Citrus in Albania: virological problems and efforts for the establishment of a certification programme

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Citrus in Albania: virological problems and efforts for the establishment of a certification programme

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SUMMARY - Little is known on the presence and distribution of virus and virus-like diseases of citrus in Albania. Concave gum, psorosis A, cristacortis and impietratura were detected only by visual inspection. A project, in collaboration with IAM-B and the University of Bari, has been outlined for the establishment of the citrus improvement programme.

Key words: citrus, virus, virus-like, certification, project, Albania

RESUME *- Les connaissances sur les maladies à virus et de type viral des agrumes en Albanie, leur présence et diffusion actuelles sont aujourd'hui encore limitées. De plus, la détection repose exclusivement sur les inspections visuelles et jusqu'à présent, seuls des symptômes de concave gum, de psorose A, de cristacortis et d'Impietratura ont été observés. Un projet en collaboration avec l'IAM-B et l'Université de Bari a été entamé pour la mise au point d'un programme d'amélioration des agrumes.*

Mots-clés: *agrumes, virus, virus-similaires, certification, projet, Albanie*

Introduction

Citrus has been grown in Albania for about two centuries, but their cultivation became important only in the 1930s. Citrus growing in Albania is mostly concentrated in the South-Western part of the country along the Ionian Coast up to the border with Greece (Figure I), which represents the main area for citrus production due to favourable climatic conditions and tradition for its cultivation.

Citrus groves are generally located not far from the sea and the majority of them are on terraces under surface irrigation. A dramatic decrease in the acreage of these crops took place because of political and economic factors. From about 2,500 ha in 1990 the surface dropped to 500 ha (Anonymous, 1994)

when many citrus plantations were abandoned. Sweet orange represents nearly 70% of citrus grown in Albania, followed by mandarin and lemon, respectively with 20% and 10 %.

International citrus varieties are more widespread than the native ones. The most important imported varieties for sweet orange are 'Tarocco', 'W. Navel' and 'Moro', for mandarin 'Avana', clementine 'Common', satsuma 'Miagawa' and, for lemon 'Femminello S. Teresa' and 'Interdonato'. The traditional citrus rootstock mostly used in Albania is sour orange, but trifoliate rootstocks are also used.

Sanitary status of citrus

Among the fungal diseases, economically important for the citrus cultivation in Albania, *Phoma tracheifila* ranks first. Other diseases induced by *Phytophtora spp.*, *Fusarium spp.*, and *Armillaria spp.*, are widespread as well, mainly in old citrus groves (Kaltani and Stani, 1973).

Different aphid (*Aphis citricola*, *Toxoptera aurantii*, *Aphis gossypii* etc) and mealybugs (*Planoccocus citri*, *Icerya purchasi* etc) are important pests for citrus production (Kaltani and Stani, 1973), and the nematode *Tylenchulus semipenetrans* is frequently found (Jovani, 1996).

The only information available about virus and virus-like diseases of citrus is reported by Salibe (1986), based on field observations in the South-Western areas of the country. Exocortis symptoms on orange and mandarin grafted on trifoliate were found in the citrus varietal collection of the Institute of Pomology in Vlorë and in some citrus orchards in Sarandë. Psorosis and blind pocket symptoms were also observed in the same locations. In a citrus grove near Sarandë a mandarin tree grafted on sour orange exhibited gummosis on the bark, stem pitting on the scion and clearcut symptoms of cachexia.

Up to now nothing is known about citrus tristeza virus (CTV). Urgent studies need to be carried out to know the sanitary status of citrus industry and to give reliable information for the possible presence of CTV. Initiatives are taken in the framework of the MNCC and thanks to the bilateral collaboration of the Albanian Ministry of Agriculture and Food with CIHEAM-IAM-Bari and the University of Bari.

Concluding remarks

The recent crisis of the Albanian citrus industry, characterized by the disappearance of most citrus groves, resulted in the reduction of national production and the immediate increase of importation. Nowadays in Albania there is an increasing demand for citrus and related products inducing the import of large quantities (nearly 50%) of the total fruit import.

In such a situation the need for citrus propagation material to establish new private plantations is increasing (Nelaj *et al.*, 1996). Due to favourable climatic conditions in the South and West, Albania has a potential citrus cultivation surface, estimated in about 200,000 ha. The urgent need for grafted plants must be satisfied with quality plant material produced in the country or imported.

In the framework of the co-operation between the Mediterranean Agronomic Institute and the University of Bari with the Albanian Institutions (Plant Protection Institute and Pomology Institute) and in view of the importance of improving the sanitary conditions of the Albanian fruit tree industry, a long term project is finalized for the production, conservation and utilization of certified propagative material of citrus and other fruit tree species. This project sets down the bases for a national nursery production according to the international standards, in order to support the future citrus industry in Albania.

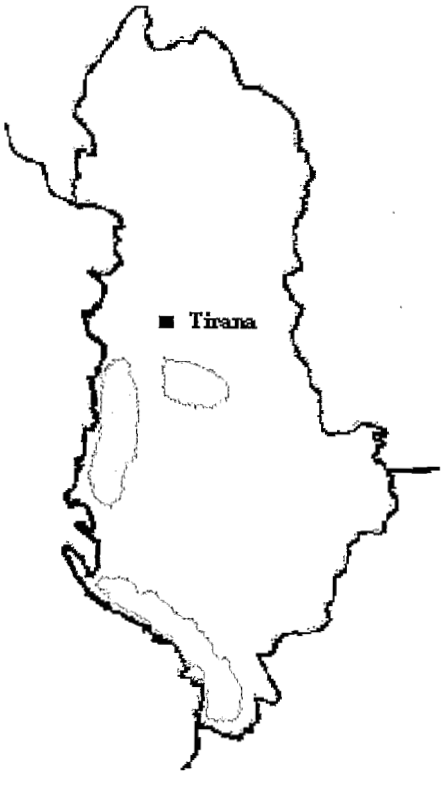

Figure I – Citrus-cropping areas in Albania

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