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The genus *Basilepta* Baly, 1860 in Russia, with a key to the species (Coleoptera, Chrysomelidae)

by **Alexey G. Moseyko**

Abstract. A key to identification of the species of *Basilepta* in Russia is given. Lectotypes for the species of the *B. fulvipes* group described by V. Motschulsky are designated.

Keywords. Coleoptera – Chrysomelidae – *Basilepta* – Russia

Introduction

Basilepta Baly, 1860 is a genus widely distributed in the Oriental and Palaearctic regions and includes over 300 described species. The widest diversity of the species of this genus occurs in tropical Asia.

There are only three species of the genus in Russia, which were treated as only two species for almost the entire 20th century. These were *B. fulvipes* (Motschulsky, 1860) and *B. balyi* (Harold, 1877). At the same time, a number of similar species described from Russia and adjacent regions were downgraded to synonyms of these species.

Motschulsky (1860) described four species of the new genus *Nodostoma* Motschulsky, 1860 (this is now a junior synonym of *Basilepta*): *N. fulvipes* Motschulsky, 1860, *N. cribricollis* Motschulsky, 1860, *N. aeneipennis* Motschulsky, 1860 and *N. rufotestacea* Motschulsky, 1860. All four species were described from the Russian Far East (Dauria), near the Amur River ("Dauria" is incorrectly used, the place lies in the south of Buryat Republic. In fact, the specimens were collected in Amur Region or Khabarovsk Territory.). In 1861, he also described another *Nodostoma* species, *N. atripes* Motschulsky, 1861, from Japan. Lefèvre described *N. chinensis* Lefèvre, 1877 from Jiangxi ("Kiang-Si"), China. Weise (1889) considered all Motschulsky's species, except for *N. cribricollis,* to be varieties of *N. fulvipes*, and described two other varieties, *N. f. var. coerulescens* Weise, 1889 and *N. f. var. picicollis* Weise, 1889. All these varieties had differences in only details of coloration. In 1922, he changed the valid name of the genus to *Basilepta* Baly, 1860 and in the same work also downgraded Lefèvre's species *N. chinensis* to a synonym of *B. fulvipes* (Weise 1922). Pic (1930) described a new species of "*Nodostoma*" from Yunnan, *N. bicoloripes* Pic, 1930 along with a new variety, also from Yunnan, *N. b. guerryi* Pic, 1930. Both these taxa were downgraded to synonyms of *B. fulvipes* by Gressitt & Kimoto (1961). Chen (1935) noted that all varieties of *B. fulvipes* were sympatric. The same understanding of these species was to be found in all later publications, by various authors (Gressitt & Kimoto 1961, Medvedev 1992, Kimoto & Takizawa 1994, 1997; Tan *et al.* 2005). *Nodostoma cribricollis* became a forgotten name and was cited for the last time as a separate species in Junk's catalog (Clavareau 1914). This species has never been downgraded to a synonym.

Working on a Palaearctic catalogue (Moseyko & Sprecher-Uebersax 2010a,b), we have found two distinct species of this group dwelling almost everywhere in

the habitat of "*B. fulvipes*" *sensu auct.* Analysis of Motschulsky's type specimens have disclosed that one of them was *B. fulvipes*, and another was *B. cribricollis*. These species have more or less different coloration. Analysis of Motschulsky's type specimens and descriptions by other authors have shown that two of the forms previously considered as synonyms of *B. fulvipes* are in fact synonyms of *B. cribricollis*. These names, *B. atripes* and *B. coerulescens*, have been transferred to synonyms for this species (MOSEYKO & SPRECHER-UEBERSAX 2010b). Unfortunately, the format of the Catalogue did not allow the inclusion of comments on morphology and materials into the section "Taxonomical Acts".

Nodostoma balyi Harold, 1877 was described from Honshu Island, Japan. Later on, two other species followed: *N. japonica* Jacoby, 1885 and *N. otsukae* Matsumura in Otsuka, 1911, both also described from Honshu; and two subspecies: *B. balyi yezo* Nakane, 1963 from Hokkaido and *B. balyi kurilensis* L. Medvedev, 1966 from Kunashir, Russia. Still later, all these forms were considered as synonyms of *B. balyi* (Harold, 1877) (KIMOTO & TAKIZAWA 1994, MOSEYKO & SPRECHER-UEBERSAX 2010a). The genitalia of this species have never been figured.

The purposes of this paper are:

- to give a key to identification of the genus *Basilepta* in Russia, with figures of the aedeagus, which may also be used for distinguishing *B. fulvipes* and *B. cribricollis* outside Russia
- to check the types of Motschulsky and designate lectotypes for his species

All type specimens are deposited in Zoological Museum of Moscow State University, Moscow (ZMMU). Geographical data are mostly based on a collection of Zoological Institute of Russian Academy of Sciences, St. Petersburg. A part of the material is deposited in Natural History Museum in Basel (NHMB).

