

Ambrosia and bark beetles on relict oriental beech (*Fagus orientalis* Lipsky) trees in the southeastern part of Turkey

Oğuzhan Sarıkaya*

Süleyman Demirel University, Faculty of Forestry, Forest Engineering Department, Isparta, Turkey

* Corresponding author: oguzhansarikaya@sdu.edu.tr

Abstract: Oriental beech (*Fagus orientalis* Lipsky) is known as one of main tree species for Turkish forests. The main distribution area of oriental beech is in the northern region of Turkey. By the way, approximately 40,000 ha of isolated relict oriental beech forest exist in south-eastern Turkey especially Adana, Osmaniye, Hatay, and Kahramanmaraş. In this study, ambrosia beetle species which distribute on oriental beech forests of Andırın (Kahramanmaraş) were determined. The survey was carried out in Andırın-Akifiye province (37° 44' N, 36° 22' E) in the south-eastern part of Turkey. Field studies were conducted from March to October in 2015 and 2016. For this aim, the red winged sticky traps (by mixed of ethyl alcohol 96% and toluen 1%) were set in stand and checked periodically. Also, specimens were collected from weaken trees and also broken and fallen trees by snow. Traps consist of two red-colored and crosswise mounted sticky plates with a 1 liter white colored plastic bottle hanging just below and each wings of oblong sticky plates with adhesive glue has 15x21 cm size. Total 20 traps were placed on beech trees and checked. They were placed 2-2,5 m above the ground and positioned 50-80 m from each other. Mix attractant which contains 96% alcohols and 1% toluen were used in traps. Checking was made monthly and traps were replaced with new ones at each controlling period. Specimens were examined under microscope and species were determined. Based on the material collected from Oriental Beech forests in Andırın between 2015 and 2016 by red winged sticky traps and by examination on 1224 individuals during 2 years, a total of 7 Ambrosia beetle species belonging to 6 genera of 3 tribe were identified. These species are; *Taphrorychus ramicola* (Reitter, 1894), *T. villifrons* (Dufour, 1843), *Scolytus intricatus* (Ratzeburg, 1837), *Anisandrus dispar* (Fabricius, 1792), *Trypodendron signatum* (Fabricius 1787), *Xyleborinus saxesenii* (Ratzeburg, 1837) and *Xyleborus monographus* (Fabricius, 1792). Among those, *X. saxesenii* was the more abundant species than the others. The species of *A. dispar*, *T. ramicola* and *T. signatum* were followed it respectively.

Keywords: *Fagus orientalis*, Ambrosia beetle, Andırın, Red winged sticky traps, Turkey

Acknowledgment

Data and knowledge produced in the scope of the GEF funded “Integrated Forest Management” project run by UNDP Turkey in collaboration with General Directorate of Forestry, Turkey