

Notes on species of *Aphodius* of the Russian Far East (Coleoptera: Scarabaeidea)

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Aphodius quadratus Reiche and *A. hammondi* Dell. are reported from Russia for the first time. Data on distribution of *A. notabilipennis* Petr., *A. rugosostriatus* Water. (= *raddei* Berlov, syn.n.) and *A. costatellus* A.Schmidt are given.

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Berlov (1989) summarized most of the data of *Aphodius* species from the Russian Far East. From the examination of the material collected in this region in 1970-90s by several entomologists some new data were obtained.

Aphodius (Colobopterus) quadratus Reiche. Described from Japan. I examined specimens from "Kunashir" (Kuril isl.). The species is recorded for Russia for the first time.

Aphodius (Colobopterus) notabilipennis Petrovic. Described from "Bogoljaza-Gebirge, Sibiria or." (Bogoladza Range, Primorsk Terr.). I examined specimens from the Primorsk Terr. (SE of Spassk, 1.VI.1951). The species has been omitted from Berlov (1989).

Aphodius (Sinodiapterna) hammondi Dellacasa. Described from one male collected in N. China ("Heilongjiang, Bin Xien, Julong Shan") (G.Dellacasa 1986). No other specimens were found so far (G.Dellacasa, personal communication). Material examined: Primorsk Terr.: Khanka Lake, Kamen'-Rybolov, 28.VIII.1992; Luk'yanovka, 4.IX.1992; near station Khasan, 6.IX.1976.

Since the female has not yet been described, it is appropriate to do it here. There are no clear differences between the sexes in the body shape, punctation of elytra, pronotum and head, and degree of development of frontal suture, i.e. in characters in which the sexual dimorphism becomes apparent in most *Aphodius* species. Female may be separated from male by the shape of the spur on fore tibia: it is slender and apically acuminate.

Aphodius (Pharaphodius) rugosostriatus Waterhouse, 1985. (= *A. raddei* Berlov, 1989, syn.n.). Described from Japan, recorded from Korea, North and Central China (as *A. raddei*) from the Primorsk Terr. of Russia. Material examined (Primorsk Terr.): Kondratenovka, 21.VIII.1992; Kamenushka, 19.VIII.1992; Filaretovka, 10.VIII.1992.

Aphodius (Nobius) costatellus A. Schmidt. Described from "East Siberia (Amur reg.)". Material examined: Amur Prov., SW of Svobodnyy, 1.VIII.1979; Primorsk Terr.: Lukyanovka, 1.IX.1992; Suchan [Partizansk] Distr., 6.VIII.1952; Suputinka [Komarovka] River, 1.VIII.1959; Okeanskaja (near Vladivostok), 30.VIII.1985; Ryazanovka River, Khasanchi. According to O.N.Kobakov (personal communication) this species belongs to the *Bodilus*-group.

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References

Berlov, E.Ya. 1989. Subfamily Aphodiinae. In: P.A.Lehr (ed.). *Opredelitel' nasekomykh Dal'nego Vostoka SSSR* [Keys to the insects of the Far East of the USSR], 3(1):387-402. Leningrad. (In Russian).

Dellacasa G. 1986. A world-wide revision of *Aphodius* sharing a large scutellum. *Frustula entomol.*, 7/8: 173-282.

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