A key to identification of the species of *Basilepta* in Russia

1(2) Pronotum distinctly, more than 1.5 times, narrower than elytra. Lateral angles of pronotum dentiform, placed midway along sides. Antennae robust, preapical joints about 1.5 times as long as wide. Colour of upper side reddish or reddish-brown, underside except lateral parts of hypomerae pitchy black. Legs reddish to blackish. Aedeagus – Fig. 1. Russia: Sakhalin, Kunashir. Japan. ..... ***B. balyi* (Harold, 1877)**

2(1) Pronotum comparatively wide, up to 1.2 times narrower than elytra. Lateral angles of pronotum not dentiform, placed near hind angles. Antennae filiform, preapical joints about three times as long as wide. Colour different from the aforementioned, often partly or completely metallic.

3(4) Pronotum reddish or dark reddish, without precious-metallic reflection. Elytra reddish or metallic. Legs reddish. Aedeagus – Fig. 2. Russia: Primorsky Territory and Khabarovsky Territory, Amur Province, and Sakhalin Island. Japan, North and South Korea, north-eastern China, and Taiwan. ..... ***B. fulvipes* (Motschulsky, 1860)**

4(3) Pronotum metallic blue or green, sometimes almost black but with distinct metallic reflection. Elytra metallic-coloured, underside and legs dark reddish to black. Aedeagus – Fig. 3. Russia: Primorsky and Khabarovsky Territories, Amur Province, Sakhalin Island. Mongolia, Japan, northern, central and eastern China, and Taiwan. .... ***B. cribricollis*** **(Motschulsky, 1860)**

Basilepta balyi **(Harold, 1877)**

Nodostoma balyi Harold, 1877: 361 (Type territory: Japan: Hakone, Honshu Is.)
Nodostoma japonicum Jacoby, 1885: 205 (Type territory: Japan: Kisa, Honshu Is.)
Nodostoma otsukae Matsumura in Otsuka, 1911: 61 (Type territory: Japan: Mt. Togakushi, Honshu Is.)
Basilepta balyi yezo Nakane, 1963: 225 (Type territory: Japan: Rausu. Shiretoko, Hokkaido Is.)
Basilepta balyi kurilensis L. Medvedev, 1966: 40 (Type territory: Russia: Kunashir Is.): RUSSIA, Yuzhno-Sakhalinskaya reg., Kunashir Isl., Tretyakovo Vill., Kerzhner, 3.07.1973, 1 specimen; Sakhalin Isl., Pravda Vill., to the S. of Kholmsk, Kerzhner, 25.05.1973, 1 specimen (all NHMB).

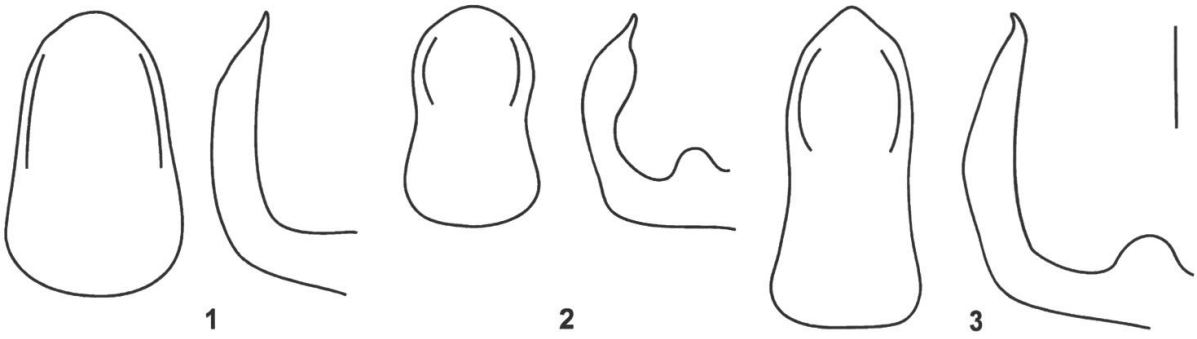
Basilepta fulvipes **(Motschulsky, 1860)**

Nodostoma fulvipes Motschulsky, 1860: 176 (Type territory: Russia: Amur River)
Nodostoma aeneipennis Motschulsky, 1860: 177 (Type territory: Russia: Amur River)
Nodostoma rufotestacea Motschulsky, 1860: 177 (Type territory: Russia: Amur River)
Nodostoma chinensis Lefèvre, 1877: 158 (Type territory: China: Jiangxi)
Nodostoma fulvipes var. *picicollis* Weise, 1889: 597 (Type territories: Japan; China: Inner Mongolia, Ordos)
Nodostoma bicoloripes Pic, 1930: 7 (Type territory: China: Yunnan)
Nodostoma bicoloripes var. *guerryi* Pic, 1930: 7 (Type territory: China: Yunnan)

