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WHO CARES? LEAF-CUTTING ANTS MAY NOT INVEST IN BEHAVIOURAL DEFENCES AGAINST *ESCOVOPSIS*

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Leaf-cutting ants cultivate the fungus *Leucoagaricus gongylophorus*, using it as food, while providing nutrients, protection and dispersion in return. These ants have a range of defence mechanisms against parasites and an important behavioural defence mechanism is grooming; this allows the ants to remove contaminants from the symbiotic fungus, themselves and from nestmates. It is common, nevertheless, to find in colonies fungi of the genus *Escovopsis*, which is a specialized parasite of *Leucoagaricus*. In this context, our objective was to evaluate the ants' defence behaviour when colonies are exposed to *Escovopsis*. Thus, we offered to *Acromyrmex subterraneus subterraneus* colonies, granulated non-toxic baits, with the treatments: (i) 1g of bait previously moistened in water + Tween 80® - control; (ii) 1g of bait previously moistened in spore suspension of *Escovopsis moelleri* (concentration 1.435 x 10^8), prepared with water + Tween 80®. Each treatment was offered to three colonies that had approximately 500ml of *L. gongylophorus* fungus garden each. Behavioural parameters were observed for five minutes, every 24 hours for seven days and mean daily frequencies of three behaviours were estimated: (i) self-grooming, (ii) allogrooming and (iii) grooming of symbiotic fungus. Frequencies of allogrooming and grooming of symbiotic fungus did not differ between treatments, while self-grooming was higher in uninfested control colonies. These unexpected results may be related to defence mechanisms being costly and, as *Escovopsis* seems to pose little threat to the colonies, limited benefit to be achieved from its control.

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