

On the Distribution of a Poorly Known Longicorn Beetle, *Phymatodes abietinus* Plavilstshikov et Lurie, 1960 (Coleoptera, Cerambycidae: Cerambycinae)¹

L. V. Egorov^a and A. M. Shapovalov^b

^a“Prisurskii” State Nature Reserve, poselok Lesnoi, Cheboksary, 428034 Russia
e-mail: platyscelis@mail.ru

^bZoological Institute, Russian Academy of Sciences, St. Petersburg, 199034 Russia
e-mail: andrej-shapovalov@yandex.ru

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Abstract—*Phymatodes abietinus* Plavilstshikov et Lurie, 1960, previously known from a few records in Siberia and eastern European Russia, is found in the Chuvash Republic (Russia). The general distribution of this species is described.

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In the course of the study of the family Cerambycidae fauna in the Chuvash Republic, which includes 111 species (Egorov, 2005, 2006, etc.), we have revealed a species, *Phymatodes abietinus* Plavilstshikov et Lurie, 1960 new to the republic. Before the end of the XX century this rare longicorn beetle was known only from the fir forests in the southern areas of Western Siberia (Novosibirsk and Kemerovo provinces) (Plavilstshikov and Lurie, 1960; Tcherepanov, 1981). Only at the beginning of the XXI century it was recorded from the eastern European part of Russia: the Udmurt Republic (Didyukhin, 2003, 2005, 2007) and the Komi Republic (Tatarinova et al., 2007). In 2015 the species was found in the Mordovian Nature Reserve (the Republic of Mordovia) (Egorov et al., 2016). The new data obtained in the recent years allowed us to specify the western border of its range.

The study is based on the results of examination of the collections of the first author in the Republic of Mordovia and the Chuvash Republic, material from the Zoological Institute of the Russian Academy of Sciences (St. Petersburg; ZIN), and the Institute of Systematics and Ecology of Animals of the Siberian Branch, Russian Academy of Sciences (Novosibirsk; ISEA). All the published records of *Ph. abietinus* are also considered here (Plavilstshikov and Lurie, 1960; Tcherepanov, 1981; Didyukhin, 2005, 2007; Tatarinova et al., 2007; Danilevsky, 2009).



Fig. 1. *Phymatodes abietinus* Plavilstshikov et Lurie, female.

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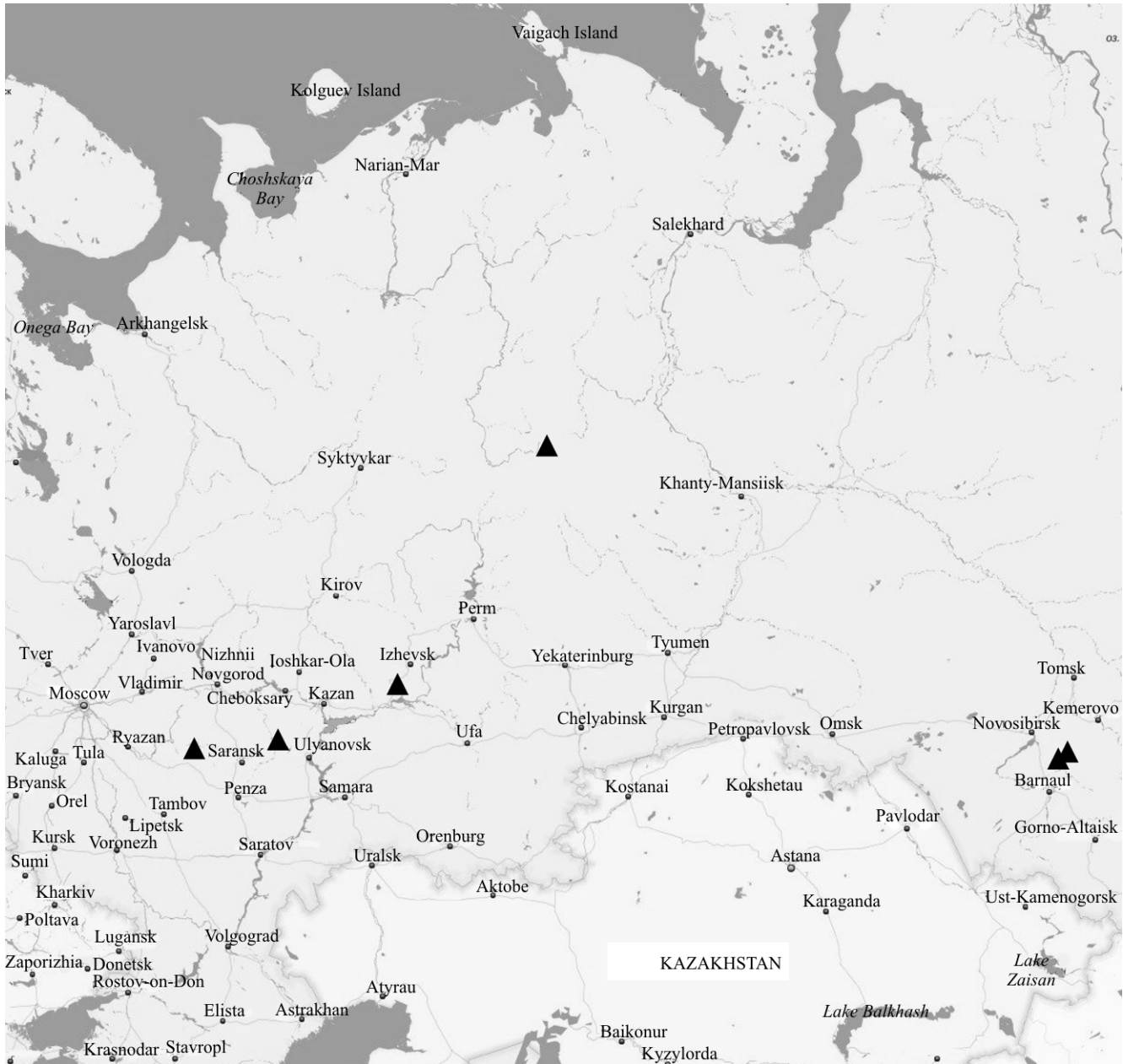


