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Ocorrência, comportamento e vetoração de fungos por formigas no Hospital da Universidade Federal de Juiz de Fora, Minas Gerais

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Abstract. Ocurrence, behavior and vetoration of fungi by ants at Hospital of Universidade Federal de Juiz de Fora, Minas Gerais. Ants are considered important social insect and some of them living intimately associated by humans beings. Prospective studies on the occurrence, biological diversity and the role of these insects as bacterial vectors have already been made considering health care units, such as hospitals. However, specially regarding our geographical region, there is a lack of such studies, add to that, considering the role of ants as fungal vectors in health care environment, there is no data available on this phenomenon, in Brazil. In this regard, this study was focused on to investigate the occurrence of ants in the Hospital Universitário, a university hospital wich belongs to the Universidade Federal de Juiz de Fora, MG. In this study, we have evaluated the ants' ecology including their behavior and the fungal vectoration activity. The insects were collected from February 2004 to March 2005 from eight spots in the hospital environment, during day and night periods. An average of 451 points were assayed using attractive baits. According to our results, the collected insects were classified in to four subfamilies (Formicidae, Myrmicinae, Ponerinae e Dolochoderinae), seven genera and ten species: *Camponotus sp.*, *Camponotus crassus* (Mayr, 1862), *Camponotus atriceps* (F. Smith, 1858), *Camponotus renggeri* (Emery, 1894), *Wasmannia auropuntata* (Roger, 1863), *Paratrechina longicornis* (Latreille, 1802), *Monomorium floricola* (Jerdon, 1851), *Pheidole sp.*, *Tapinoma melanocephalum* (Fabricius, 1793) e *Odontomachus sp*. The predominant species *T. melanocephalum*, *P. longicornis*, *M. floricola*, *W. auropuntata, Pheidole sp.* and *Odontomachus sp.* The temperature was the only abiotic factor of interference which might be influenced the presence of ants in sampled points. The data may suggest that the nesting preference between the collected insects were wall and floor gaps, which differs significantly of all categories registers. *Tapinoma melanocephalum* was the specie which showed the bhigthest diversity on places for nesting. The measure of distances do between nests and baits, varied between five of ten identified ants species. The values ranged between 0,02 to meters. Representatives of *P. longicornis* and *T. melanocephalum* displayed the longest between nest and foraging site. Regarding to the fungal vectoration, in this study we have identified. 31 genera of fungi isolated from the ants and 33 isolated of the surface. The fungal genera more frequently isolated for the ants were *Aspergillus* sp., *Cladosporium* sp., *Penicillium* sp., *Candida* sp. and *Aspergillus niger*. It is important to state that most of fungal strains isolated from the ants in this study, are closely related with nosocomial infections.

Keywords: Ants, hospitals, vetoration, fungi.