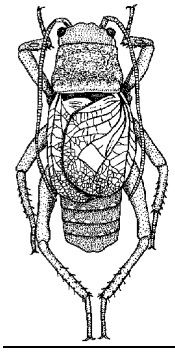

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THE SCIARIDS OF *RUFESCENS* SPECIES-GROUP OF THE GENUS *BRADYSIA* WINNERTZ (DIPTERA: SCIARIDAE) OF ALTAI WITH DESCRIPTION OF NEW SPECIES

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Five species of *Bradysia rufescens*-group are listed and *Bradysia aktru* **sp. n.** (Altai Republic) is described and illustrated. Six species are newly recorded from Altai.

KEY WORDS: Diptera, Sciaridae, taxonomy, fauna, Altai, Russia.

Л.А. Комарова. Сциариды группы видов *rufescens* рода *Bradysia* Winnertz, 1867 (Diptera: Sciaridae) Алтая с описанием нового вида // Дальневосточный энтомолог. 2009. N 194. С. 1-5.

Дается обзор 5 видов сциарид группы *rufescens* и описывается новый вид *Bradysia aktru* **sp. n.** (Республика Алтай). Шесть видов указываются впервые для фауны Алтая.

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INTRODUCTION

The Sciaridae is a clearly defined family of Nematocera (Diptera), mostly including small, dark colored gnats with thin legs and specific wing venation. The larvae inhabit various substrates such as mushrooms, soil, decaying leaves, wood, etc.

The species composition of sciarids in the relict areas of Altai "chern" taiga (small-leaved-coniferous subnemoral forest) was studied. The "chern" taiga is a unique relict formation which includes a great number of paleogene-neogene floristic relicts. It allowed to predict that there are the endemic, relict and midge species on this territory that made possible further progress in the study of phylogeny and historical reconstruction of Sciaridae in Altai. Besides the saprophagy, sciarids inhabit greenhouses and became serious pest for cultivating plants and mushrooms here. In the last years, the negative impact of human activity on the condition of the relict complex of Altai "chern" taiga is intensified, and became danger for disappearance of many ancient species. A new species of *Bradysia aktru* is described here. The holotype is deposited in the Zoological Institute, Sankt-Petersburg. This work supported by research grant of RFBR N 06-04-48260a.

MATERIAL AND METHODS

The material was collected during expeditions in Altai region and Altai Republic in 1990-2008. The methods of collecting are usual: by net, by Malaise trap. The insects placed in tubes with 70 % ethanol. Later the sciarids have been mounted on microscope slides in Euparal. Each sciarid male mounted on separate microscope slide, where wing, hypopigium and legs mounted by little separate glass. The revealed biodiversity represented by seven species of *B. rufescens*-group of the genus *Bradysia* Winnertz, 1867. The drawings were made with the help of a camera lucida attached to a Leitz Laborlux K compound microscope. The nomenclature and classification follow that of Menzel and Mohrig (2000).

LIST OF THE SPECIES

Genus ***Bradysia* Winnertz, 1867**

Winnertz, 1867: 180 (Type species: Bradysia angustippenis *Winnertz, 1867 by subsequent designation of Enderlein, 1911: 127).*

Bradysia rufescens species-group

According to Menzel and Mohrig (2000), the *Bradysia rufescens* group is characterized by scutellum with more than 4 long, strong marginal bristles; apex of foretibia usually with spine-like row of spine-like bristles; some of *R* with both dorsal and ventral macrotrichia; *R/R* long, merging into c almost opposite base of *M*-fork; abdomen with coarse, long and often dense setae.

***Bradysia inusitata* (Tuomikoski, 1960)**

Bradysia inusitata Tuomikoski, 1960: 135.

SPECIMENS EXAMINED. Altai region: ♂, № 335, relict tilia forest, Novoiushino, Togul district, 26.V 1993; ♂, № 373/2, Lake Kanonerskoe, Biysk, 18.VI 1996 (L. Komarova).

DISTRIBUTION. Russia: Karelia, Altai; Sweden, Finland, Denmark, Norway.

***Bradysia longicubitalis* (Lengersdorf, 1924)**

Cratyna longicubitalis Lengersdorf, 1924: 88
Bradysia (Neosciara) cinereovittata Frey, 1948: 53.

SPECIMENS EXAMINED. Altai Republic: ♂, № 558, Katun river, Ust-Muny, 27.VII 2000; ♂, № 603/2, chern tajga, lake Teletskoe, Artybash, 22.VII 2000; Altai region: ♂, №613, v. Srostki, r. Katun, 21.V 2000 (L. Komarova).

DISTRIBUTION. Russia: Karelia, Altai; Poland, Norway, Finland, Sweden.

***Bradysia loricata* Mohrig et Krivosheina, 1987**

Bradysia loricata Mohrig, Mamaev, Krivosheina, 1987: 91-104.

SPECIMENS EXAMINED. Altai Republic: ♂, № 819, ♂, № 831, V. Ust-Ulagan district, 50º50' N, 88º06' E, Malaise trap (A.Barkalov) 15-19.VI 2005 (L. Komarova).

DISTRIBUTION. Russia: East Siberia, Altai.

