

benches may be used. To build a ground bed, first construct a cold frame with sides 12 inches high. Place 4 to 6 inches of gravel or pine bark on the bottom to improve drainage. Cover this with 8 inches of rooting mix. An intermittent mist system should be provided for softwood cuttings. Hardwood cuttings can be rooted under mist or under 50% shadecloth with frequent brief periods of overhead irrigation.

Hardwood cuttings are taken in January and early February when stock plants are dormant. Cuttings should be about 6 inches long. They should be taken from strong wood from the previous growing season that has no flower buds. Such wood can be obtained from large stock plants that were pruned severely the preceding spring. Hardwood cuttings should be stuck 4 inches deep in the rooting medium, leaving only an inch or two above the medium. Both hardwood and softwood cuttings should be spaced 1 1/2 inches apart in rooting beds. The most critical period during the rooting of hardwood cuttings is the 2 months after the cuttings begin to leaf out. Leafing occurs at least a month before roots form, and even temporary wilting of the leaves during this period can greatly reduce the rooting percentage. Intermittent mist, or shadecloth combined with frequent light irrigation (once each hour of daylight for 2 minutes each time) can prevent wilting.

Softwood cuttings are taken after the first flush of new growth becomes semi-hard in May. Good cutting wood can be obtained in large quantities from strong stock plants from which all the flowering branches were removed in early March. Cuttings should be about 4 inches long. No leaves should be removed except from the bottom 1 inch of the cutting. Cuttings should be stuck 1 inch deep in the rooting medium. Intermittent mist should be provided. Leaves should never be allowed to dry at any time. A major cause of loss with softwood cuttings is power outages or pump failures that interrupt the delivery of mist during hot, sunny weather. Cuttings frequently defoliate after such an incident, and rooting rate may be severely reduced. Most mist systems are equipped with two time-clocks. One turns the whole system on at sunrise and off at sunset. Mist at night is unnecessary and promotes the growth of damaging fungi. The second timeclock activates a 5-second burst of mist approximately once every 5 minutes. One way to reduce the risk of cutting loss during power outages is to install a mist system that mists continuously during power outages.

Hardwood cuttings stuck in ground beds in February will generally have roots by May 15. They

should then be fertilized once every 2 weeks until October 1. One good fertilization schedule is to alternate ammonium sulfate with water-soluble 20-20-20. These should be dissolved in water and applied as uniformly as possible with a sprinkling can. For 20-20-20, dissolve 1/2 pound water-soluble 20-20-20 in 16 gallons of water. Sprinkle 1 gallon per 25 square feet over the plant bed and wash the leaves immediately with irrigation water.

Softwood cuttings stuck on May 15 will be rooted by July 15. They should then be fertilized every 2 weeks as described for rooted hardwood cuttings. Rooted softwood cuttings should be grown for an additional year before being planted in a production field. One way to do this is to move them during December from the rooting bed to a high-density nursery equipped with overhead irrigation. Plants should be set 6 inches apart in rows 1 foot apart. Starting on February 15, plants should be fertilized every 6 weeks by broadcasting ammonium sulfate at the rate of 1/2 pound per 100 square feet over the tops of the plants when the leaves are dry. If the soil is good and weeds are controlled, very nice plants with excellent root systems can be obtained by the following December.

### **For More Information**

Check first with your county agent if you have questions or problems with blueberries. He may have the needed information or know where to get it. The Florida Blueberry Growers' Association is a grower organization which has as one of its goals the dissemination of information on blueberry production in Florida. The Association normally sponsors half-day blueberry growing workshops each spring and fall. Your county agent can put you in touch with association officers. Large libraries frequently have books and circulars on blueberry production. Most of this information pertains to northern highbush blueberries, but some is relevant to rabbiteyes. A particularly thorough book is *Blueberry Culture*, edited by Paul Eck and Norman F. Childers, Rutgers University Press, 1966, 378 pages.

### **Summary**

Blueberries appear to be one of the most promising fruit crops that can be grown in northern Florida. Markets are excellent in early June when early rabbiteye cultivars mature in Florida. Blueberries are an excellent crop for pick-your-own markets. Blueberry growing is a very specialized kind of farming, and prospective growers need to learn all they can about blueberries before planting.