

# **NAVEL ORANGES: Fukumoto**

**FRUIT:** Seedless. Round shape. 3.0 to 3.25 inches in diameter equates to 56 to 88 box count. Rind texture and thickness normal for navels. Attractive reddish-orange rind color. Early maturity, internally and externally. Excellent flavor.

**TREE:** Slower growing, small to medium size tree. Dark green foliage with large juvenile leaves. Moderate yield of medium to large size fruit.

**HARVEST SEASON:** Mid-October to February.

**PROS:** Early maturity. Excellent rind color and flavor. Name recognition in Pacific Rim markets, especially in Japan.

**CONS:** Tendency to produce chimera fruit. Foamy bark rot has been known to occur on 2-year-old trees.

**COMPATIBLE ROOTSTOCKS:** Carrizo, C-35 Citrange, Trifoliate, Citrumelos, Rough Lemon.

## **RECOMMENDED SPACINGS:**

Standard: 20' x 20'; 20' x 22'; 22' x 22'

Double-planting Standard: 10' x 20'; 10' x 22'; 11' x 22'

C-35: 19' x 18'; 18' x 20'; 20' x 20'

Double-Planting C-35: 9' x 18'; 9' x 20'; 10' x 20'

**HISTORY:** Fukumoto is a navel budline selection made by Mr. S. Fukumoto in Japan, where it was a popular variety grown in the southwestern navel region of that country. It is famous there for its early maturity and beautiful reddish-orange color. It was imported into California by Dr. Bitters of the University of California at Riverside in 1983 and was released to nurseries for propagation in 1992. Since then, Fukumoto has become the most popular commercial early maturing variety and has proven itself in all the navel regions of the San Joaquin Valley.

**OTHER OBSERVATIONS:** Fukumoto is an excellent quality early season navel variety. Early harvest can also be attained in the Central Valley regions when Fukumoto is planted in the warmer microclimates of those counties (Tulare and Fresno). The overall qualities are really best during November and December. Fukumoto responds well to light ethylene gassing and develops a deep, attractive orange color. Combined with the good flavor and medium-thick rind this variety may be the best early variety for the Pacific Rim where some name recognition has been developed. There are two problems associated with Fukumoto but they haven't been detrimental enough to slow the interest and planting of this variety. The first problem you may incur is Foamy Bark Rot, a little known bacterial disease that may or may not attack two-year-old trees. It causes large cankers that may girdle a part of or the entire tree. The foam attracts ants, which join in on the girdling. Ant controls along with bacterial sprays are advised when experiencing this malady. It also may be heat stress related so location may be an issue. The other problem involves a tendency to produce chimera fruit, where a segment or ridge in the rind is enlarged and stands out from the rest of the fruit causing it to be downgraded.