GENERAL INFORMATION

The beautiful rabbiteye blueberry is native to Georgia. Fishermen collected the best wild blueberries growing along our rivers, and later Dr. Tom Brightwell and other horticulturists created improved varieties of rabbiteye blueberries. Georgia is now the fifth largest blueberry producing state.

Rabbiteyes are generally the best type of blueberries for home gardeners in Georgia. Southern highbush blueberries are grown commercially in Georgia, but require high organic matter soil (at least 3 percent) and are very prone to attack by deer and birds because they ripen early in the season. For this reason, they are usually poor choices for home gardeners. On sites in the mountains of North Georgia, northern highbush blueberries can be grown. Northern highbush blueberries often bloom later than rabbiteyes, so they may be useful on freeze-prone sites in the mountains. Northern highbush blueberries often require deer and bird protection.

At this time, home blueberry plants seldom require spraying for insects or diseases in most areas of the state. A number of nurseries in Georgia propagate and sell blueberry plants. Your local garden center may have them. If they do not, ask your county Extension agent about a source.

Under good management, blueberry bushes will produce some fruit the second or third year after transplanting. By the sixth year they will yield as much as 2 gallons each. The yield will continue to increase for several years as the plants get larger.

VARIETIES

Rabbiteye

The most important things to remember about starting rabbiteye blueberries is to plant more than one variety for cross-pollination. Cross-pollination is necessary for fruit set.

<table>
<thead>
<tr>
<th>Early Season</th>
<th>Mid-Season</th>
<th>Late Season</th>
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<tbody>
<tr>
<td>Austin</td>
<td>Bluebelle</td>
<td>Baldwin</td>
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<tr>
<td>Brightwell</td>
<td>Briteblue</td>
<td>Centurion</td>
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<tr>
<td>Climax</td>
<td>Chaucer</td>
<td>Choice</td>
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<tr>
<td>Premier</td>
<td>Powderblue</td>
<td>Delite</td>
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<tr>
<td>Woodard</td>
<td>Tifblue</td>
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Climax, Chaucer, Choice and Woodard are not suggested for mountain areas because they bloom early. Austin, Climax and Premier are the earliest ripening rabbiteye varieties. To lengthen your harvest season, select one or more of these varieties, and one or more of the other varieties. Baldwin, Centurion and Delite are the latest maturing rabbiteye varieties. With early, mid-season and late varieties, you should enjoy fresh blueberries for six weeks.

Woodard is a good berry for fresh eating but develops a tough skin when frozen. Brightwell, Centurion, Tifblue and Powderblue are generally the most spring freeze resistant.

Northern Highbush Varieties

Northern highbush blueberries are as a rule self-fertile. However, larger and earlier ripening berries result if several cultivars are interplanted for cross-pollination. They can be grown in the mountains of North Georgia if soil conditions are met and if birds and deer are controlled. Early and mid-season northern highbush varieties ripen ahead of the earliest rabbiteyes.

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<td>Berkeley</td>
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<td>Duke</td>
<td>Bluechip</td>
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<td>Earliblue</td>
<td>Bluecrop</td>
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<td>Patriot</td>
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<td>Spartan</td>
<td>Bluery</td>
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<td></td>
<td>Legacy</td>
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PLANTING AND CARE

1. Obtain your plants in time for winter transplanting.
2. Select a site with sun for at least one-half the day. Blueberries will grow in shady spots, but fruit production will be poor.
3. Blueberries require a soil pH of 4.0 to 5.3 for best growth. If your soil pH is in the range of 5.4 to 6.0, sulfur can be applied six months before planting to lower the pH. Refer to the sulfur application chart in the Commercial Blueberry Production bulletin. Sulfur can also be applied after planting to the soil surface but not mixed with the soil. Rates of up to 7/10 pound per 100
square feet can be used yearly, if needed. If the initial soil pH is above 6.0, growing blueberries will be difficult unless massive amounts of peat moss or milled pine bark are mixed with the soil. You can find out what your soil pH is by taking a sample to your county Extension office.

4. The standard spacing for rabbiteye blueberries is 6 feet (in row) and 12 feet (between rows). The standard spacing for highbush is 4 feet (in row) and 10 feet (between rows). For a quicker hedgerow effect, plant rabbiteyes 4 feet apart in the row. If developing individual specimen plants of rabbiteyes, use a spacing of 8 to 10 feet between plants.

5. Till the soil at least 8 inches deep in a band at least 4 feet wide. If the site is excessively wet, plant on a raised bed 6 to 12 inches high and 4 feet wide.

6. Mix 2 to 5 gallons of wet peat moss or milled pine bark with the soil in each planting hole. Do not use any agriculture lime; blueberries require an acid soil.

7. Pot-bound plants must be depot-bound prior to transplanting. Hold the plant by the base of the stem and beat the root ball on the ground until most of the potting media falls out and the roots are exposed. Spread out the roots. Plants that are not pot-bound can be planted without beating the root ball.

