

Introduction

Citrus should be included in all home orchards and landscapes where it can be successfully grown. The different types of leaves, abundance of blooms, aroma of the flowers and the color of the mature fruit of different types of citrus add to the aesthetic value of the landscape and provide an excellent quality, nutritional fruit for consumption. It is the ideal fruit for the homeowner. The fruit is easy to grow and, once mature, stores well on the tree and can be picked over a period of several months.

The major problem for home gardeners is the survival of trees after hard freezes. The production of citrus is not without its insect and disease problems; however, these pests can be controlled successfully with timely spraying and good cultural practices.



Areas of Citrus Production

Because of potential freezes, citrus can be produced in only a limited area of the state. Louisiana can be divided into three general climatic zones (Figure 1). Only two are suitable for citrus production.

Zone I, the coastal area, is the primary area of commercial citrus production. Generally, all citrus types can be grown in this zone.

Zone II is a marginal area where only the cold-hardy satsuma and kumquats should be grown. Certainly any plantings of citrus in Zone II should be undertaken only after realizing the risk of freeze outs. Success with citrus planted in Zone II can be enhanced with the trifoliata rootstocks and use of cold protection practices.

Citrus in Zone III would freeze out regularly. Homeowners may risk planting satsumas and kumquats in Zone III. Citrus in Zone III should be grafted on a trifoliata rootstock and be protected in winter.

Growth of Citrus

Growth in citrus tends to be in flushes with periods of shoot inactivity between flushes. In Louisiana, there are three flushes of growth a year. The first flush occurs in late February and March. This is usually the time of the greatest shoot extension because more buds elongate. The second flush occurs in August, and the last takes place in October. During growth flushes, the shoots elongate in between the flushes, the leaves expand to full size and root growth occurs.

Flowering of Citrus

Oranges, grapefruit, mandarin, tangelo and tangerines tend to bloom in March; satsumas and kumquats bloom in late March and April. Lemons and limes tend to blossom continuously, but the heaviest blossoms are in the spring. Citrus flowers tend to be borne in small clusters in the axils of leaves on last year's wood and as single flowers in the axils of leaves of a growth flush that is just completed.

Pollination

Citrus flowers have both male and female parts in the same flower (complete perfect flowers) and will pollinate themselves and produce fruit (self-compatible and self-fruitful). Pollination is seldom a problem in citrus. There are, however, a few special cases with tangelo and tangerines where a pollinator is required for good fruit set.

Citrus trees produce an abundance of flowers. Citrus has a natural tendency to drop its fruit, and most of the fruit set at bloom will not hold on until maturity. A good crop may be borne if only 3 percent to 7 percent of the flowers that are set mature fruit. The Washington navel and satsuma do not have viable pollen. They set fruit without pollination and have no seeds. The few seeds in a satsuma are from viable pollen from another variety.

Site Selection

A well-drained soil, high in organic matter and slightly acid to neutral, is desirable for citrus. The site should provide full sunlight. In most cases, homeowners are limited to sites in the yard where citrus can be planted. The site with the most sun should be selected for a citrus planting. Citrus trees require good drainage. Trees planted on heavy clay soils with poor internal drainage should be planted on a mound or row 8 to 12 inches high.

Planting

The best time to plant citrus trees is in January or February. Trees planted after December can withstand a freeze in February better than earlier-planted trees. A 2- to 4-foot tree with three to four well-developed upward-growing side branches 18 to 24 inches above the ground is the ideal tree for home plantings.

The root system of the young trees should be inspected before planting. Trees that have bent or circled