G. A: male head, lateral view. B, G: male genitalia, lateral view. C: antenna, lateral view. D: male abdomen, dorsal view. E: female abdomen, dorsal view. F: male frons and occiput, dorsal view. H: male sternite V, ventral view.

Рис. 9. *Blera similis* sp.n. A–F, H. *Blera shirakii* G. A: голова самца, вид сбоку. B, G: гениталии самца, вид сбоку. C: усик, вид сбоку. D: брюшко самца, вид сверху. E: брюшко самки, вид сверху. F: лоб и затылок самца, вид сверху. H: 5-й стернит самца, вид снизу.

Conclusion

Thus, the fauna of the Old World presently includes 14 species of the genus *Blera*, similar to the fauna of the Nearctic which has 15 species. *Blera* have not been found in the Afrotropics, Australasia or Oceania of the Old World. The apparent uneven regional distribution of species of *Blera* should be noted. In the European part of the Palaearctic there are only two species. *Blera fallax* which has a trans-Palearctic distribution, and *B. eoa* which only reaches Europe in northern Scandinavia. In the remainder of the Palearctic *B. nitens* has its western limit in the Asian part of the Urals. Six *Blera* species are recorded from eastern mainland Asia. In contrast there is unusually high species diversity in the Japanese Islands where eight species have now been recorded. Such current species richness and the presence of two subspecies of one species, separated by a relatively small geographical barrier, indicate active speciation in the Far Eastern part of the Palaearctic. Unfortunately, we have very little information on habitat preferences of species of this genus (except *B. fallax*), but it appears that species are generally confined to forest ecosystems of the nemoral and taiga types. *Blera* have not been found in steppe or tundra regions.

Acknowledgments

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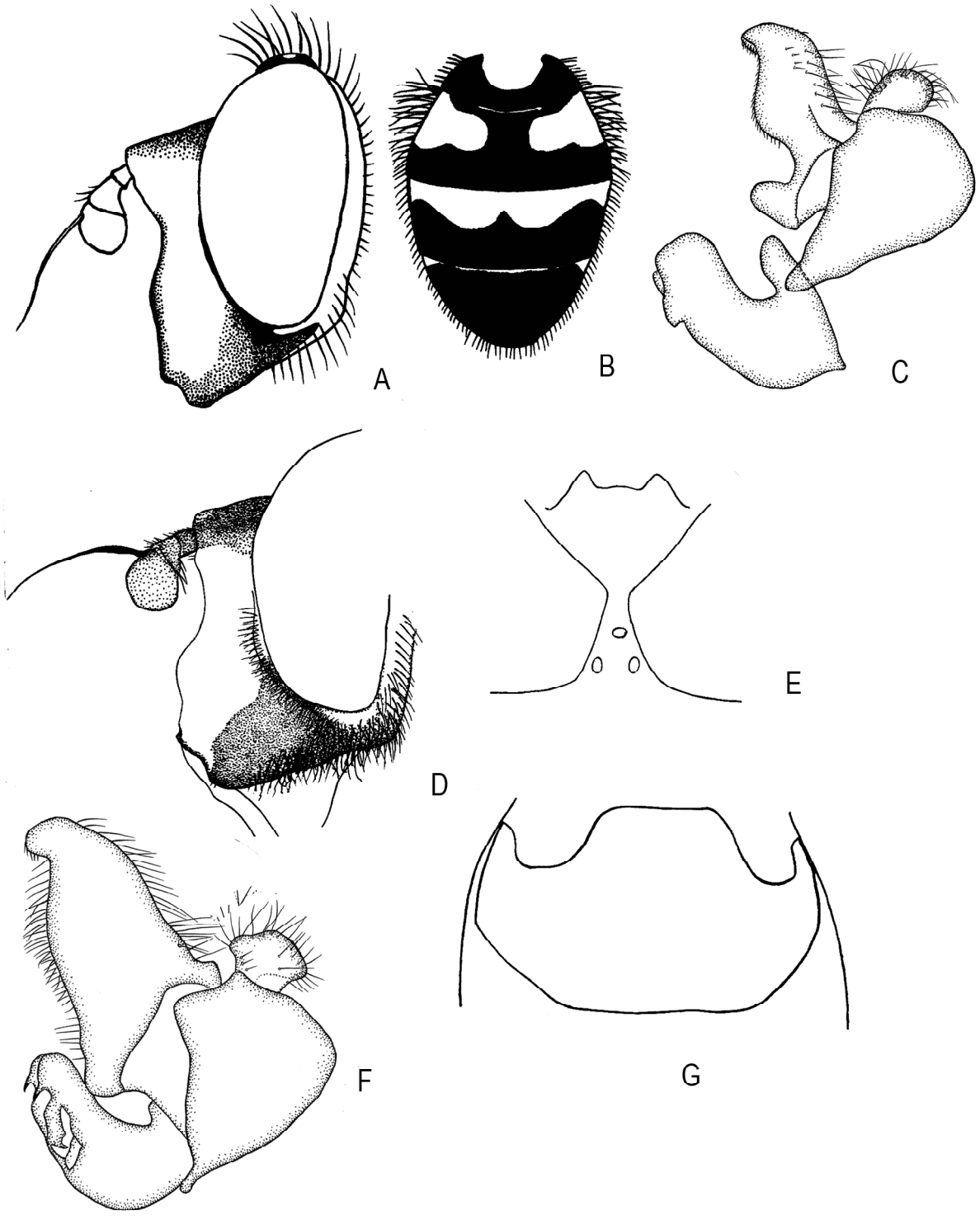

