

EVALUATION OF BAIT GEL DOSAGE WITH FIPRONIL AND HYDRAMETHYLNONE FOR *PERIPLANETA AMERICANA* CONTROL

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Abstract The aim of this work was to evaluate to a minimal dose and minimal lethal time of Fipronil and Hydramethylnone bait gel formulation at a concentration of 0.05 and 2.15%. The insects were food deprived during 24 hours and after confined individually with the respective dose of the gel, water and food feline ground into test arena 17 cm long, 13 cm wide and 5 cm high. The dosages of 0.005, 0.007, 0.01, 0.03, 0.05, 0.07, 0.1, 0.2, 0.3, 0.4 and 0.5 g gel bait containing 20 repetitions per treatment were evaluated at periods of 1, 2, 3, 4, 24, 48, 72, 96, 120, 144, 168, 192, 216 and 240 hours after confinement of individuals. The active ingredient Fipronil showed 100% efficiency for all doses tested. The smallest dosage to achieve 100% efficiency of the active ingredient Hydramethylnone was 0.1 g. The minimum lethal time to reach 90% mortality of individuals with the active ingredient Fipronil was at a dose of 0.5 g gel bait in 24 <LT₉₀ <48 hours. The active ingredient Hydramethylnone showed lethal time of at least 90% of individuals of 168 <LT₉₀ <192 hours at a dose of 0.5 g gel bait.