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ATTRACTIVENESS OF WOOD DECAY TO ARBOREUM TERMITE *NASUTITERMES CORNIGER* (ISOPTERA: TERMITIDAE)

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Nasutitermes corniger (Motschulsky) show attractiveness for specific woods, but it is unknown whether this attractiveness may be altered by wood decomposition process. This study analized the foraging behavior of *N. corniger* when decayed woods in different stages are offered to termites nest. Wood samples of the same species that were maintained in an adequate environment (control) or previously exposed to weather during 3, 6 or 9 months were placed simultaneously in a foraging arena of *N. corniger* nests. During one hour the exploration and recruitment behaviors of termites on each wood type were recorded. To compare the number of termites recruited to each wood type, the individuals present in each wood were removed and counted at the end of the test. This experiment was conducted separately with woods of different density (I) *Pinus elliottii*, (II) *Eucalyptus grandis* (III) and *Manilkara huberi*. The massive recruitment of workers occurred more frequently on wood decomposed for a period of 6 months than to healthy wood, both in tests with *P. elliottii* (12/20 vs. 2/20 healthy wood, Chi^2 test, χ^2=8.90 p<0.01) and with *E. grandis* (13/20 vs. 3/20 healthy wood, Chi^2 test χ^2=8.44 p<0.01). In tests with *M. huberi* the massive recruitment to decayed wood was also more frequent than in healty wood, however in this case the wood more attractive was that decayed during nine months (10/20 vs. 2/20 in healthy wood, Chi^2 test, χ^2=5.83 p<0.05). The total number of termites recruited at the end of the tests was also higher on decayed wood. In tests with *P. elliottii* and *E. grandis* more individuals were recruited to decayed wood for 6 months (1.7 ± 0.2 and 2.1 ± 0.1, respectively) than to healthy wood (0.8 ± 0.1; F=3.44, P <0.05 and 1.3 ± 0.2; F=3.82, P <0.05, respectively). In tests with *M. huberi* most individuals were recruited to wood decomposed for 9 months (1.9 ± 0.3 vs. 1.0 ± 0.1 to healthy wood, F= 2.91, P <0.05). The attractiveness of *N. corniger* for decayed wood, regardless of the species, was evidenced. The decomposition time necessary to increase attractiveness of wood seem different to each specie wood, and this is probably influenced by differences in wood density.

Key Words Termites, exploration, recruitment, wood-decomposition, healty wood