

THE EFFECT OF PLACEMENT HEIGHT, COLOR AND RELEASE RATE ON TRAP CATCHES OF THE ASIAN LONGHORN BEETLE, *ANOPLOPHORA GLABRIPENNIS*

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Abstract

The effects of trap height, color and semiochemical release rates on trap catches of the Asian longhorn beetle, *Anoplophora glabripennis* in China were evaluated. In 2001, black Intercept Panel TrapsTM were baited with a synthetic chemical combination (1-butanol, 1-pentanol and 2-pentanol) and hung at varying heights (bottom cup at ground level, 1 m, 2 m and at tree top) in a stand of *Populus opera*. Results of this experiment indicated no significant differences in trap catches among placement heights. In 2002, traps of various colors (black, green, gray, white, yellow and brown) were hung at breast height and baited with a combination of 1-butanol, 1-pentanol, 2-pentanol and cis-3-hexen-1-ol. Catches were significantly higher for black traps than any other color trap, with green ranking second. Also in 2002, experiments to verify attractiveness of host volatiles at different release rates were undertaken. A chemical combination of 1-butanol, 1-pentanol, cis-3-hexen-1-ol and 2-pentanol was tested at varying release rates (3 mg/day, 30 mg/day, 300 mg/day), with height and color held constant. There were no differences in the number of beetles caught among the different release rates. Further research is necessary in the development of a semiochemical based sampling technique to help with the eradication of this important pest insect.