

cultivars and two infection levels), with four replications and three trees per plots. The canopy height of 'Finike', 'Folha Murcha' and 'Olivelands' were not affected significantly by CVC. The soluble solids and fruits yield were also affected in the six cultivars, with a reduction of 23.70% and 32.17%, respectively. Fruits from healthy trees showed mass, height and diameter values greater than those from diseased ones. For soluble solids (SS), titratable acidity (TA) and *ratio* (SS/TA), the cultivars had different behavior, being the 'Olivelands' the less affected one. It present similar values in tree fruits healthy and CVC affected.

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New Satsuma Mandarin Cultivar 'Tamnajosaeng'

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A new early maturing satsuma mandarin (*Citrus unshiu* Marc.), 'Tamnajosaeng' was developed as a nucellar seedling selection of 'Sigeta unshiu' (*C. unshiu* Marc.) crossed in 1992 with pollens of 'Natsudaikai' (*C. natsudaikai* Hayata) at the National Institute of Subtropical Agriculture in Jeju island, Korea. The 'Jegam ga No. 3', a first selection from seedlings fruited in 2001 was finally named 'Tamnajosaeng' through field evaluation trials at four locations in Jeju island from 2003 to 2005. 'Tamnajosaeng' produces seedless fruit maturing in mid November, and has lower acidity than 'Miyagawa wase', the leading early-maturing satsuma mandarin cultivar in Jeju island. Fruit weight is moderate at about 80-90g, shape is compressed-oblate globose with a light orange color, and the rind about 2mm thickness is easily peeled. The flesh is also light orange in color and has a 9 to 10 Brix and 0.9 to 1.0 % acidity when mature. Tree shows moderately vigorous growth and spreading thornless twigs. Alternate bearing is similar to 'Miyagawa wase'. 'Tamnajosaeng' is susceptible to citrus scab disease and melanose, but resistant to citrus canker.

[P22]

SSR-Based Genetic Variability Assessment of Tunisian Local Citrus Rootstocks

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In the framework of the 6th PCRD European Project 'CIBEWU', the genetic diversity of Tunisian Citrus rootstocks germplasm was assessed using microsatellite markers (SSR). This work started with a prospection in order to identify the different rootstocks used all over the country, focusing on those which are the most adaptable to abiotic stress (mainly salinity). Sour Orange is by far the most widely used in Tunisia. However, we have also observed other rootstocks in some aged plantations and in southern Tunisia. Our survey has showed that these rootstocks are being used since a long time in the oasis of southern Tunisia and were preferred than Sour Orange by farmers due to their adaptation to the particular conditions of the oasis. We have collected a total set of 206 accessions, on which, 20 SSR markers were performed. This work generated interpretable results for all markers and a total of 121 alleles were revealed. Little variability was observed among Sour Orange (*Citrus aurantium* L.) rootstocks, while specific alleles were observed for the other rootstocks such as Limes, lemons and oranges. The genetic diversity assessment of the Citrus local rootstocks resources allowed the estimation of the variability either within the Sour Orange and between Sour Orange and the other rootstocks analysed. This work plays a role in the preservation of local resources biodiversity. Prospection, collection and identification, object of this study will avoid the loss of important local resources diversity. Indeed, even if the Sour Orange is threatened by the spread of Citrus Tristeza Virus over the Mediterranean Basin, it constitutes a good local material, very well adapted to local abiotic stress conditions. The Sour Orange diversity with the other local rootstocks form a genetic heritage of great importance for further rootstock breeding project and has to be preserved.

[P23]

Determination of Yield and Quality Characteristics of Valencia Orange Types Selected in Turkey

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In this study, the yield and fruit characteristics of thirteen Valencia types selected in citrus growing regions of Turkey during 1979-1983 were examined in Adana ecological conditions during 2002, 2003 and 2004 years as the second stage of the citrus selection Project. Twenty three pomologic and three vegetative characteristics were evaluated with analyses and measurements so, the types which have the best results for each one of the characteristics were determined. Besides, the clones which show superior performance were found by using weighed averaged method. As a result, 55-A, 59-A and 76-A types