## American grapevine leafhopper – Scaphoideus titanus Ball.

The length of the body is 4.5-6 mm. There is a black stripe along the front edge of the top of the head. The top of the head, the thorax and the scutellum is light brown - orange brown, with well visible patterns The veins of the wings are dark, they show a characteristic pattern. Host plants of the larva include: grapes, and non/cultivated varieties. Its immediate damage is significant only in case of a mass outbreak. Economically it is much more important that the leafhopper is the vector of the phytoplasm causing Flavescence dorée disease. The phytoplasm is taken up through feeding by the leafhopper, then after a period of several weeks the insect transfers it to another plant.



The pathogen has already been found in the leafhoppers in some European countries[2]. Symptoms of Flavescence dorée: they can be visible to the same extent on berries, leaves and also shoots. The combination of symptoms should be observed, sinlge symptoms may indicate a weaker infection, or lack of some nutrients. Flavescence dorée can be identified by certainity only by molecular and serological methods. The



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symptoms include late bursting in spring, during summer the flowers and berries get dry, the leaves become hard, change colours, and roll up in a characteristic triangular shape. On white vine varieties the leaves turn to yellow, on red varieties to reddish[1]. In case of early infection the shoots do not become woody, they are elastic, hang loosely[2]. At the end of summer and in the autumn the plants show a "willow-like" shape[1]. In the winter shoots can die off[2]. For capture of the leafhoppers one can use yellow (SZs) or fluorescent yellow (SZz) sticky sheets (with no chemical bait). The fluorescent yellow sheets also capture Drepanothrips reuteri at good intensity, so in this case both species can be monitored with the same trap. Traps should be placed at a height of ca. 1.5 m among leaves, so that the yellow surface be sunlit as long as possible, and neighbouring leaves should not cover the sticky surface.



Selectivity of the CSALOMON® SZs and SZz traps: the colour of the sticky sheets can be attractive to several other insects (among them other leafhoppers).

Longevity of the CSALOMON® traps in field conditions: Efficacy of the trap is retained until all of the sticky surface is covered by captured insects. This can happen within 1-2 weeks even, depending on weather conditions. In case the presence of the american grapevine leafhopper is detected, it is advisable to closely observe physiological state of the plants in that vineyard so that an infection by the disease be detected early. The traps can be used for early detection and to monitor the flight pattern of the leafhopper. The pest originates from North America. It first was recorded in Europe in France in 1960[1]. Since then it spread to several European countries.

[1] Dér, Zs et al.: New vine pest in Hungary: Scaphoideus titanus Ball, 1932 (in Hung.). Növényvédelem 44(5), (2008). [2] EPPO: Grapevine flavescence dorée phytoplasma. Data Sheets on Quarantine Pests. European and Mediterranean Plant Protection Organization,

http://www.eppo.int/QUARANTINE/bacteria/Flavescence\_doree/PHYP64\_ds.pdf



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