STUDIES ON THE POTENTIAL OF PLANT EXTRACTS AS LARVICIDES TO CONTROL *AEDES AEGYPTI* POPULATION

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Dengue is a serious Public Health problem in Brazil, where outbreaks of the disease occur in a regular basis. This is due, in part, to the resistance of *Aedes aegypti*, dengue's main vector, to the larvicides available. New methods to control the population of this insect are necessary. In the present work we evaluate the potential of extracts from *Tagetes minuta* and *Spilanthes acmella* as larvicides. Flowers were separated and sequentially extracted with hexane, dichloromethane and ethyl acetate. Soxhlet extraction was used in *S. acmella* preparations and percolation in *T. minuta* preparations. Any extract exhibiting significant larvicide activity was further fractioned and the fractions tested according to the World Health Organization protocol. One fraction derived from each of the plants tested outstanded as a highly active larvicide, achieving 100% larval mortality in 24h, when tested in the concentrations of 40µg/ml *S. acmella* and 50µg/ml *T. minuta*. Preliminary toxicity tests of the selected fractions were performed by plating yeast cells in YPD medium containing 100µg/ml of these extracts. No significant alterations in colony formation could be observed suggesting these fractions aren't toxic. These fractions will be submitted to further fractionation aiming to identify the molecules responsible for the larvicide activity.

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