

**Sanitary status of stone fruit industry in the Mediterranean countries: Greece**

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# GREECE

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Fruit production is of great importance in Greece playing a prominent role in its national economy. About 104,000 ha are cultivated and 1.6 million tons of fruits were produced in 1994; stone fruits represent 76% of this production. Virus and virus-like disease problems occur in fruit-trees and plum pox potyvirus (PPV) is the most serious one. This virus was first reported in 1967 (Demetriades and Catsibas, 1968) and since then, it has spread throughout the country infecting apricot, peach and plum trees. Extensive losses concern especially apricot and peach production (Syrgianidis, 1988). Other early reports were concerned with the widespread nature of prunus necrotic ringspot ilarvirus (PNRSV) in peach trees in central Macedonia (northern Greece), reaching 35% infection (Syrgianidis, 1977). Later on, in 1980, PNRSV was detected in almond trees in Volos (central Greece) at a similar incidence (Bem, 1985). Apricot chlorotic leafroll phytoplasma was also reported in peach, apricot, and Japanese plum (Syrgianidis *et al.*, 1976).

A relatively small-scale survey in state and private mother-tree plantations was undertaken in 1992 (Varveri and Bem, 1995). At least one tree per variety in the state collections was sampled, whereas in private mother-tree orchards 6% of the trees were sampled. Samples were tested by ELISA for PPV, PNRSV, and apple chlorotic leaf spot trichovirus (ACLSV). Virus levels differed greatly according to the location of orchards. The incidence of PPV and PNRSV in peach trees in Naoussa (northern Greece), a region of intensive stone-fruit cultivation, was of 100% and 48%, respectively. In Volos (central Greece), 94% of almond trees were infected by PNRSV. In contrast, peach and almond plantations away from the main production areas (i.e., Servia, northern Greece, and Vardates, central Greece) showed lower virus incidences (ranging from 0 to 33%). Furthermore, isolated private apricot mother blocks in southern Greece were infected by PPV (1%) and by ACLSV (11,5%). In 1995, the serological indexing of all apricot mother-trees of the isolated Evinohori (central Greece) state farm revealed low virus incidence: PPV 7,9%, PNRSV 7,9%, and ACLSV 2,2% (Varveri and Kafchitsas, 1996). Regarding sweet cherry trees, the survey undertaken in 1992 revealed,

in a non-isolated state nursery, PNRSV and ACLSV infections of 12,5%, whereas no infection was observed in an isolated nursery.

The data reveals that serious problems occur with the viruses possessing a natural means of dissemination especially in regions of intensive cultivation of stone-fruit trees. In areas of less intensive cultivation, sanitation measures can be envisaged including careful indexing and eradication of infected trees.

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