

LOSSES IN WOOD PRODUCTION OF PLANTS ARTIFICIALLY DEFOLIATED SIMULATING THE NATURAL PATTERNS OF *Acromyrmex crassispinus* ATTACK ON *Pinus taeda* PLANTS

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Acromyrmex crassispinus cause different levels of defoliation on *Pinus taeda* seedlings. The objective of this work was to evaluate the effects of artificial defoliation simulating the natural patterns of *A. crassispinus* attack on wood production of *P. taeda* plants. The experiment was carried out in São Mateus do Sul, state of Paraná, Brazil, where a planting of *P. taeda* was done in August, 2007. The experimental defoliation levels were: level 0: control; level 1: 50% defoliation; level 2: 75% defoliation; level 3: 100% defoliation, without the cut of the apical meristem; and level 4: 100% defoliation, including the cut of the apical meristem. The experimental design was a randomized complete block, and artificial defoliation was done on 20 plants for each attack level. Twenty plants that did not suffer defoliation were selected as the control (level 0). Each plant was numbered and identified with a defoliation level. Artificial defoliation was done when plants were 30 days old, since the most severe *A. crassispinus* attack on *P. taeda* plants occurs during this time. The assessments were done when plants were six years old (August, 2013), measuring the diameter to 1.30 m above ground and height of the plants. There are not significant losses on wood production to the plants with less than 75% defoliation ($F_{4, 89} = 7.37$, $p < 0.0001$). However, there are significant losses in wood production to the plants with 100% defoliation, irrespective of the cut of the apical meristem and also the death of some plants. The mean losses in wood production of plants defoliated in level 3 and 4, in relation to the control, were 34.1% and 39.2%, respectively, when plants were six years old. Not all *A. crassispinus* attack in the first month after planting means significant losses in wood production. The losses in wood production occur when plants suffer more than 75% defoliation. (RIGESA)