

Sanitary status of stone fruit industry in the Mediterranean countries: Egypt

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EGYPT

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The total area of stone fruit trees in Egypt is 70,000 Fedans (Fedan=0.4 Ha) with an approximate yearly production of 340,000 tons (Ministry of Agriculture, 1997). Apricot, peach, and plum are the most important stone fruits grown in Egypt. They are cultivated in many governorates, especially Giza, El-Fayoum, Beni-Sweif, El-Qualubia, El-Monofia, El-Gharbia, El-Sharkia, and North Sinai.

Several virus and virus-like diseases affect stone fruit trees. Probably these agents cause the highest economic losses observed in stone fruits. Among such agents, plum pox virus (PPV) is considered to be very important. PPV is widely observed in the above-mentioned governorates, causing severe losses to apricot trees (Mazyad *et al.*, 1992; Abo-El-Ella and Amal, 1994). The symptoms associated with PPV infection in leaves and branches include mosaic, vein banding, leaf distortion, and cracks. Malformation and necrosis on the fruits accompanied by chlorotic spots on the stone are frequently seen (Ghanem *et al.*, 1997).

Dunez (1988) had identified PPV for the first time in Egypt. PPV incidence varies greatly according to varieties and location. This virus is most dangerous to apricot production in Qualubia governorate (Lower Egypt).

A relatively small-scale survey for PPV was carried out in 1997 to evaluate the current status of the local wild type strain and to search for other strains. Visual inspection and ELISA screening indicated that the PPV isolate from the Qualubia and El-Fayoum was closely related to the El-Amar strain (Ghanem *et al.*, 1997). Other studies performed in Bari, Italy, indicated, small molecular differences (about 200 nucleotides) between these isolates (unpublished).

Other viruses such as prune dwarf virus (PDV), apple chlorotic leaf spot virus (ACLSV) known to exist in countries neighbouring Egypt have not been recorded. Only one publication was issued on the incidence of tomato ringspot virus on grapevine (Ouf *et al.*, 1991). Mosaic symptoms of unknown etiologies, in peach and mottling-mosaic symptoms in

pear and apple trees, have frequently been observed in many locations in Egypt (Abdel-Salam, unpublished). A thorough investigation should be made to examine the frequency of the new PPV isolate of Qualubia and El-Fayoum, as well as the incidence of PDV and ACLSV in stone fruits and apples.

References

- ABO-EL-ELLA and A. AMAL (1994). Studies on viral diseases of stone fruits. M.Sc. Thesis, Plant Pathology Department, Faculty of Agriculture, Ain Shams University, 125 pp.
- DUNEZ, J. (1988). Plum pox disease of stone fruit in Egypt. Report of a mission to Egypt. TCP/EGY/6759. 8 pp.
- GHANEM, G.A., DI TERLIZZI, B. and A.M. ABDEL-SALAM (1997). Some biological and serological properties of plum pox virus (PPV) in Egypt. *In: The 7th National Conference of Pests and Diseases of Vegetables and Fruits in Egypt, Ismailia, Suez Canal University, November 1997.*
- MAZYAD, H.M., NAKHLA, M.K., ABO-EL-ELLA and M.H. EL-HAMMADY (1992). Occurrence of plum pox virus (sharka) on stone fruit trees in Egypt. *Acta Horticulturae*, 309: 119-124.
- OUF, M.F., SOLIMAN, H.N. and M. HASSAN HANAA (1991). Tomato ringspot virus: a new virus disease of grapevine (*Vitis vinifera* L.) in Egypt. *Assiut Journal of Agricultural Science*, 22: 39-54.