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WOOD CONSUMPTION OF EXOTIC FOREST SPECIES UNDER FIELD CONDITIONS IN THE MUNICIPALITY OF SEROPÉDICA, RJ, BRAZIL

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Abstract Due to the organic nature of its constituents, wood is subjected to deterioration by biological agents, including termites, with some of them being urban pests. This study aimed to evaluate the wood consumption of *Corymbia citriodora*, *Eucalyptus cloeziana*, *Eucalyptus saligna*, *Eucalyptus urograndis* and *Pinus elliottii* under field conditions in Seropédica, RJ. The test bodies consisted of wood stakes (25x2x2 cm), which were weighed before being buried in the soil for 90, 120 and 150 days in fragment of Atlantic Forest, *Corymbia citriodora* plantation (lemon eucalyptus) and outer perimeter of building. Cardboard roll baits were buried for previous termites' attraction. The points where the presence of termites was detected in the bait served as central points for the installation of the stakes around the bait. After each exposition time, the stakes were taken from the field and weighed to determine the consumption of the stakes (eight replications/species/time). The stakes were attacked only by *Coptotermes gestroi* (Rhinotermitidae) in the area around the building, *Heterotermes tenuis* (Rhinotermitidae) was the only of the species that infested the stakes buried in the eucalyptus plantation while only *Nasutitermes* cf. *itapocuensis* (Termitidae) damaged the stakes exposed in the forest. The attack of *N*. cf. *itapocuensis* to the stakes was higher at the beginning of the experiment, differing significantly at 90 and 120 days, while not differing between them (χ^2=7.25; df=1; p<0.01). *C*. *gestroi* attacked more frequently the stakes at 150 days (χ^2=8.30; df=1; p< 0.05). *H*. *tenuis* was more frequent at 120 days, which did not differ at 150 days (χ^2=13.13; df=1; p< 0.001). The average consumption of stakes by *C*. *gestroi* and *H*. *tenuis* among the five species were similar. The average consumption of *E*. *cloeziana* stakes (4.32 ± 1.19g) by *N*. cf. *itapocuensis* was significantly higher than that of *P*. *elliottii* (0.18 ± 0.10g).

Key words Xylophagous termites, eucalyptus, pine, wood resistance