AN INVASIVE SPECIES OF APHID, *PROCIPHILUS FRAXINIFOLII* (HEMIPTERA, APHIDIDAE, ERIOSOMATINAE), FOUND IN SERBIA. Olivera Petrović-Obradović<sup>1</sup>, Ž. Tomanović<sup>2</sup>, L. Poljaković-Pajnik<sup>3</sup>, and Andja Vučetić<sup>1</sup>. <sup>1</sup>Faculty of Agriculture, University of Belgrade, 11080 Belgrade-Zemun, Serbia; <sup>2</sup>Institute of Zoology, Faculty of Biology, University of Belgrade, 11000 Belgrade, Serbia; <sup>3</sup>Institute of Lowland Forestry and Environment, 21000 Novi Sad, Serbia

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This is the first record of *Prociphilus (Meliarhizophagus) frax-inifolii* (Riley) in Serbia and second in Europe. From May of 2006 until November of 2006, colonies of this aphid were

observed on *Fraxinus pennsylvanica* in Belgrade (New Belgrade, Zemun) and Subotica. Remaudičre and Ripka (2003) found it on one tree of an American species of *Fraxinus* 

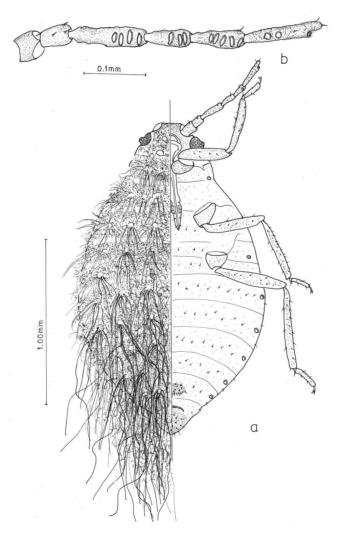


Fig. 1. Prociphilus fraxinifolii (Riley): a – apterous viviparous female, left: dorsal side of living aphid, right: ventral side of mounted aphid; b – antenna in alatae of viviparous female.

in Budapest, Hungary. The aphid seems to be quickly expanding its distribution in Serbia, developing colonies on many red ash trees there. The host plant, red ash (*Fraxinus pennsylvanica*), a North American species of *Fraxinus*, was introduced in Europe more than two hundred years ago. The aphid *Prociphilus fraxinifolii* is widely distributed in the USA, Canada, and Mexico and was introduced to Chile and South Africa (Blackman and Eastop, 1994).

As all members of the genus *Prociphilus*, *P. fraxinifolii* has well-developed wax glands and is snow-white in appearance due to enormous quantities of wax (Fig. 1a, left side). Siphuncular pores are absent. Body color of all forms of *P. fraxinifolii* is yellow-green to pale green. Colonies of compact aphids live in curled leaves on the tips of twigs throughout the vegetation period. *P. fraxinifolii* is monoecious on American *Fraxinus* spp. where ant-attended colonies can be found all year round on roots and sexuparae emerge in October-November (B 1 a c k m a n and E a s t o p, 1994). Its biology in Europe has not yet been studied. However, by the beginning of November in Belgrade there were no oviparous females or males in the

very large colonies on almost yellow and falling leaves.

On Fraxinus excelsior, a native European ash, two species of Prociphilus have been found in Serbia (Petrović-Obradović, 2003). Both, P. bumeliae (Schr.) and P. fraxini (Fabr.), leave Fraxinus in early summer and fly to roots of their secondary hosts - Abies (Heie, 1980). Apart from that difference in biology, P. fraxinifolii can be easily distinguished from P. bumeliae and P. fraxini by morphology of the antennae of alatae. At the base of anntenal segment VI in alatae of P. fraxinifolii there are 1-5 almost circular secondary rhinaria (Fig 1b), which are missing in P. bumeliae and P. fraxini.

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