

## S17P01

### Plant growth, initial fruit production and yield efficiency of twelve early maturing sweet orange cultivars in São Paulo State, Brazil

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One alternative to minimize the effects of highly destructive diseases on sweet oranges used for industrial processing is the establishment of new plantings in regions of less incidence, such as the Southwestern São Paulo State, Brazil. However, the different sweet orange cultivars have distinct vigor which can influence tree growth and development and, consequently, affect production. The objective of this study was to evaluate the plant growth, initial fruit production and yield efficiency of twelve early maturing sweet orange cultivars (*Citrus sinensis*) grafted on 'Sunki' mandarin (*C. sunki*) and identify those superior to 'Hamlin', the main early maturing cultivar planted in São Paulo State. The sweet orange cultivars evaluated were 'Hamlin', 'Westin', 'Pineapple', 'Ruby', 'Seleta Vermelha', 'Mayorca', 'Valencia 2', 'Olivelands', 'Kawatta', 'IAPAR 73', 'Salustiana' and 'Valencia Americana'. The experimental design was completely randomized with four replications, consisting of three plants of each cultivar per plot. Data of plant growth (plant height, canopy diameter and volume), fruit production and yield efficiency collected on 2010 and 2011 harvest seasons were obtained and analyzed by Dunnett test ( $P < 0.05$ ). 'Olivelands' was the cultivar with highest vigor, with highest plant height and canopy volume. Moreover, this cultivar also had higher initial fruit production and yield efficiency compared to 'Hamlin'.

## S17P02

### Initial production of 17 mid-season sweet orange cultivars in Southwestern São Paulo State, Brazil

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The high incidence of diseases and their destructive impact on sweet orange in Brazil has led to changes in the growing regions. Thus, it is critical to conduct studies to evaluate the performance of different materials as potentially productive cultivars in such new regions. This study evaluated the initial production of 17 mid-season sweet orange cultivars (*Citrus sinensis*) ['Seleta Rio', 'Seleta Amarela', 'Homossasa', 'Finike', 'Biondo', 'Bidewells Bar', 'Sanguinea', 'Vaccaro Blood', 'Torregrossa', 'Jaffa' oranges and seven selections of 'Pera' ('Pera Rio', 'Pera 2000', 'Pera 2', 'Pera 3', 'Pera 4', 'Pera AM', 'Pera MT')] grafted on 'Sunki' mandarin (*Citrus sunki*) in the Southwestern region of São Paulo State, Brazil. The experiment was planted in 2007, at 6.0 x 2.5 m spacing. The data regarding accumulated fruit production in 2010 and 2011 were submitted to variance analysis and the means were compared by Scott-Knott test ( $P < 0.05$ ). 'Pera AM', 'Biondo', 'Vaccaro Blood' and 'Jaffa' sweet orange cultivars had significantly higher accumulated fruit production (2010 and 2011).

## S17P03

### Determination of yield and fruit quality characteristics of several local and foreign originated nucellar orange clones in Adana province of Turkey

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Due to its various climatic and soil characteristics, many fruits can be grown economically in Turkey. Citrus are grown for many centuries in the Mediterranean region of Turkey, especially in the southern part of Toros Mountains. In recent years, citrus cultivation increased year by year. In this study, second level selection lines were obtained from controlled cross pollination of trifoliate orange (*Poncirus trifoliata*) with local and other 20 orange varieties. Nucellar progenies were planted in the research plot during 1975