

## BLACK HAWTHORN

*Crataegus douglasii* Lindl.

var. *douglasii*

plant symbol = CRDOD

Contributed By: USDA, NRCS, National Plant Data Center



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### Alternative Name

Douglas hawthorn, *Crataegus columbiana* (Columbia hawthorn)

### Uses

**Erosion Control:** Because it tolerates a wide variety of sites, black hawthorn can be planted to stabilize banks, for shelterbelts, and for erosion control along ditches and highways.

**Timber:** Although the wood is hard and strong, it has no commercial value except for tool handles and other small items.

**Wildlife:** It provides abundant food and cover for game birds such as the blue and sharp-tailed grouse. The mule deer, small mammals and other wildlife species feed on the leaves and twigs of young seedlings or trees. Livestock readily eats its leaves if accessible.

**Beautification:** Ideal for biological barriers between recreational areas and physical structures.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

### Description

It is a large shrub or small tree that can grow to thirty-five feet tall, with straight, strong but few thorns ranging from 0.5 to 1 inch long. Stems are usually clustered from the base or from a point just above the ground surface. Leaves are smooth, long, broad, dark green, shiny, and serrated at the tip. Flowers are globe-shaped and in small clusters produced in the spring. Its fruits are dark reddish-purple to black.

**Distribution:** Black hawthorn, is widespread in the Pacific Northwest, from southeastern Alaska south through British Columbia to northern California.

### Adaptation

Black hawthorn generally occurs on deep, moist, fine-textured soils, at lower elevations ranging from 2,200–5,400 ft. Although it will succeed in partial shade and different soil types, it grows best in full sunlight with sufficient moisture levels. It is predominantly an understory species and seldom found in pure stands. It is fire tolerant and will resprout and produce suckers following fire disturbance. It is also tolerant of atmospheric pollution and performs well in urban settings. It is also wind tolerant making it a good tree species in shelterbelt planting.

### Establishment

**Propagation from Seed or Grafting:** Black hawthorn can be propagated by either seeds or grafting. To increase percent germination, seeds requires acid scarification for 0.5 to 3 hours, followed by 84 to 112 days of cold treatment. Seeds are planted early in the fall, in drill rows 8 to 12 inches apart and covered with 1/4 inch of soil. Seedlings must not be kept in the nursery longer than a year. Approximate seed per pound: 22,600.

Containerized trees should be planted when they are no more than eight feet tall, in the fall or spring. Balled and burlapped trees should be planted in early spring.

Grafting on seedling stock of *Crataegus oxyacantha* or *Crataegus monogyna* is best carried out in the winter to early spring.

### Management

Because it develops long taproot, it should not be kept in seedbeds more than one year. Pruning should be done in the winter or early spring in order to maintain a clear shoot leader on young trees and/or remove the weakest branches to allow more light to

pass through. Suckers or stems arising from the roots should be removed when they become noticeable. Limited agriculture/livestock can help maintain and protect black hawthorn thickets as important source of food and cover for wildlife.

### **Pest and Potential Problems**

Although pests and diseases seldom affect it, it is susceptible to fireblight, cedar-hawthorn rust, cedar-quince rust, leaf blight, fruit rot, and leaf spot.

### **Cultivars, Improved and Selected Materials (and area of origin)**

Consult you local nurseries to choose the right cultivar for your specific landscape. Seeds and seedlings are commercially available at forest seed companies.

### **References**

Dirr, M.A. 1990. *Manual of woody landscape plants: their identification, ornamental characteristics, culture, propagation and uses*. 3<sup>rd</sup> ed. Stipes, Champaign, Illinois.

Duncan, W.H. & M.B. Duncan 1988. *Trees of the Southeastern United States*. University of Georgia Press, Athens, Georgia.

Elias, T.S. 1989. *Field guide to North American trees*. Revised ed. Grolier Book Clubs Inc., Danbury, Connecticut.

Flint, H.L. 1983. *Landscape plants for eastern North America*. John Wiley and Sons, Inc, New York, New York.

Harrar, E.S. & J.G. Harrar. 1962. *Guide to southern trees*. 2<sup>nd</sup> ed. Dover Publications, Inc., New York, New York.

Little, E.E. 1996. *National Audubon Society field guide to North American trees: Eastern region*. Alfred A. Knopf, New York, New York.

USDA Forest Service 1974. *Seeds of woody plants in the United States*. Agricultural Handbook 450. USDA, Washington, DC.

USDA Forest Service 1990. *Silvics of North America*. Agricultural Handbook 654. Forest Service, USDA, Washington, DC.

Young, J. A. & C.G. Young. 1992. *Seeds of woody plants in North America*. Revised and enlarged ed. Dioscorides Press, Portland, Oregon.

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