8. Transplant the same depth as they grew in the nursery. Look for the soil line markings on plants. Firm the soil with your foot after planting.

9. Prune plant back $\frac{1}{3}$ to 2 at planting. Remove low twiggy growth entirely and tip remaining shoots to remove all the flower buds (Figure 1).

10. Do not apply any fertilizer at transplanting. After new growth begins (March) and rain or irrigation settles the soil, apply 2 ounces of azalea special fertilizer (4-8-8) or 1 ounce of 12-4-8 or 10-10-10 per plant. Refertilize at the same rate in May and July if rainfall or overhead irrigation has been good. Spread the fertilizer evenly over a circle 18 inches in diameter with the plant in the center.

11. The first year, remove any flowers or fruit that escaped the pruning process.

12. Keep weeds and grass away from plants.

13. In March and July of the second year apply 2 ounces of 10-10-10 or 12-4-8 or 3 to 4 ounces of azalea special fertilizer (4-8-8). Never over-fertilize; fertilizer damages blueberries easily until they are established. Spread the fertilizer evenly over a circle 24 inches in diameter with the plant in the center.

14. From the third season on, base the amount of fertilizer applied on the size of the bushes. If your soil tests very high in phosphorus, use 12-4-8. If your soil tests low or medium in phosphorus, use 10-10-10. Use "premium grade" fertilizer if possible; this type contains secondary and micronutrients that may be needed. Apply 1 ounce of 12-4-8 or 10-10-10 per foot of bush height at the time of bud break in the spring and after harvest in the summer. Continue to increase the amount of fertilizer applied yearly until the bushes are 8 feet tall. Bushes 8 feet tall or taller should receive the maximum rate of 8 ounces of fertilizer per bush. Spread the fertilizer evenly under and around the bushes.

15. After establishment, rabbiteye blueberries require little pruning until they reach about 6 to 8 feet in height. At this point, a cane renewal pruning program should be started. Remove one to three of the largest canes each winter at 0 to 24 inches from ground level or a total of about 20 percent of the canopy (Figure 2). In areas where stem borers are a problem, make the pruning cuts at 24 inches. Over a period of five years the bush will be totally renewed. New, more productive canes will sprout from the old canes and will sprout below ground level. In addition, excessively tall canes can be pruned back to 6 to 8 feet each winter.

16. Water the plants throughout the growing season when rainfall is not adequate. Irrigation of young plants is especially important. Adequate water is essential for plant growth and important for fruit bud formation that occurs in the fall.

17. Blueberries seldom require spraying for pests. If, however, pests attack them, see your county Extension agent for pest-control recommendations.

18. Cultivated blueberries are an almost perfect fruit. They are easy to pick, and the berries are large. To freeze them, pack the berries dry in plastic containers and place in the freezer. A small amount of frozen berries can be removed from the container and washed afterward.
Figure 2: Cane renewal of rabbiteye blueberries 6 feet and taller. Remove one to three of the oldest, tallest canes each winter or about 20 percent of the canopy. In addition, excessively tall canes can be pruned back to 6 to 8 feet.

ADDITIONAL RECOMMENDATIONS FOR HIGHBUSH BLUEBERRIES

Highbush blueberries generally perform more satisfactorily on lighter (sandy to sandy loam) soils because of the need for good internal drainage to avoid infection by Phytophthora root rot. Generally, success with highbush on upland sites also depends on meeting the following conditions:

1. Till 6 inches of peat moss, milled pine bark or well-rotted pine sawdust into the soil in a band 3 to 4 feet wide down the row prior to planting.

2. Keep the plants mulched 4 inches deep with pine bark nuggets, pine straw or pine sawdust.

3. Install permanent sprinkler or micro-sprinkler irrigation and water regularly if rainfall is insufficient.

4. Prune newly set bushes as in Figure 1. The next winter, remove all or nearly all flower buds (large plump buds) by tipping the shoots. This will encourage the bush to grow faster by not bearing a crop in the second year. Highbush blueberries often over bear, and annual pruning is usually necessary to keep the bushes healthy. On 3- and 4-year-old bearing plants, remove low spreading branches and excessively twiggy growth with too many flower buds.

When the bushes are about 4 or 5 feet tall, begin a cane-renewal pruning program. First remove the oldest, weakest canes or diseased canes entirely. Then, among the remaining canes, start with the older ones and prune approximately two per year back either to strong laterals or to within 1 foot of the ground. New strong canes will usually develop below the cut. Over a period of four or five years, a new rejuvenated bush framework will be developed.

Figure 3: Cane renewal pruning and branch thinning of highbush blueberries 4 feet and taller, before (left) and after pruning. Remove low, spreading branches and excessively twiggy growth with too many flower buds.
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