Three plant protection agents against *Aculops lycopersici* on tomato

Alexander Pfaff, Martin Hommes and Elias Böckmann
Julius Kühn-Institut, Institute for Plant Protection in Horticulture and Forrest, Braunschweig
E-mail of corresponding author: alexander.pfaff@julius-kuehn.de

In recent years, *Aculops lycopersici* (Tryon) (Acari: Eriophyoidea) has occurred more frequently in tomato cultivation throughout Germany. If infestation of tomato greenhouses occurs *A. lycopersici* can cause devastating damage. At present, there are no beneficials available that show satisfying results when used against *A. lycopersici* on tomato and there also are only few acaricides available against this mite. In order to investigate plant protection agents which potentially could be used against *A. lycopersici* in tomato, a greenhouse trial was conducted between May and August 2017. In this trial the acaricide “Vertimec Pro” (Abamectin, Syngenta), “PREV-AM” (orange oil, Oro Agri) and the entomopathogenic fungus *Beauveria bassiana* formulated as “Naturalis”(e-nema) were compared in their efficacy against *A. lycopersici* on tomato. After inoculation with *A. lycopersici* the population densities and the symptoms caused by *A. lycopersici* on tomato plants were monitored frequently throughout the whole experiment. This allowed assessment of the direct and lasting effects of all three plant protection agents. Abamectin showed good results, *B. bassiana* showed a slight reduction of symptoms and the orange oil showed no effect and performed similar to the water treatment.

This study is part of the SmartIPM project within the C-IPM initiative and is funded by the German Federal Office for Agriculture and Food (FK: 2816ERA01L)