Type material. *N. fulvipes*. Four specimens on two plates (three on upper and one on lower) on one pin. LECTOTYPE (designated here). Specimen on lower plate, unprepared. Labels: small white label with three black lines; small, pink, handwritten label "Amur"; large white label with black edging and handwritten inscription "Nodostoma fulvipes. Dauria. Amur. Motsch."; large red label without inscriptions; label "Lectotype (lower specimen). Nodostoma fulvipes Motsch., 1860. Moseyko des., 2011"; label "Paralectotypes (upper specimens). Nodostoma fulvipes Motsch., 1860. Moseyko des., 2011". (ZMMU). PARALECTOTYPES (designated here). Three specimens on upper plate, sex unknown, fore-specimen partly damaged by Dermestidae (without hind third of the body), hind specimens almost completely destroyed. Labels as in lectotype. (ZMMU).

N. aeneipennis. Two specimens on one plate. LECTOTYPE (designated here). Right specimen, unprepared. Labels: small, pink, handwritten label "Amur"; large white label with black edging and handwritten inscription "Nodostoma aeneipennis. Daur. mer. Motsch."; large red label "Holotypus – right specimen"; same label "Paratypus – left specimen"; label "Lectotype (right specimen) Nodostoma aeneipennis Motsch., 1860. Moseyko des., 2011"; label "Paralectotype (left specimen) Nodostoma aeneipennis Motsch., 1860. Moseyko des., 2011". (ZMMU). PARALECTOTYPE (designated here). Left specimen, unprepared. Labels as in lectotype. (ZMMU).

N. rufotestacea. One specimen on one plate. LECTOTYPE (designated here). Damaged, right half of body absent. Sex unknown. Labels: small, pink, handwritten label "Amur"; large white label with black edging and handwritten inscription "Nodostoma rufotestacea. Daur. mer. Motsch"; large red label "Holotypus"; label "Lectotype. Nodostoma rufotestacea Motsch., 1860. Moseyko des., 2011". (ZMMU). RUSSIA, Primorsky terr., Khasansky Distr., 8km E of Khasan. Golubiniy utes. 24-25.07.2005. Moseyko & Polilov leg., 10 specimens (NHMB).



Figs 1–3. Aedeagus, view from above and lateral view. 1 – *B. balyi,* 2 – *B. cribricollis,* 3 – *B. fulvipes*. Scale 0.25 mm.

Basilepta cribricollis (Motschulsky, 1860)

Nodostoma cribricollis Motschulsky, 1860: 176 (Type territory: Russia: Far East, "Dauria")
Nodostoma atripes Motschulsky, 1861: 23 (Type territory: Japan)
Nodostoma fulvipes var. *coerulescens* Weise, 1889: 597 (Type territory: Japan)

Type material. *N. cribricollis.* One prepared specimen on plastic triangle. LECTOTYPE (designated here). Female. Labels: Pink, handwritten label "Daur. Mer."; large white label with black edging and handwritten inscription Nodostoma cribricollis Motsch. Daur. Mer."; red label "Holotype"; label "Lectotype. Nodostoma cribricollis Motsch., 1860. Moseyko des., 2011". (ZMMU).

N. atripes. One prepared specimen on plastic triangle. LECTOTYPE (designated here). Female. Labels: small yellow rectangular label; small, white, handwritten label "Type"; Yellow label "Nodostoma atripes Motsch. Japan."; red label "Holotype"; label "Lectotype. Nodostoma atripes Motsch., 1861. Moseyko des., 2011". (ZMMU). RUSSIA, Primorsky terr., Khankaisky Distr., Khanka Lake, Troitskoe Vill., Cherskiy, 10-20.07.1909, 10 specimens (NHMB).

Remarks. *B. fulvipes* and *B. cribricollis* are very abundant species in the south of the Russian Far East, north-eastern China, North and South Korea and Japan. *B. cribricollis* has also been found in eastern Mongolia. All indications and descriptions of *B. fulvipes* and its synonyms in central, south-eastern and southern China belong to true *B. fulvipes*. These species can be, in most cases, easily distinguished by colour of pronotum. Only in cases of some forms with blackish pronotum and indistinct metallic reflection is it necessary to study the genitalia. The female genitalia do not serve to distinguish these two species because the spermatheca and ovipositor are very similar in both, while sclerotization near the vagina base is too variable in the two species.

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