

Abstract

The performance of eleven 'Valencia Late' and nine 'Washington Navel' orange (*Citrus sinensis*) clones all on rough lemon (*Citrus jambhiri*) rootstock was evaluated. Significant differences in trunk cross sectional area, plant canopy volume, cumulative yield and yield efficiency were found between clones of different citrus cultivars. Some clones such as VL106, VL139, VL185 and WN204 appeared to be promising in terms of good growth characteristics and high yield, and could therefore be used for the national performance trials. Studies on post-harvest degreening of 'Valencia Late' oranges were also carried out at Matuga Regional Research Sub-Centre (Kenya) in a series of experiments. Fully mature fruits were dipped for three minutes in 0, 500, 1000, 1500, 2000, 2500 and 3000 ppm concentrations of ethephon. Fruits wrapped in aluminum foil shrivelled less and retained their firmness and freshness. Rind brightness increased by dipping of fruits in ethephon (2000) ppm giving a good colour change. Dipping fruits a second time three days after the first dip did not have any significant effect on colour change. (Chemical names used: (2-Chloroethyl)phosphonic acid (ethephon)).