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D3762 Influence of fire on ambrosia beetles (Curculionidae, Scolytinae and Platypodinae) in rubber tree plantations (*Hevea brasiliensis*) in southern Brazil

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West Hall C (Convention Center)

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Introduction: In the last 15 years ambrosia beetles are becoming serious pests of rubber tree plantations in southern Brazil. Stress on rubber trees might predispose them to be attacked by these borers. Our objective was to determine the influence of fire on the population of ambrosia beetles in rubber tree plantations. Methods: There were 2 *Hevea brasiliensis* clone RRIM600 stands planted in 1990, where tapping started in 2001, in Castilho, state of São Paulo. One stand never caught on fire (UNBU), while the other caught on fire twice, in 2010 and 2011 (BURN). We surveyed for ambrosia beetles with 95% ethanol-baited flight intercept traps in weekly trappings, from November 2014 to November 2015.

Results/Conclusion: Altogether, 44 Scolytinae, 4 Platypodinae and 5 Bostrichidae species were trapped. For the most abundant species, *Ambrosiodmus obliquus*, *Ambrosiodmus opimus*,

Cryptocarenum heveae, *Cryptocarenum seriatus*, *Hypothenemus brunneus*, *Hypothenemus obscurus*, *Hypothenemus seriatus* (Scolytinae) and *Micrapate brasiliensis* (Bostrichidae) were significantly more trapped in the unburnt stand, while *Xyleborus affinis*, *Xyleborus ferrugineus* (Scolytinae) and *Xyloperthella picea* (Bostrichidae) were more trapped in the burnt stand. All species significantly more trapped in the unburnt site develop in small diameter plants, seeds, branches or broken twigs. This plant material was reduced due to fire in BURN, while it was more abundant in UNBU. *Xyleborus affinis* and *X. ferrugineus* are known to attack stressed rubber trees, while *X. picea* is known to attack live (stressed?) *Eucalyptus*. Results suggest that fire might predispose more aggressive species to increase in abundance and attack rubber trees.

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