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Chrysobothris rugosiceps Melsheimer (Coleoptera: Buprestidae) found in Washington state

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Chrysobothris rugosiceps Melsheimer (Coleoptera: Buprestidae) found in Washington state

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Abstract. Chrysobothris rugosiceps Melsheimer (Coleoptera: Buprestidae) is reported from Washington State from a single specimen caught in a Lindgren funnel trap. Clearly this represents an exotic to the region, as the closest known occurrence of this native U.S.A. species is in the Dakotas.

Key words. Lindgren funnel, detection, exotics, woodborers.

Introduction

A female specimen of *Chrysobothris rugosiceps* Melsheimer (Coleoptera: Buprestidae), identified by the senior author, was captured in southwest Washington during a cooperative survey by the Oregon Department of Forestry, the Washington Department of Natural Resources and the Oregon Department of Agriculture, which was funded by the U.S. Forest Service Special Technology Development Program. The aim of the project is to test the ability of newly available commercial pheromone lures to detect new exotic woodboring species—including those in Buprestidae, Cerambycidae, Curculionidae (Platypodinae and Scolytinae), and Siricidae—at sites across a wide environmental gradient from Douglas-fir/western hemlock forests typical of the Coast Range to semiarid ponderosa pine forests found east of the Cascade Range. Sites were selected based on their proximity to various forest types, shipping and travel corridors, industrial/commercial centers, metropolitan areas, and recreation sites. The survey was conducted during April—September, 2016 and 2017. A final year of survey is planned for 2018.

Materials and Methods

The specimen (Fig. 1) is labeled as follows: WASHINGTON, Cowlitz Co., Port of Longview, 46.107038, -122.94082, 15-VI-2017, black Lindgren funnel trap, baited with a-pinene/EtOH, A. Dozic, G. Kohler, Wash. Dept. Nat. Resources. The trap had last been sampled on 22-V-2017. The specimen is deposited in the insect collection of the Oregon Department of Agriculture, Salem. The trap was hung 1.5 m high on a metal frame located in a grass field near the Port of Longview, at the confluence of the Columbia and Cowlitz Rivers, approximately 150 meters from a log yard that primarily ships conifer logs. Another log yard that stores and processes hardwoods is located approximately two kilometers from the trap site. Several other log storage facilities, lumber mills, a paper mill, an international shipping port, and rail yards are located within three kilometers of the trap site. Information from one company indicates they sell red oak sourced from the eastern U.S. The beetle could have come from any of these places that import hardwoods (undoubtedly oak), and to ascertain if *C. rugosiceps* has established here requires further trapping. The nearest forest stands are approximately 2.5 kilometers from the trap site.

Discussion

Chrysobothris rugosiceps, a native species that varies in length from 10.8–13.5 mm (Wellso and Manley 2007), has been recorded from almost every state east of the Rocky Mountain States, and in the District of Columbia; and in Canada from Manitoba, Ontario and Quebec. Oddly, it was not listed from Ohio by either of the recent catalogs of Buprestidae (Bellamy 2008; Nelson et al. 2008), both of which must be consulted for distribution of this species. An Ohio record was provided by Williams and Hartzler (2004). The nearest location to the Washington detection is in either North or South Dakota. Recorded larval hosts are American chestnut (Castanea dentata Borkh.) and three species of oaks (Quercus spp.), and adults have been collected from dead or dying wood of several other species of the latter genus (MacRae and Basham 2013; Nelson et al. 2008).

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Figure 1. Female *Chrysobothris rugosiceps* Melsheimer, Longview, Cowlitz Co., Washington. Image by Joshua Dunlap.