

First Finding of Weevil *Barynotus moerens* F. (Curculionidae) on the Territory of Russia

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Abstract—A population of the West European weevil *Barynotus moerens* F. was discovered in the Zelenograd administrative district of Moscow. The beetles were found every spring from 1999 to 2008. All of them were females. These weevils fed on leaves of dandelion (*Taraxacum officinale*) in a holding box.

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Uncommon weevils of genus *Barynotus* were found every spring from 1999 to 2008 in the Zelenograd administrative district of Moscow. Thus far, only one species of this genus has been registered in Russia—*Barynotus obscurus* F. [Yunakov, 2006]. However, the beetles found differ from *Barynotus obscurus* in a wide range of characters. On the rostrum, they have not a single but several longitudinal grooves and denser puncturations on the pronotum, and bristles are seen only on more convex odd-numbered gaps of elytra, but not on all of them. The comparison with the material from the Dresden Natural History Museum (Museum für Tierkunde Dresden) made it possible to determine that the weevils belong to the West European species *Barynotus moerens* F.

Barynotuses are comparatively large, remarkable beetles; therefore, their distribution is well investigated by coleopterologist. The nearest edge of the natural range of *Barynotus moerens* is the Northwest Carpathian region [Arnoldi et al., 1965]; in actual fact, it is more than a thousand kilometers removed from Moscow. It is obvious that these apterous insects could not independently spread over such distance. Probably, adult beetles hibernating in the ground or larvae developing on roots were transported with imported planting material. European weevils have acclimatized at the boundary of the city on waste ground and on the edge of a woodland park. We regularly found them from the end of March up to the end of May at the same points. Places of findings are marked with asterisks on the Zelenograd map.

It is notable that, thus far, all collected specimens are females. Quite possibly, weevils of the Moscow population reproduce by parthenogenesis. *Barynotus moerens* belong to the Entiminae subfamily, which contains some species with both bisexual and parthenogenetic populations [Yunakov, 2003].

According to the literature, in Western Europe *Barynotus moerens* feeds on dog's mercury (*Mercurialis perennis*) [Moris, 1997]. However, in those places where Moscow population of weevils lives, no dog's mercury is found. Then, what do the beetles eat? To answer this question, an experiment was carried out in a holding cage. Beetles were offered shoots of various plants gathered in the habitat. Wormwood (*Artemisia* sp.), silverweed (*Potentilla anserina*), and coltsfoot (*Tussilago farfara*) stayed untouched. On cereals and clover (*Trifolium* sp.), only insignificant gnaw marks were found. Leaves of dandelion (*Taraxacum officinale*) were quite damaged. Then the beetles were kept in a holding cage for a month, being fed dandelions exclusively.

In summary, the population of *Barynotus moerens* in Moscow has existed not less than nine years. Obviously, the beetles satisfactorily undergo hibernation and reproduce. As a host plant, dandelion is one of the most common for European Russia. Consequently,

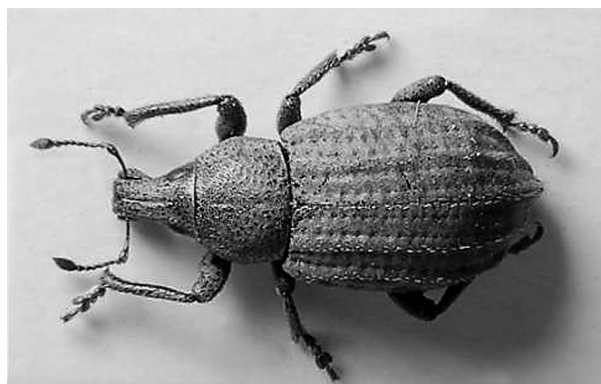


Fig. 1. External appearance of the weevil (*Barynotus moerens* F.).

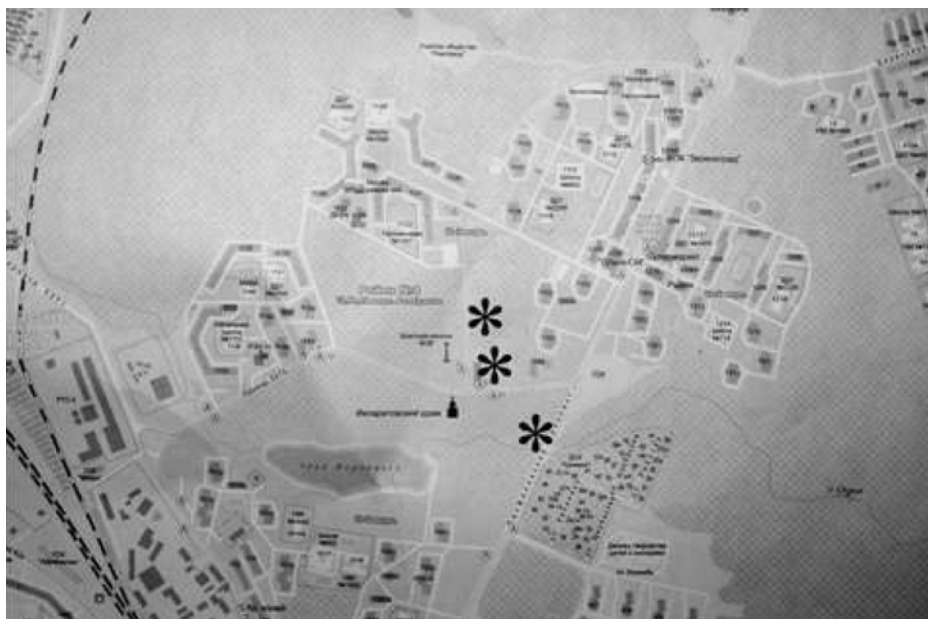


Fig. 2. Places of finding the Western European weevil population in the Zelenograd administrative district of Moscow.

adventitious species may well settle and naturalize. *Barynotus moerens* is not considered as a pest; therefore, its introduction does not cause specific concern. Nevertheless, it is preferable to monitor the population because the influence of an alien species on local communities is unpredictable.

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