

BANANA PUP & PLANT CARE SUGGESTIONS

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Bananas are fun and easy to grow in South Georgia. They are considered by many people to be one of the most beautiful plants for the Coastal landscape. Occasionally, you may also receive the additional benefit of delicious fruit.

Immediate Care: Don't expose your banana pup to freezing temperatures; but keep in a cool place until you can pot it up. Your banana plant will need to be given some time to develop a strong root system before planting it in the ground. You should pot your plant as soon as possible in a soil-less growing mix, give it a good watering and allow the top of the "soil" to become dry to the touch before watering again. After potting, keep it in as warm and sunny a location as possible until it starts to show new growth. This may take from a few weeks to a couple of months. The length of time is determined by several factors with one of the most important being the temperature where the plant is kept. After new leaves begin to grow, you can add a little water soluble fertilizer or slow release fertilizer to your plant. Follow the manufacture's recommendations on the box. When the spring comes and the danger of frost has past, you can plant it in the ground in its permanent location.

Description: Bananas are large, fast growing plants that develop from underground rhizomes. These underground rhizomes develop into "mats" that may include a number of individual banana plants. Banana plant "trunks" (or pseudostems) are composed of a series of leaf sheaths that are tightly wound to provide the structural support necessary to hold the weight of the plant and fruit. The time required for a banana plant to reach maturity and bear fruit varies from 10-24 months and depends on several factors. Some of these factors include: the variety of banana being grown, the amount of sunlight received, the temperature during the growing season and the amount of water and fertilizer available to the plant. Fruiting in Georgia will occur following mild winters when the trunk pseudostem survives the winter. Bananas reproduce through "suckers" or "pups" that arise around the base of the mother plant. These suckers can be removed, rooted and used to provide planting material for starting new mats of bananas.

Growing Conditions: If bananas are being grown for fruit they should be planted in full sun if possible. The plants will tolerate some shade and the foliage may actually look better if grown under light shade. This practice is not used in commercial plantations because plant growth, flower emergence and fruit development will be delayed relative to plants grown in full sun. Although bananas can be grown on marginal soils, they prefer soils with a pH of 5.5-6.5 and are heavy feeders that do best with regular feedings during the growing season. A mature mat of bananas may use as much as 1.5-2 pounds of fertilizer a month during the growing season. Young plants require much less fertilizer. A balanced fertilizer such as 10-10-10 is a good choice. In addition to a good balanced fertilizer, if possible additional

potassium (such as 0-0-63 or 0-0-22) can be applied. Bananas also enjoy having a steady supply of water during the growing season but do not like having their roots growing in wet soil. They also enjoy lots of organic matter, so adding additional compost to the mat is an excellent idea. They also respond well to mulching with organic materials such as yard waste and pine bark.

Flowers and Fruiting: Banana flowers emerge from the center of the pseudostem and initially point upward but over the period of a few days, they bend downward and eventually point towards the ground. As the purplish-red bloom (known as an inflorescence) points towards the ground, it begins the process of unfurling individual bracts or petals that reveal the actual flowers. The first bracts to open expose female flowers which will develop into the fruit we enjoy as bananas or plantains. After all the female flowers have opened the bloom enters the male portion of the bud and the remaining flowers to open are male. These will not mature into edible fruits. Bananas do not require pollination to set fruit, but set fruit parthenocarpically (without pollination). The female flowers develop into fruit over a period of months. The fruit are arranged in "hands" around the stem that holds the bloom and the individual bananas are referred to as "fingers". Bananas should be harvested at a mature green state and ripened off the tree. This is especially recommended in the late Fall in Georgia when cold temperatures threaten the crop. However, wait until the green fruit becomes plump and rounded in shape. Then cut the bunch and hang in a warm place to finish the ripening process.

References and Additional Sources of Information:

"Banana" from The California Rare Fruit Growers Website -
<http://www.crfg.org/pubs/ff/banana.html>

"Economics of Banana Production and Marketing in the Tropics" by Drs. Fonsah, E.G. and SAND Chidebelu, Minerva Press London, 1995, ISBN # 1 85863 394 X

"Bananas and Plantains" from Dr. Mark Rieger's Website -
<http://www.uga.edu/fruit/banana.html>

"Banana" from Dr. Julia Morton's book, *Fruits of Warm Climates* -
<http://www.hort.purdue.edu/newcrop/morton/morton/banana.html>

Bananas and Plantains by J. C. Robinson, CAB International Publishers, 1996, ISBN # 0 85198 985 3

"Bananas and Plantains" from the INIBAP website -
<http://www.inibap.org/index.php?page=home-%3Ebp>

"Banana Growing in the Florida Home Landscape" from The University of Florida, IFAS Website - <http://edis.ifas.ufl.edu/MG040>