HBOK 27 - SUMMARY OF THE INVENTION

The ‘HBOK 27’ peach rootstock of the present invention is an intraspecific hybrid between two peach parents that has size control ability, moderate root knot nematode resistance, less wood from dormant and summer pruning, and produces fewer root suckers. When used as a clonally-produced rootstock with fresh market peach (‘O’Henry’) scions, ‘HBOK 27’ showed size reduction of compound trees and no evidence of graft incompatibility or other abnormalities. Five-year-old compound trees with ‘HBOK 27’ rootstock had 45 % smaller trunk cross-sectional area (TCA) than with the standard rootstock ‘Nemaguard’. The compound trees with ‘HBOK 27’ rootstock also had approximately 50% to 60% less wood from summer and winter pruning, and had fewer root suckers than ‘Nemaguard’. Although crop yield per tree usually was less than on ‘Nemaguard’ rootstock, the compound trees with ‘HBOK 27’ rootstock that were smaller generally showed greater cropping efficiency. The ability to plant smaller trees at greater density in commercial fields provides an opportunity to recover economically viable yields per unit area. Fruit from the compound trees with ‘HBOK 27’ rootstock ripened 4 to 7 days later than ‘Nemaguard’. The ‘HBOK 27’ rootstock displays root knot nematode resistance levels that are slightly less than that of ‘Nemaguard’. The ‘HBOK 27’ rootstock is adapted to regions such as California, and can be used as a rootstock for dessert peach, canning peach, almond, apricot, and Japanese plum (*Prunus salicina* Lindl.). Compound plants with ‘HBOK 27’ rootstocks provide an opportunity for growers to develop new management practices that utilize the potential of these rootstocks to lower costs through size reduction, reduced pruning and less need for sucker control.