***Bradysia rufescens* (Zetterstedt, 1852)**

Sciara rufescens Zetterstedt, 1852: 4545 (new name for *Sciara testacea* Zetterstedt, 1851, a junior primary homonym of *Sciara testacea* Zetterstedt, 1838).
Sciara testacea Zetterstedt, 1851: 3763-3764.
Sciara pollula Winnertz, 1867:112-113. Synonymized by Menzel & Mohrig, 2000.
Sciara somnialis Winnertz, 1867: 114.
Sciara villosa Winnertz, 1867: 87-88. Synonymized by Menzel & Mohrig, 2000.

SPECIMENS EXAMINED. Altai region: ♂, № 254, relict tilia forest, Novoiushino, Togul district, 26.V 1993 (L. Komarova).

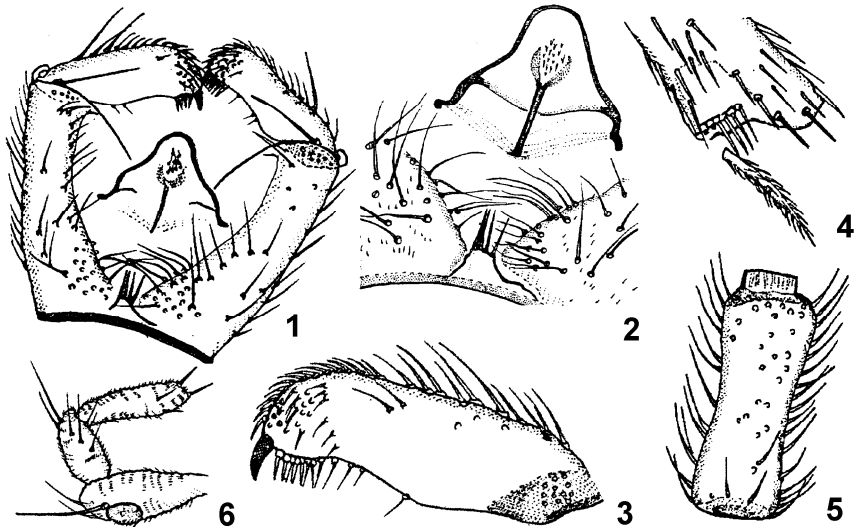
DISTRIBUTION. Russia: Karelia, Altai; Latvia, Estonia, Ukraine, Finland, Sweden.

***Bradysia vagans* (Winnertz, 1868)**

Sciara vagans Winnertz, 1868: 537-538.
Bradysia (Chaetosciara) angustipennis Frey, 1948: 63. Synonymized by Menzel & Mohrig, 2000.
Bradysia (Chaetosciara) callicera Frey, 1948: 60, 82. Synonymized by Menzel & Mohrig, 2000.
Bradysia richardi Gerbachevskaja, 1986*:* 51. Synonymized by Menzel & Mohrig, 2000.

SPECIMENS EXAMINED. Altai Republic: ♂, № 573, Lake Manzherok, ♂, № 620, Isha River, 21.V 2000; Altai region: ♂, № 278, relict tilia forest, Novoiushino, Togul district, 26.V 1993; ♂, № 412/1, chern tajga, Novoalejskoe, Tretjakovo district, 12.VIII 1994 (L. Komarova).

DISTRIBUTION. Russia: Altai; Finland, Romania.



Figs 1-6. *Bradysia aktru* Komarova, sp. n. 1) hypopygium; 2) base of gonocoxites; 3) gonostylus; 4) apex of fore tibia (t_1); 5) flagellomere 4; 6) papli.

***Bradysia aktru* Komarova, sp. n.**
Figs 1-6

SPECIMENS EXAMINED. holotype – ♂, № 921, Altai Republic: Aktru river, 20 km from Kurai (foot of Mt. Ak-Tru), 1800 m, 25.VII 2006 (L. Komarova).

DESCRIPTION. MALE (2.5 mm). Head, maxillary palpus and antennal scapus, pedicellus and legs black but setae of male are yellow. Head**.** Eye bridge *ca.* 2 times facets wide. Face (prefrons) with 10 setae. Clypeus with 1 seta. Maxillary palp – Fig. 5. Palpomere 1 with 3 lateral sensory pit. Length/width of antennal flagellomere 4 *ca.* 2.50 times. Thorax. Anterior pronotum with 15 setae. Apex of fore tibia – Fig. 4. Length of spur/width of fore tibia 1.1 times. Wing**.** Length 2.4 mm; width / length 0.41 times, c/w 0.60 times, R=R_1 1*r-m* (*x*) = *bM* (*y*), *bM* with 7-8 setae. Abdomen. Hypopygium – Fig. 1; gonostylus narrow cylindrical, *ca.* 4 times longer than broad (Fig. 3). Base of the gonocoxites with thin long setae. Small genital lobes with four strong setae (Fig.2). Tegmen rather simple, likes triangle, bordered with distinct sclerotized lateral shoulders.

DIAGNOSIS. New species is similar to *B. rufescens* but differs by having the smaller genital lobe with four setae and by having long ventral setae in basal part of gonocoxites, by having narrow cylindrical gonostylus, by having high tegmen with more sharp its apex.

ETYMOLOGY. The species name refers the Ak-Tru mountain range in the Mountain Altai where the species was found.

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