Growing Blueberries in Iowa

Blueberries are attractive shrubs with flowers in spring, edible berries in summer, and fall foliage in shades of yellow, orange, and red. The blueberry is a member of the heath or Ericaceae family.

Site requirements
Blueberries can be successfully grown in Iowa when their special growing requirements are provided.

Blueberry plants require a sunny location and well-drained acidic soils. Planting in wet, poorly drained soils should be avoided because blueberries are susceptible to root rots.

Blueberries require an acid soil of pH 4.0 to 5.5. Because the pH of most Iowa soils is above this range, the soil pH must be lowered to successfully grow blueberries. Home gardeners can lower their soil pH by incorporating sphagnum peat moss into the soil. Sulfur also can be used to acidify the soil. However, because sulfur reacts slowly with the soil, it should be applied and incorporated a year before planting.

The following table lists the approximate amount of elemental sulfur required in pounds per 100 square feet to lower the soil pH to 4.5.

<table>
<thead>
<tr>
<th>Current Soil pH</th>
<th>Sandy Soil</th>
<th>Loam Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>2.3</td>
<td>6.9</td>
</tr>
<tr>
<td>7.0</td>
<td>1.9</td>
<td>5.8</td>
</tr>
<tr>
<td>6.5</td>
<td>1.5</td>
<td>4.6</td>
</tr>
<tr>
<td>6.0</td>
<td>1.2</td>
<td>3.5</td>
</tr>
<tr>
<td>5.5</td>
<td>0.8</td>
<td>2.4</td>
</tr>
<tr>
<td>5.0</td>
<td>0.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Aluminum sulfate should not be used to acidify the soil because large amounts of aluminum can be toxic to blueberry plants.

Plant choices
Highbush and half-high blueberries can be grown in Iowa. Plant two or three different cultivars to ensure adequate pollination and fruit set.


Half-high blueberries are relatively small and usually reach only 2 to 3 feet in height. They produce small to medium sized berries. Suggested cultivars are ‘Polaris’, ‘Northblue’, ‘Northcountry’, ‘Northsky’, and ‘St. Cloud’.

Planting tips
Spring is the best time to plant blueberries. The roots of dormant, bare-root plants should be soaked in water for about an hour before planting. Prune back the plant by half by removing the small side branches and by heading back the main branches.

When using sphagnum peat moss to acidify the soil, dig a wide, shallow hole. Set the plant at the same depth it grew in the nursery. Then backfill with a mixture that is half soil and half moistened peat. Moisten dry peat before mixing with soil. After planting, thoroughly water each blueberry plant. Highbush blueberries should be spaced 4 to 6 feet apart. A 3- to 4-foot spacing is adequate for the smaller half-high blueberries.

Plant care
Blueberries have a shallow, fibrous root system. Plants quickly become stressed during hot, dry weather. To help retain moisture and control weeds, apply 2 to 4 inches of mulch around blueberry plants. Sawdust, wood chips, pine needles, and shredded leaves are excellent mulching materials. During prolonged periods of dry weather, water plants weekly.
Blueberry plants should not be allowed to bear fruit the first 2 years after planting. Any blossoms that form should be removed. Removal of the flowers maximizes vegetative growth and increases yields in later years. Blueberry plants should come into full production by the fifth or sixth year. Gardeners can expect to harvest 5 to 10 pounds of fruit per plant from mature highbush blueberries. Half-high blueberries generally produce 1 to 3 pounds per plant.

Established blueberry plants also benefit from an annual application of an acid-producing fertilizer, such as ammonium sulfate. In early spring apply ½ to 1 pound of ammonium sulfate per 100 square feet of garden area. Ammonium sulfate supplies nitrogen to the plants and also helps to maintain soil acidity.

In Iowa, blueberries generally have few insect and disease problems. Birds are the biggest threat because they can quickly devour much of the crop. Although scare devices may be helpful, netting is the most effective method of protection and should be placed over plants when the fruit begins to turn color. Hang the netting over some type of support structure with the edges of the netting buried or anchored to the ground to prevent bird entry from below.

Blueberries can be stored for 2 weeks at a temperature of 32° F and a relative humidity of 90 to 95 percent.

Sources
Blueberry plants are available at some garden centers and mail order catalogs. Mail order sources include the following:

**Indiana Berry and Plant Co.**  
2811 US 31, Plymouth, IN 46563  
Phone: (800) 295-2226  
Website: [www.indianaberry.com](http://www.indianaberry.com)

**J.W. Jung Seed Co.**  
335 S. High Street, Randolph, WI 53956  
Phone: (800) 297-3123  
Website: [www.jungseed.com](http://www.jungseed.com)

**Miller Nurseries**  
5060 County Road 16, Canandaigua, NY 14424  
Phone: (800) 836-9630  
Website: [www.millernurseries.com](http://www.millernurseries.com)

**Nourse Farms**  
41 River Road, South Deerfield, MA 01373  
Phone: (413) 665-2638  
Website: [noursefarms.com](http://noursefarms.com)

**Stark Bro’s Nurseries**  
P.O. Box 1800, Louisiana, MO 63353  
Phone: (800) 325-4180  
Website: [www.starkbros.com](http://www.starkbros.com)

**W. Atlee Burpee & Co.**  
300 Park Avenue, Warminster, PA 18974  
Phone: (800) 888-1447  
Website: [www.burpee.com](http://www.burpee.com)

**For more information**  
Call ISU’s Hortline at (515) 294-3108 (Monday-Friday, 10 a.m.-noon and 1-4:30 p.m.) or email hortline@iastate.edu.

Visit one of these websites:  
[https://store.extension.iastate.edu/](https://store.extension.iastate.edu/)  
[www.yardandgarden.extension.iastate.edu](http://www.yardandgarden.extension.iastate.edu)  
[www.reimangardens.iastate.edu](http://www.reimangardens.iastate.edu)

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Prepared by Richard Jauron, extension horticulturist.

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