

Influence of Light Condition on the Spatial Distribution of an Ambrosia Beetle *Platypus quercivorus* (Murayama) (Coleoptera: Platypodidae) Flying in a Natural Secondary Broad-Leafed Forest

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Abstract *Platypus quercivorus* (MURAYAMA) is known to be the primary vector of *Raffaelea quercivora* that causes oak mortality in Japan. Differing from many Scolytid and Platypodid species, *P. quercivorus* attacks healthy host trees and sometimes kills them. In this study we examined adult phototaxis in a laboratory experiment, we investigated the spatial distribution of adults flying in and around forest gaps and we investigated light conditions relative to the distribution of adults in the field. Results of the phototaxis experiments indicate that newly emerged adults of *P. quercivorus* are positively phototactic. The distribution of *P. quercivorus* at the stand level was influenced by light conditions. The behavioral response of *P. quercivorus* to light may therefore explain their tendency to invade trees around roads and forest gaps.