Testing the Effect of Derris malaccensis (Ava Niukini) Plant Extract on Rhipicephalus sanguineus (Brown Dog Tick)

Myung, Da In

This experiment was conducted to determine which of the two solutions, Ava Niukini or a commercial product pesticide, will be more efficient in the extermination of one or more Rhipicephalus sanguineus latreille (Brown Dog Tick). The experiment was conducted with the negative control (Ava Niukini and a commercial product pesticide) and the positive control, water. Three experiments were made to test the efficacy of each solution on a single tick. Each solution is applied by injecting 0.25 mL of the solution into one male and one female. Another three experiment were made to test the efficiency of each solution on groups of ticks and 0.25 mL of each solution is applied to each group. It was hypothesized that Ava Niukini solution will have a greater effect in both experiments, meaning that it will take less time for the tick to die. Another hypothesis is that both solutions will have a greater effect on male ticks compared to female ticks. The experiments supported both hypothesis.

Awards Won: