

# EFFECTS OF INSECTICIDES TO CONTROL CICADAS *Quesada Gigas* OLIVIER (HEMIPTERA: CICADIDAE) IN REFORESTATION AREAS WITH “PARICÁ” (*Schizolobium parahyba* VAR. *amazonicum*) IN PARÁ STATE.

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The incidence of cicadas, *Quesada gigas* Olivier, 1790 (Hemiptera: Cicadidae) in reforestation areas with “paricá” (*Schizolobium parahyba* var. *amazonicum*) in Pará State, particularly at Dom Eliseu, Ulianópolis and Rondon do Pará municipalities, is considered the main problem in reforestation programs with this tree species [1,2]. Root system damages are caused by continuous sap suction of the nymphs during their underground development, weakening injured trees and leading to tree decline and death. Cicada nymphs’ development cycles are very long and occurs beneath the soil, usually lasting more than one year, which greatly increases the potential damage on the plants’ root system. Therefore, a preliminary study was carried out to evaluate the efficiency of insecticides to control cicadas in “paricá” reforestation areas. The experiment was conducted in a four years old reforested area at the Rio Concrem Group, in Dom Eliseu – Pará State, during the first semester of 2009. Randomized complete block design with three replications was used, each plot containing 64 trees (8 x 8 plants). The treatments consisted of three insecticides, each with three doses: thiamethoxam (Actara WG 250, 2.0, 4.0 and 6.0 p.c. Kg.ha<sup>-1</sup>), carbofuran (Furadan 350 FS, 7.15, 14.30 and 21.45 p.c. L.ha<sup>-1</sup>) and imidacloprid (Provado 200 SC, 4.5, 9.0 and 13.5 p.c. L.ha<sup>-1</sup>) and control. The insecticide dosages were applied by a tractor mounted equipment (“Mec Pec”) at the total area, with a rate volume of 340 L.ha<sup>-1</sup>. The assessments consisted of counting the number of holes in the soil made by the nymphs and the number of living nymphs found on three trenches openings of 8 m long x 0.8 m wide x 0.1 m deep in each plot, randomly distributed among the tree rows. These trenches were obtained with a tractor implement to scraped the soil. A preliminary assessment was carried out before the applications and subsequently three assessments were accomplished 15, 30 and 45 days after the insecticides application. According the results, the three insecticides used were effective for *Q. gigas* nymphs control in reforestation area with “paricá”. No significant difference between the dosages was obtained. It is intended to repeat this experiment in order to consolidate the results, as well as to change the insecticides dosages and application mode.

[1] Lunz, A. M., Harada, A. Y., Aguiar, T. S. and Cardoso, A. S. 2009. Danos de *Solenopsis saevissima* F. Smith (Hymenoptera: Formicidae) em paricá, *Schizolobium amazonicum*. Neotrop. Entomol. 38: 285-288.

[2] Zanuncio, J. C., Pereira, F. F., Zanuncio, T. V., Martinelli, N. M., Pinon, T. B. M. and Guimarães, E. M. 2004. Occurrence of *Quesada gigas* on *Schizolobium amazonicum* trees in Maranhão and Pará States, Brazil. Pesq. Agropec. Bras. 39: 943-945.