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HYDRAMETHYLNONE AND BORIC ACID BAITS TO CONTROL URBAN ANTS

ÉRIKA DE MORAES CERIONI, [2]FABIANA CORREA BUENO, [2]MARCELA CECCATO, AND [2]ODAIR CORREA BUENO

[1]Servitec Cerioni Saneamento Ltda. Mairinque, SP. Brazil
e-mail: erika_cerioni@hotmail.com
[2]Centro de Estudos de Insetos Sociais, UNESP, Rio Claro, SP. Brazil

The urban environment provides conditions for the establishment and spread of some species of ants, known as tramp ant species. They can occur in many environments, including hospitals, industrial and domestic kitchens, acting as carriers of pathogenic organisms. The most effective method of control is the destruction of nests, which is very difficult in urban environments due to the inaccessibility of the nests. One option is the use of bait which is incorporated in a slow acting active ingredient, which can be taken by workers into the nest and distributed to all individuals in the colony. The aim of this study was to evaluate two formulations of bait gel in hospitals and food industries. One formulation was made up of protein and the active ingredient Hydramethylnone and the other formulation was composed by carbohydrate and the active ingredient boric acid. For the gel whith Hydramethylnone was performed one application and to the gel with boric acid were six applications. The tests were analyzed for six weeks through weekly monitoring. The result was not satisfactory for a single application of Hydramethylnone. The boric acid bait result was satisfactory, and the continued application resulted in effective control of *Tapinoma melanocephalum* and *Monomorium floricola* colonies. Most species of ants found in the studied showed a preference for carbohydrate food-based baits. For this reason, the bait containing little Hydramethylnone was charged and did not get the expected outcome. Moreover, the time of offering the bait (a single application) may have been insufficient to control the ant colony. Further tests must be performed using a formulation comprised of carbohydrates and Hydramethylnone in finding satisfactory results for the active ingredient.

Key Words Tramp ant species, control, baits, preference, *Tapinoma melanocephalum, Monomorium floricola*