Influence of limb pruning in attacks of Curculionidae to *Khaya grandifoliola* in Minas Gerais, Brazill

Luana S. Covre¹; Gabriel H. R. Costa²; Carlos A. H. Flechtmann¹

In Brazil foresters are recently planting African mahogany (Khaya spp.), which has a high timber value. Amongst forestry operations, a number of growers prune limbs, to induce stem-form, less knots and a longer trunk. The objective the this experiment was to determine if pruning favors attacks of Scolytinae or Platypodinae (Curculionidae) to trees. The site was Khaya grandifoliola planted in Dec2013, area of 4.5 ha, and located in São Roque de Minas, state of Minas Gerais, Brazil. In Mar2018 we checked all trees for beetle trunk borers. The next day 2 ha were left unpruned and acted as a control (CC), and the remaining 2.5 ha were pruned: in one part (1.1 ha) 58 trees were pruned and limbs were left on the ground (LG), while in the other part (1.4 ha) 34 trees were pruned and limbs were removed (LR). Only trees that required pruning had their limbs trimmed; hence, even in the pruned parts of the stand there were unpruned trees. All trees were then checked every 7 days (W) for new beetle attacks, until no more new pinholes (PH) were found. All attacks were caused by *Euplatypus parallelus* (Platypodinae), and exclusively in LG. A week after pruning (W1) 10 trees were attacked (5 unpruned), and 120 PH were counted. On W2 24 trees were attacked (6 of them attacked also on W1) and 158 new PH counted. On W3 6 trees were attacked (3 unpruned; 3 reattacked) and 38 PH counted. On W4 3 trees were attacked (1 unpruned; 2 reattacked) and 5 new PH counted. W5 was the last evaluation with attacks, with one attacked tree and one PH found. Limbs left on the ground were attacked by 9 Scolytinae, 2 Platypodinae (including *E. parallelus*) and one Bostrichidae species. Results show that just the wound resulting from pruning does not attract borers, but the pruned limbs themselves release semiochemicals that attract Scolytinae and Platypodinae species, which develop in them, while *E. parallelus* also attacks standing trees. Hence, pruned limbs should always be removed or chipped.

Palavras-chave: Euplatypus parallelus; ambrosia beetles; Scolytinae

Apoio institucional: Florestas da Canastra

Filiação institucional: ¹Department of Plant Protection, FEIS/UNESP, Av. Brasil 56, 15385-000, Ilha Solteira-SP, Brazil. Email: flechtma@bio.feis.unesp.br ²Florestas da Canastra, Rua Miguel Couto 733, 37925-000, Piumhi-MG, Brazil.



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Anais

