COMPARATIVE EVALUATION OF THE EFFICIENCY OF AN INSECTICIDE SOLUTION IN DIFFERENT EQUIPMENT USED FOR CONTROL OF INSECTS AND OTHER ARTHROPODS

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Abstract  Of the techniques used by pest control operators to control synanthropic cryptic insects and other arthropods such as German cockroaches, ants, bedbugs, and scorpions, the application of insecticides directly into cracks is one of the most commonly used methods. Three pesticide application equipments: manual compression sprayer, pressurised aerosol spray and electric micro-sprayer with two-fluid nozzle atomizer. The test models were standardized, made up of three pieces of pine plywood, to contain a hollow space with an inlet hole at one end and an output hole at another end. The equipments were filled with a colored solution and the pressurised aerosol spray was not colored. Before application the flow rate and pressure of application of each equipment were measured. After application the time was measured which the solution needed to pass through the outlet hole. The test models were then opened and the dispersion of the solution was measured in each model. The results were compiled and analyzed by the Tukey test (p<0.01) and indicated that under the conditions of this experiment the electric micro-sprayer was the most efficient, secure and economical (99% cheaper) choice for this type of treatment.