Study on the efficiency of kaolin in controlling the *Bemisia tabaci* (Hom.: Aleurodidae) in tomato greenhouses of Jiroft

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Abstract

*Bemisia tabaci* is one of the most important pests of tomato greenhouses in Jiroft and chemical control is the only way to control this pest. To reduce the use of chemical pesticides and produce healthy crops, studying safer control methods such as application of kaolin powder is very important. In this study, the effect of kaolin clay, made in Iran (Sepidan(R)), on the control of *Bemisia tabaci* was investigated in a RCBD with 8 treatments and 4 replications. Treatments were kaolin clay at 3% and 5% concentrations with 2 and 3 times application (10 days intervals), acetamipride spraying at 0.05% concentration with 2 and 3 times application (10 days intervals) and control (water spraying) with 2 and 3 times application (10 days intervals). Results showed that acetamipride treatments on the first day with 80 2.07 % and 85.22 2.95 % and on the third day with 74.52 2.48 % and 77.05 4.32 % had the highest efficiency and they had no significant difference with efficiency of kaolin clay at 5% concentration with 3 times application on the first day (71.02 3.9 % ) and third day after treatment (65.5 3.78 %). Also it was revealed that there was no significant difference between average yields of treatments.

Keywords: *Bemisia tabaci*, Kaolin powder, Tomato greenhouse.

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