MANDARINS: Minneola Tangelo

FRUIT DESCRIPTION: Near seedless when grown in isolation. Few seeds (7-12 per fruit) when grown near pollinators. Oblate to Obovoid fruit shape with a prominent neck or collar at the stem end. The fruit appears pear or bell shaped. 3.00 to 3.50 inches in diameter equates to a Mammoth to Super Colossal size designation. Rind has a deep reddish-orange color, smooth to finely pitted texture and a medium-thin thickness. Easy to peel, but moderately adherent to the internal fruit surface. The delicate segments number 10 to 12 and the axis is small and hollow. The orange colored flesh is tender, finely textured, juicy and aromatic. The unique and distinctive flavor, derived from its parentage, is rich and tart.

TREE DESCRIPTION: Round shape with vigorous growth habit and medium-large tree height. Attractive appearance with large long and pointed deep green leaves and highly visible fruit positioned towards the outside of the tree. Productive bearer of fruit early in its youth. Fruit holds well on the tree. Fruit production is enhanced by cross-pollination and the use of honeybees. This practice will also increase the amount of seeds per fruit. Tendency to alternate bear, resulting in extra large fruit of poor quality during the off years. Good cold tolerance.

HARVEST SEASON: January to May

PROS: Large fruit with unique shape and attractive red-orange color. Easy to peel fruit has a distinctive rich, aromatic flavor, high juice content and a low seed count. Mid to late season harvest and good holding capabilities allow for many marketing opportunities. Popular in the gift fruit trade because of its unique appearance and excellent eating qualities. Grown successfully in most citrus regions, but best suited to hot climates, such as those found in the low elevation desert regions of Arizona and California.

CONS: Moderate alternate bearing tendencies may be alleviated with management techniques, scheduled harvesting and annual pruning. Requires the use of pollenizers and honeybees to increase yields, which also increases seed count (up to 7 to 12 per fruit). Low yields may be experienced if suitable pollenizers are not in close enough proximity and in the proper quantities. Many growers are developing strategies to grow trees without pollenizers in an effort to attain seedless fruit. Fruit has the potential to be frost damaged due to its position on the tree and its lateness of harvest. Shortened harvest season in desert regions. Not recommended for close plantings and trees grown on standard rootstocks often require regular hedging and topping. Adequate spacing should be provided.

COMPATABLE ROOTSTOCKS: Carrizo, C-35 Citrange, Citrumelos, Trifoliates, Rough Lemon, Volkameriana

RECOMMENDED SPACINGS:

Traditional: 18'x18', 18'x20', 20'x20', 20'x22', 22'x22'
Double Planting Standard Rootstock: 9'x18', 9'x20', 10'x20',10'x22', 11'x22'
C-35: 18'x18', 18'x20', 20'x20'
Double Planting C-35 Citrange: 9'x18', 9'x20', 10'x10'

HISTORY: Minneola was developed in 1931 at the U.S. Department of Agriculture in Florida by W.T. Swingle, T.R. Robinson and E.M. Savage and is the result of a cross between Duncan Grapefruit and Dancy Mandarin. Its flavor is a combination of its parents, with the richness, aroma and color of the mandarin and the tartness associated with the grapefruit. One of the oldest varieties in the Florida fresh fruit mandarin and mandarin hybrid markets. The most important commercial tangelo variety in California and now a major part of the world's citrus producing regions. Because of its unique appearance and flavor, Minneola is now commonly found in supermarkets and especially in the specialty markets and gift fruit trade.

OTHER OBSERVATIONS: Minneola is the most widely grown tangelo variety in the world and performs satisfactorily in most of the citrus regions. The desert climates produce the sweetest fruit but have the shortest harvest period. Fruit produced in the cool, California coastal climates hang on the tree longer but have a tarter flavor. Trees grown in a solid planting, without pollenizers, produce near seedless fruit, but have lower yields. Some growers apply gibberellic acid growth regulator sprays at bloom to increase fruit set and subsequent yield. Not recommended on vigorous rootstocks or planted in poor quality soils. Fruit quality best on slower-growing rootstocks. Growers should resist marketing the fruit produced in the first few years, which usually is lower in sugar and highly acidic. Minneola was nicknamed Honeybell or Honey Bell by the gift fruit trade. Fruit for the gift trade is best to harvest when it has reached full flavor and not when it has developed full color earlier in the season.