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MORTALITY OF BLATTELLA GERMANICA FEMALES WITH OOTHECA AFTER INGESTION OF INSECTICIDE IN GEL FORMULATION AND EMERGENCE OF NYMPHS

A.A.D. SILVA AND M.R. POTENZA

Instituto Biológico/APTA/SAA, Av. Cons. Rodrigues Alves, 1252 - São Paulo/SP - 04014-002, Brazil

Abstract Cockroaches are of the great importance in public health. *Blattella germanica* is the main specie that infests commercial kitchens and industrial kitchens, due to conditions for their development. One of the methods to control B. germanica is the use of insecticides in the gel bait formulation. The objective of this work is to evaluate the mortality, viability and detachment of ootheca and nymph emergency in *Blattella germanica* females that ingested indoxacarb (Advion®) and fipronil (Blatum®) insecticides in the gel formulation. The bioassays were performed in the laboratory using females after 7-10 days of ootheca formation. Females were individualized and offered gel bait dosage of 0.01g and water and in the control 0.01g of food and water. The females were maintained in acclimatized room at temperature of 27°C and 60% of relative humidity. Both treatments caused 100% mortality in females with 48h after ingestion, causing 100% detachment of ootheca with fipronil treatment and 92% with indocacarb, occurred immediately after death of female. There was not detachment of ootheca in control. The viability of ootheca was 92% in control, 80% and 72% in indoxacarb and fipronil treatment, respectively. The media number of emerged nymphs was 41.65 in control, 42.89 in fipronil and 38.50 in indoxacarb treatment, it hasn't shown significant difference in the number of emerged nymphs. The results obtained can aid in the integrated control of cockroaches.

Key words Blattella germanica, ootheca, fipronil, indoxacarb, control