Fig. 10. *Blera violovitshi* A–C. *Blera yudini* D–G. A, D: male head, lateral view. B: male abdomen, dorsal view. C, F: male genitalia, lateral view. E: male frons and occiput, dorsal view . G: male sternite V, ventral view.

Рис. 10. *Blera violovitshi* A–C. *Blera yudini* D–G. A, D: голова самца, вид сбоку. B: брюшко самца, вид сверху. C, F: гениталии сама, вид сбоку. E: лоб и затылок самца, вид сверху. G: 5-й стернит самца, вид снизу.

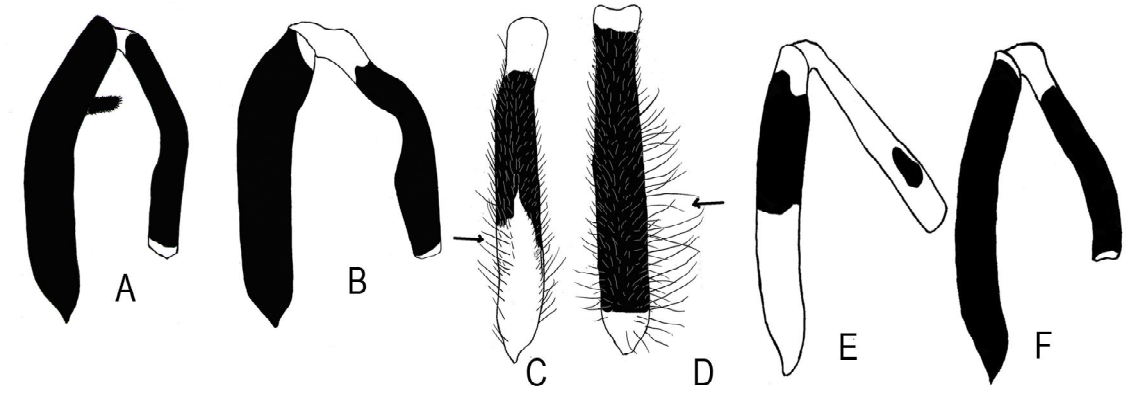

Fig. 11. *Blera* spp. *Blera nigrescens* A, F. A: male hind femur and tibia, lateral vew. F: female hind femur and tibia, lateral view. *Blera kiotoensis* B: male hind femur and tibia, lateral view. *Blera nitens* C: male hind femur, dorsal view. *Blera japonica* D, E. D: male hind femur, dorsal view. E: female hind femur and tibia, lateral view.

Рис. 11. *Blera* spp. *Blera nigrescens* A, F. A: задняя нога и голень самца, вид сбоку. F: задняя нога и голень самки, вид сбоку. *Blera kiotoensis* B: задняя нога и голень самца, вид сбоку. *Blera nitens* C: заднее бедро самца, вид сверху. *B. japonica* D, E. D: заднее бедро самца, вид сверху. E: заднее бедро и голень самки, вид сбоку.

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