

TWO-SPOTTED SPIDER MITE *TETRANYCHUS URTICAE* (ACARI, TROMBIDIFORMES, TETRANYCHIDAE) IN THE COMMERCIAL STRAWBERRIES OF LATVIA

Ineta Salmane

Latvian Plant Protection Research center

Address: 14a Strukturu str., Riga, Latvia, LV-1039

e-mail: ineta.salmane@laapc.lv

Investigation of the seasonal dynamics of two-spotted spider mites on the commercial strawberries in high and low tunnels and open field was made. Strawberries are among the most popular soft fruits in Latvia and for extended production purposes growing of those crops often is performed in tunnels. The specific environmental conditions in the tunnels increases the number of pest species and decreases the number of their natural enemies. One of the most dangerous strawberry pests is two-spotted spider mite. *Tetranychus urticae* is the most polyphagous of the spider mite species and the most economically important arthropod pest in the commercial strawberry plantations. This spider mites are dependent on environmental conditions - they prefer high air temperature and low relative humidity.

Information is scarce on dynamics of two-spotted spider mites in strawberry plantations in Latvia. Hence an aim of the current investigation was to make an insight in the dynamics of *Tetranychus urticae* in the high and low tunnels and open field. An investigation was performed in the territory of the Latvian State Institute of Fruit-Growing in Dobeles and Pure Horticultural Research center during the vegetation season 2013. The ordinary strategy (in Latvia) of strawberry leaf cutting after the last harvest in the middle of July was performed. The sampling of strawberry leaves was made fortnightly from 7.05.2013 to 24.09.2013 (BBCH 55-61) in the untreated strawberry plantations.

In the early spring in the high tunnels and open field of strawberry plantations average number of two-spotted spider mites per 1 leaf was low (0 - 15 indiv./leaf) due to the relatively low average air temperature. The maximal average number of *T. urticae* was 75-115 indiv./leaf in the low tunnels at the first sampling time (9.05.2013). The polythene cover in the low tunnels was removed at the beginning of June (BBCH 81), which led to the significant decrease of average number of the two-spotted spider mites. In the open field *T. urticae* reached maximal value (64 indiv./leaf) at the middle of June (BBCH 87) and in the high tunnels (68 indiv./leaf) at the beginning of June (BBCH 81).

Two-spotted spider mite populations undergoing rise in numbers after the leaf cut-off, still it was not significant as average air temperature gradually decreased toward the autumn.