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SURVEY OF PHYTOSEIDS IN ORGANICALLY GROWN VINEYARDS AND TRIAL OF BIOLOGICAL FIGHT AGAINST E - CARPINI

- SUMMARY -

In 1991 a survey was realized in Languedoc on vineyard mites with the SRPV (State Departement for Plant health).

33 organically grown vineyards, were prospected 2 or 3 times each. Observations were realized on 50 leaves in the grape neighbourhood.

High levels of phytoseids populations were found (mainly K. aberrans and T. pyri) = density was higher than 0,5 in 19 cases (57,5%) and between 0,2 and 0,5 in 8 cases (18,3%). E. carpini was found in only one vineyard.

Sulfur (powdery or wettable) treatments did not seem to influence phytoseids in field conditions (where as in laboratory conditions, wettable sulfur at 1,2% kills phytoseids).

On the whole area, the organic vineyards, have been found to host more phytoseids = 56% of organic vineyards have phytoseids density higher than 0,5, against 38% for conventional vineyard, without insecticids or acaricids, and 35% for conventional vineyards with insecticids or acaricids.

In 1992, an attempt of biological fight was realized. 300 green shots were taken on a high-density phytoseid vineyard and transfered into a 2 ha very low density phytoseid vineyard (on June the 25 th 1992), in a plot of 330 stocks (11 rows, 30 stocks). Phytoseid populations were surveyed every two weeks :

- in the high density vineyard
- in 3 zones of the low density vineyard
- in a witness vineyard (same variety, same cultivation, same density, in the neighbourhood of the low density vineyard).

Phytoseid populations increased during a few weeks after the introduction, then decreased. The same regression was also observed on the high-density vineyard. It could be explained by high rainfalls, "dilution" due to important vegetation growth and numerous 13 treatments (10 to in 1992, 6 to 8 in 1991).

The survey must be pursued in 1993.

Jacques ROUSSEAU
Stéphane COUDERC
Alain ARRUFAT

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Maison des Agriculteurs Mas de Saporta 34970 LATTES
tél: 67.92.25.21. Télécopie: 67.20.88.73.