

TERMITES ASSOCIATED WITH TREE SPECIES FROM AN ATLANTIC FOREST FRAGMENT AT ILHA DO CATALÃO, RIO DE JANEIRO CITY, BRAZIL

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Abstract Ilha do Catalão is located in the urban area of the city of Rio de Janeiro (22°50'44"S, 43°13'19"W), and had part of its Atlantic Forest vegetation recovered, currently with 120 tree species identified. The objective of this work was to identify termite species that infest trees in the island in order to guide the preservation of this vegetation. Trees were inspected for termite infestation, and soldiers were collected and preserved in 70% alcohol for identification. A total of 545 trees distributed in 57 species (47 native and 10 exotic species) were inspected. A total of 419 trees were infested by termites, with three native species of Termitidae (*Nasutitermes corniger*, *Nasutitermes jaraguae* and *Microcerotermes strunckii*) and one exotic species of Rhinotermitidae (*Coptotermes gestroi*) collected. *Albizia lebeck* (Fabaceae) and *Schinus terebinthifolius* (Anacardeaceae) were the most explored species by termites, followed by *Spondias mombin* (Anacardiaceae), *Handroanthus impetiginosus* (Bignoniaceae) and *Hibiscus tiliaceus* (Malvaceae) ($\chi^2=5.47$; df=4; p>0.01). The least termite-infested tree species were *Avicennia schaueriana* (Acanthaceae), *Ceiba glaziovii* (Malvaceae) and *Caesalpinia ferrea* (Fabaceae). Trees of *A. lebeck* and *S. terebinthifolius* species were the most exploited by *N. corniger* (32% and 12% of 330 trees, respectively) ($\chi^2=7.5$; df=4; p<0.01). The termite *N. jaraguae* infested mainly trees of the latter species, *A. schaueriana* (Acanthaceae) and *Laguncularia racemosa* (Combretaceae). The only tree species infested by *M. strunckii* were *H. impetiginosus*, *Inga laurina* (Fabaceae), *Bombacopsis glabra* (Malvaceae) and *Clitoria fairchildiana* (Fabaceae). All tree species infested by *C. gestroi* are native, such as *C. fairchildiana*, *L. racemosa*, *H. impetiginosus*, *S. monbim*, *Marchaerium brasiliense* (Fabaceae) and *Sapindus saponaria* (Sapindaceae). The most frequent termite was *N. corniger* ($\chi^2=93.58$; df=3; p<0.001), occurring in 79% of infested trees. The cohabitation of termite species was verified in four infested trees (*N. corniger*-*C. gestroi* and *C. gestroi*-*M. strunckii* in 75% and 25% of cases, respectively).

Key words Arboreal termite, xylophagous termite, urban pest