

INFLUENCE OF LIGHT CONDITION ON THE SPATIAL DISTRIBUTION AN AMBROSIA BEETLE *PLATYPUS QUERCIVORUS* (MURAYAMA) (COLEOPTERA: PLATYPODIDAE) FLYING IN A NATURAL SECONDARY BROAD-LEAFED FOREST

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Abstract

Field surveys and laboratory experiments were carried out to investigate the influence of light condition on the spatial distribution of flying *Platypus quercivorus* adults around gaps. In the laboratory experiments, both male and female adults showed a positive phototaxis. In the field, many adults were captured under forest canopies near forest edges. The positive phototaxis of newly emerged beetles appeared to be one of the causes of this phenomenon. However small numbers were captured inside gaps, although newly emerged adults of *P. quercivorus* are positively phototactic. Peaks of trap captures appeared in places where relative light intensity was ca. 0.2. The distribution of *P. quercivorus* at the stand level was influenced by light conditions. The behavioral response of adults to light may therefore explain their tendency to invade trees around road and gaps. We conclude that adult *P. quercivorus*, in general tends to be associated with forest edges which is a trait shared by several other bark and ambrosia beetles.