

Comparative Toxicity of Garlic Juice and Dicofol to Population of Citrus Mites

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Abstract : Insecticidal properties of Alliaceae are widely known, they are plant with varied biological properties. Garlic and onion are known for their positive effect on health, including the prevention of cardiovascular disease and some digestive cancers. These health benefits molecules are also responsible for pest potential control of Alliaceae. With these properties, we can consider using Alliaceae as acaricides. The purpose of this study was to compare the effect of chemical and biopesticides on citrus mites, especially *Tetranychus urticae*, *Panonychus citri* and *Eutetranychus orientalis*. Chemical treatment (Dicofol) and biopesticides (Garlic juice + Alcohol) applied on this study to control the various stages of mites, have reduced the proliferation of mobile forms and reducing the number of eggs to acceptable levels. Garlic juice + alcohol revealed efficiency from 50 to 57.69 % against the mobile forms of *T. urticae*, however, it was effective against the mobile forms of *P. citri* and *E. orientalis* with an efficiency of 85.71 % and 100 % respectively, its action has also reduced the number of eggs of *T. urticae* and *E. orientalis* at low levels. Therefore, this biopesticide is conceivable viewpoint technical and economic as the infestation by mite is low.

Keywords : Garlic juice, acaricide, biopesticide, mites, alcohol, *Tetranychus urticae*, *Panonychus citri*, *Eutetranychus orientalis*.

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