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# EVALUATION OF *SOPHORA FLAVESCENS* EXTRACT FOR COMBAT THE RED MITE *(TETRANYCHUS URTICAE)* TO THE TOMATO CROP IN GREENHOUSE

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Intensive use of increased amounts of chemicals in the agricultural sector for the treatment of tomato crops in greenhouse, led to a demand for organic products on the market. The need to reduce crop losses raises the issue of developing effective plant protection measures that reduce the dynamics of the development of harmful organisms with a minimum number of chemical treatments. Tomato crops in greenhouse suffer huge losses due to damage caused by red mite. This pest can be present throughout the vegetation period if various preventive measures are not taken in time. The aim of this article is to demonstrate the biological efficacy of *Sophora flavenscens* plant extract in controlling mites in tomato crops. For this purpose, three variants were installed. The first variant was witness, the second variant (standard) the insecticide Pelecol 0.8 l/ha, the third variant was used the extract from *Sophora flavenscens*. 14 l/ha. No treatment was applied to the witness plants, so the development of mites was very rapid. Each of the variants had 3 repetitions. The degree of attack and the intensity of development were determined according to the method described by A. Hrapova (Roșca *et al*., 1996). The first treatment was performed on 13.06.2022. Before testing the extracts on tomato plants, 12-26 mites were registered on the leaf. The application of the treatment contributed to the mortality of the pest both on the plants from the variant of the tested preparation and on the one from the standard variant.

Evaluating the data obtained after treatment, a decrease in the number of pests was observed in relation to the untreated plant. Thus, the biological efficacy of *Sophora flavenscens* extract after the 3rd, 7th and 14th day on average was 80%, in the Etalon variant, it was 91%. From these data it results that the treatment of tomato plants with *Sophora flavenscens* plant extract reduces the spread of mites, although it has demonstrated a slightly lower biological efficacy compared to the standard.

***References***

Roșca, I.; Vasiliescu, B. Protecția integrată a culturilor agricole împotriva bolilor și dăunătorilor. Curs. București: UASM; 1996-156p.

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