Fig. 2. Map of the *Phymatodes abietinus* Plavilstshikov et Lurie distribution.

Phymatodes abietinus Plavilstshikov et Lurie, 1960
(Fig. 1)

Type material. Holotype (♂) and 4 paratypes (♀) are deposited in the Zoological Museum of the Moscow State University; 1 paratype (♀), in the ZIN collection (Danilevsky, 2009).

Material. Russia. *Mordovia:* Temnikovskii Distr., 0.5 km N of Pavlovka Vill., 54°45'14"N, 43°24'10"E, quarter 420 of Mordovian State Nature Reserve, mature spruce forest with pine and birch, window traps, 16.V–6.VI.2015, (L.V. Egorov, G.B. Semishin),

4 spms. (ZIN). *Chuvashia:* Alatyrskii Distr., 2.3 km ESE of Atrat Vill., quarter 41 of "Prisurskii" State Nature Reserve, 54°59'50"N, 46°44'26"E, mature pine forest with spruce and with small admixture of birch and oak, window traps, 7–27.V.2016, (L.V. Egorov), 2 spms.; same locality, mature pine forest with spruce and with small admixture of birch and oak, window traps, 27.V–17.VI.2016 (L.V. Egorov), 3 spms. (ZIN). *Novosibirsk Prov.:* Maslyaninskii Distr., 7 reared in laboratory specimens with abbreviated temporary labels in Cyrillic (6 spms. ZIN, 1 spm. ISEA).

Distribution (Fig. 2). Russia. The Republic of Mordovia, the Chuvash, Udmurt, and Komi republics, Novosibirsk and Kemerovo provinces. Thus, at present, the species is found in the Central Russian subprovince of the East-European province of the European broadleaved forest Region, and also in the Kama–Pechora–West-Ural and East-Ural–West-Siberian subprovinces of the Ural–West-Siberian Taiga Province of the Eurasian Taiga Region (*Vegetation ...*, 1980). The species is endemic to Russia. The type of the range of *Phymatodes abietinus* (after Gorodkov, 1984) is Eastern-European–Siberian.

Mode of life. This is a rare taiga species with a hidden mode of life (Tcherepanov, 1981). According to all the published data, it develops on drying out fir shoots. Since the only conifers present in the known localities of *Ph. abietinus* in Mordovia and Chuvashia are the fir and the pine, the insect can develop there on one of these tree species. The biotope in the forest of the Mordovian Nature Reserve in the northwest of Mordovia where *Ph. abietinus* was collected is described by Egorov and Semishin (2016).

In Chuvashia, *Ph. abietinus* was found in a mature pine forest with the fir and with an admixture of *Betula pendula* Roth and *Quercus robur* L.; the underbrush is formed by *Tilia cordata* Mill., *Sorbus aucuparia* L., *Euonymus verrucosa* Scop., *Lonicera xylosteum* L., and *Acer platanoides* L.; the sparse grass and semishrublet cover is formed by *Vaccinium myrtillus* L., *Carex* sp., and *Convallaria majalis* L.; there are many old windfallen spruces in this area.

According to the scheme of physico-geographical regionalization of the Middle Volga River area, the locality is situated in the trans-Sura River marshy woodland area of mixed forests of the forest-steppe Province of the Volga Upland (Physico-Geographical ..., 1964). According to the scheme of phytogeographical regionalization of the Chuvash Republic (Gafurova, 2014), the record was made within a part of the Sura River area forestland, the Alatyrskii Sura River area of the southern stripe of coniferous and mixed forests. The zonal type of vegetation (as well as that in Mordovia) is the coniferous and broadleaf forests situated in the Central Russian Subprovince of the East-European Province of the European Broadleaf Forest Region (*Vegetation ...*, 1980).

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