SCIENTIFIC NOTE

THE EUROPEAN EUGLENES PYGMAEUS (DE GEER) (COLEOPTERA:ADERIDAE) IN NORTH AMERICA

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The first North American report of the European aderid Euglenes pygmaeus (De Geer, 1774) from Coquitlam, British Columbia, Canada, was made by Tim Loh in a submission to BugGuide in 2011 (bugguide.net/node/view/490691/bgimage; bugguide.net/node/view/490690/bgimage) and was included in a compilation by Carlson et al. (2012). His specimens were collected in July 2010, and the species identification was made by Nicolas Gompel, a European authority on the family. We are unaware of any subsequent collections in North America, and so report here on a second collection of this species in North America.

Jaloszyński et al. (2013) indicate that adults can be collected in small numbers “by sweeping and beating bushes and trees or on screens at light”. Similä et al. (2002) captured E. pygmaeus adults with window traps in early seral stage Scots pine plantations. Brin et al. (2011) reared adults from large logs of maritime pine (Pinus pinaster Aiton, Pinaceae). Abrahamsson et al. (2008) reared E. pygmaeus from stumps of Norway spruce (Picea abies (L.), Pinaceae) and state that E. pygmaeus is “regarded as a fungivorous species on mycelia-infected wood” in reference to the larva and that “the ecology of this species is poorly known”. Burakowski et al. (1987) state that the larvae develop in dead, fungi-infested, red or brown rotting wood, that only the larvae overwinter, and that pupation occurs during May and June. The adults emerge during late May and June, fly on warm summer evenings, and can be collected until July on tree trunks and branches, under loose bark, in rotten wood, in decayed material, and under fallen leaves at the base of trees. Schmidl and Büßler (2004) classified both E. pygmaeus and its congener Euglenes oculatus (Paykull) as members of the “rot hole” guild of xylobiontic (saproxylic) beetles. This classification was followed by Brunet and Isacsson (2009) who, while using window traps to study snags of European beech (Fagus sylvatica L., Fagaceae), captured most specimens of these two species (50 of 80 and 25 of 35 specimens, respectively) from snags in their highest decay class in the absence of tinder bracket fungus (Fomes fomentarius (L.) Fr.). Since this beetle is not considered a primary plant pest, the Canadian Food Inspection Agency (2016) does not include E. pygmaeus in its list of insects regulated under the authority of the Plant Protection Act.

Nardi (2008) lists E. pygmaeus as present in Austria, Belarus, Czech Republic, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Norway, Poland, Russia (Central, North, South European Territories), Slovakia, and Sweden, while Tamutis et al. (2011) add Lithuania. The keys provided by Gompel and Barrau (2002) and Jaloszyński et al. (2013) provide the best means of distinguishing this species, though the males are more readily identified than the females. Euglenes pygmaeus males have more elongate and serrated antennae in contrast to the females, and they can be compared in the photographs provided by Jaloszyński et al. (2013), who also include those of E. oculatus and Aderus populneus (Creutzer).