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CITRUS FOR THE HOME GARDEN

Many of our subtropical juicy fruits, such as the citrus, are found thriving in our backyards. It provides edible fruits which are consumed in a fresh state and are also used in many of our flavorings.

Most of the citrus species are grown from sea level to 2,000 feet in elevation. They grow best between temperatures of 65-90° F. and in a warm, sunny location. Great day and night temperature difference will provide better quality fruits, especially during ripening period.

Mandarin oranges are quite popular to many home gardeners since they are easy to peel. 'Dancy,' 'Fremont,' 'Fairchild,' and 'Nova' mandarin have been widely planted. Other lesser known varieties such as 'Lee,' 'Honey,' and 'Wilking' can also be added to the home gardens.

Oranges will do well in Hawaii. Oranges are planted for fresh fruit consumption purposes. These oranges are relatively easy to peel and contain few or no seeds, making them highly desirable. 'Washington,' 'Rico No. 2,' 'Raratonga Seedless,' 'Shuekhan' and 'Pera' oranges ripen from October to January.

Other citrus fruits for the home garden include the 'Meyer' lemon which produces abundant juice, and fruits almost year around. Lime varieties include 'Bearss' and 'Key' ('Mexican,' 'Chinese'). Grapefruit varieties such as 'Marsh Seedless,' 'Ruby Red,' and 'Nitta' are suggested.

Pummelo, a close relative of grapefruits, require a slightly larger space to grow. Pummelo varieties such as 'Chandler,' 'Diamond Head,' 'Pauthel,' 'Haiku B,' 'Leslie,' and 'Kao Pan' and 'Sakata' are grown for their excellent quality. These varieties are sweeter and the flesh firm, making it easy to eat with the finger.

Tangelos (Mandarin x Grapefruit) are planted for its ease in peeling and its abundant juice. Varieties such as 'Minneola' and 'Orlando' can be planted.

Some citrus trees grown also for ornamental purposes include calamondin and kumquats. Calamondin is often planted as a bonsai or container plant. Kumquat, which can be eaten with the rind or for marmalade usage, is used normally to accent entrance to homes. Kumquat varieties to plant include 'Nagami,' 'Meiwa,' and 'Marumi.'

Grafted varieties that have been proven for the locale are worth the expense because they are likely to yield quality fruits and are tolerant to some diseases found on citrus. A rootstock such as 'Heen Naran' is recommended. Where space is limited, citrus varieties grafted on dwarf rootstocks may be considered. These plants are available at the garden centers.

This publication was assumed to be correct at the date of its issue, but it may no longer represent the most up-to-date information on its subject. In particular, if it contains information on pesticide uses, the products mentioned may not currently be approved for sale in Hawaii

Plant citrus trees in areas that are protected from excess wind and in areas which receive full sunlight. The tree should be spaced 15-18 feet apart. For dwarf citrus trees, spacing may be much closer. Dig a hole 2 feet in diameter and 2 feet deep. Add sufficient amount of compost and apply 1/2 pound of treble superphosphate in the bottom of the planting hole. Adjust the soil pH to about 6.0-7.0. Set the tree in the planting hole and spread the root system in all directions. Fill with soil-compost mix around the tree. The crown of the tree should be at the same soil level as it was in its original container. Firm the soil around the plant and water. Protect the tree from excess wind and sunlight until the tree establishes itself.

Fertilize the tree every 3-4 months by applying a fertilizer such as 10-10-10 or 16-16-16 or 10-20-20 around the drip line. Fertilizer may be applied before bloom, when fruits are rapidly developing and when fruits are 4-6 weeks prior to maturity (ripe stage).

Water trees thoroughly after fertilizing. The tree should never be allowed to show symptoms of water stress such as drooping leaves. Water thoroughly, 1-2 times a week or when necessary.

After the last crop is harvested from the tree, the tree can be lightly pruned. Remove all dead and undesirable branches. The interior of the tree should not be so dense as to exclude light and air. Severe pruning may lead to vigorous vegetative growth and result in decreased yield.

Insects attacking citrus include, scales, Chinese rose beetles, citrus swallowtail, thrips, aphids, and whiteflies. These insects can be controlled by using pesticide sprays, such as diazinon, malathion, and carbaryl. A combination of a petroleum type spray oil plus malathion or diazinon has been found to be the most effective on scales and whiteflies. Mites can be controlled by using sulfur. Oriental fruit flies are also a problem on fruits since they reduce the shelf life potential of the fruit.

Viruses are common problems often found in citrus. Presently, there is no control of these diseases. Plant grafted trees on tolerant rootstock. Other diseases which are found on citrus include scab, melanose, algal spot, and sooty mold. These diseases can be controlled by using fungicide sprays such as copper compounds. Sooty mold can be eliminated by controlling insects such as scales, whiteflies, and aphids.

Fruits are harvested when 1/3 - 1/2 of the rind turn color. Leaving fruits beyond complete coloration may lower the quality of the fruits. Refrigerate fruits at 35-40°F. to prolong the shelf life of the fruit.

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NOTE: The use of trade names is for the convenience of readers only and does not constitute an endorsement by the University of Hawaii, the College of Tropical Agriculture and Human Resources, the Hawaii Cooperative Extension Service or any of their employees.

"Use pesticide safely. Read and follow the label. Consult Cooperative Extension Service or Department of Agriculture personnel for authorized special local need registrations or additional information. The user is responsible for proper use and application of pesticides as well as storage and disposal.