

Cooperative Extension Service

FSA6105

Blackberry Production in the Home Garden

M. Elena Garcia Associate Professor Extension Fruit and Nut Specialist Blackberries are adapted to all regions of Arkansas. They are a good addition to the home fruit garden and can be grown with fewer inputs than most other fruit crops. Furthermore, the fruit is flavorful and nutritious. Varieties developed by the University of Arkansas fruit breeding program are recommended for use in the state.



These varieties have an upright growth habit and do not require the use of an elaborate trellis system.

They are grown in a hedgerow-type system with the first crop being harvested the year after the planting is established.

Many soil types are suitable for blackberry production. However, the preferred soil pH ranges from 5.5 to 6.5, and good soil drainage is essential. Sites with water standing for long periods of time should be avoided.

Varieties

Varieties recommended for home fruit production in Arkansas are given in Table 1 (inside). All varieties were developed by the University of Arkansas fruit breeding program.

Site Preparation

Begin preparing the soil a year prior to the projected planting date if possible. Perennial weeds and established sod should be eliminated before planting. The soil should be cultivated deeply, and several diskings or rototillings may be needed to kill weeds and thoroughly incorporate plant residues.

Blackberries will respond to increased levels of organic matter in the soil, especially under nonirrigated conditions. If the soil is not well supplied with humus, apply decomposed barnyard manure or chicken litter to build soil organic matter. When chicken litter is used, be sure to apply and plow under during the fall prior to planting.

If the soil requires additional drainage, the rows can be established as raised beds. The beds should be 6 to 10 inches high and 2 to 3 feet wide. The row middles will be maintained

Arkansas Is Our Campus

Visit our web site at: http://www.uaex.edu

Table 1. Characteristics of Recommended Blackberry Varieties for Home Gardens

Cultivar	Notes
Chickasaw*	Thorny. High yielding with large fruit. Disease resistant to anthracnose and orange rust. Mid-season harvest with medium storage potential. Requires approximately 500 chill hours.
Choctaw*	Thorny. High yielding cultivar; medium fruit size. Disease resistance to anthracnose and orange rust. Early ripening. Low storage potential.
Shawnee*	Thorny. High yield with medium to large fruit size. Disease resistance to anthracnose and orange rust. Early to mid harvest season with low storage potential.
Apache*	Thornless. High yield with large fruit. Disease resistant to anthracnose and double blossom. Late harvest season with high storage potential. Requires approximately 800-900 chill hours.
Arapaho*	Thornless. Moderate yield with medium fruit size. Disease resistance to anthracnose and double blossom. Early to mid harvest season. High storage potential.
Kiowa*	Thorny, erect; very large fruit. Ripens over a long period, the longest fruiting of the Arkansas varieties. Storage and handling potential very good, among the best of the thorny varieties. Requires approximately 200 to 300 chill hours.
Navaho*	Thornless. Moderate yield with small to medium size fruit. Excellent, consistently rated the highest of the Arkansas varieties. Disease resistant to anthracnose and double blossom; susceptible to orange rust. Late harvest season with very high storage potential. Requires approximately 800-900 chill hours.
Ouachita*	Thornless, very erect canes. Early to mid-season ripening. Resistant to double blossom/rosette. High storage potential. Requires approximately 400-500 chill hours.
Prime-Jim [®] *	Primocane-fruiting; thorny, erect. Floricane yields comparable to floricane-fruiting thorny and thornless varieties. Primocane yields vary greatly by location, best in North Arkansas. Floricanes susceptible to double blossom/rosette, but primocanes avoid this disease since the disease does not appear until the second season on the canes. No orange rust observed and only slight anthracnose observed. Low storage potential. Recommended only for home garden use and very limited commercial trial. Requires approximately 300-400 chill hours.
Prime-Jan [®] *	Primocane-fruiting; thorny, erect. Similar to Prime-Jim®. Requires approximately 300-400 chill hours.

^{*}Denotes University of Arkansas release.

as sod strips. Fescue or native grasses are acceptable plant types for row middle sod strips. Bermudagrass or other invasive plants should be avoided.

Planting

Blackberries are established from root cuttings or plants. Rooted plants are often used for thornless varieties due to the reduced level of sprouting from root cuttings that occurs for thornless as compared to thorny varieties.

Plant blackberry roots or rooted plants anytime in the spring before the soil warms. Later planting can reduce plant growth. Root cuttings should be pencil size in diameter or slightly larger and 4 to 6 inches long. Plants grown from good root cuttings are usually strong and can come into production as early as one-year-old plants. Space root cuttings 2 feet apart in the row in a horizontal position, and cover with soil to a depth of 2 to 3 inches. Place plants 2 to 3 feet apart in the row at the same depth they grew in the nursery or container. The objective is to produce a continuous hedgerow for the full row length desired. Do not let the cuttings dry out. If the plants or cuttings are slightly dry when received, soak the roots in water for several hours before planting them or heel them in. If plants or roots are extremely dry, reject the shipment.

Care After Planting

Apply fertilizer following recommendations based on soil tests. If soil tests are not available, a general recommendation for the first year is to apply 5 pounds of a complete fertilizer, such as 10-20-10, per 100 feet of row after the newly set plants have started growing or after root cuttings begin to emerge.

The second year, and thereafter, should be based on soil test recommendations alongside the rows in February. Side-dress with ammonium nitrate after harvest at 5 pounds per 100 feet of row. Increase or decrease fertilizer in response to cane growth.

Cultivation should begin as soon as plants are set in the spring. Cultivate often enough to keep the ground free from weeds and grass until late summer. Generally, little pruning is required the year of planting. However, lateral growth may need to be trimmed to keep the plants within the rows.

Blackberry plants send up new canes from crowns or from buds formed on the roots. These canes grow through one season, produce a crop of fruit the second year and then die soon after harvest. Remove old canes immediately after harvest so that the new shoots develop sturdy canes.

Top the ends of new canes during the summer at a height of 36 to 48 inches. This limits cane height and forces side laterals which bear the fruiting clusters the following year.

During the summer, it is very important to remove suckers growing up outside of the desired row. Summer prune the remaining laterals or side branches to a manageable length. Winter prune the laterals to 14 to 16 inches for convenient harvesting and larger berries (Figure 1). Winter removal of excessively wide summer growth removes the most fruitful canes. In late winter, remove the remaining dead and weak wood. Leave healthy, vigorous canes spaced about six canes per foot in a row about 12 to 18 inches wide. Irrigation of blackberries is required

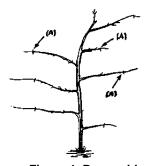


Figure 1. Prune side branches during the dormant season to increase fruit size (A).

during the first season and is needed during dry periods in most years. Apply irrigation water equivalent to 1 inch of rainfall per week. If drip irrigation is used, apply 2 to 3 gallons of water per day to mature plants during dry periods. Increase or decrease the amount of water applied based on plant response.

Pest Control

Spraying for insect, disease and weed control may be necessary. Check with your county Cooperative Extension office for current recommendations on management of blackberry pests.

Harvesting

Blackberries are highly perishable. They should be harvested as soon as ripe, handled very carefully and either placed in cold storage or used without delay. It may be necessary to harvest daily to prevent loss of fruit and the spread of molds and other diseases.

Acknowledgment is given to Dr. R. Keith Striegler as the original author and to Dr. James N. Moore and Dr. John R. Clark for their input and review of the original manuscript.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

DR. M. ELENA GARCIA is associate professor, Extension fruit and nut specialist, University of Arkansas Division of Agriculture, Cooperative Extension Service, Fayetteville.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director, Cooperative Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.