

EUROPEAN BLACK ALDER

Alnus glutinosa L.
plant symbol = ALGL2

Contributed by: USDA NRCS Plant Materials Program



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Alternate Names

Alnus alnus (L.) Britt.

Uses

European black alder is a rapidly growing tree that is useful for planting on drastically disturbed and acid sites such as coal strip-mines. It is capable of nitrogen fixation though it is not a legume, so it is a soil improving species. Black alder is also an excellent choice for internal orchard windbreaks. It can be sheared to very narrow widths of 3-4 feet thick, and produces sufficient density to be effective. Black alder has been reported as invasive on some soil types. It should not be planted widely as a landscape or specimen tree.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Weediness

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS Web site at plants.usda.gov.

Description

This species was introduced from Europe and should not be confused with native alders. The leaf, flower, and fruit are similar to the native shrub alders found along the streams of the Northeast. Black alder is a tree that can grow 60-70 feet tall. The leaf is smooth, 3-5 inches long, with a serrated margin. Small, winged seed is produced in little woody cone-like fruits. The bark is dark brown, with prominent warty strips.

Adaptation and Distribution

Black alder will grow on a wide variety of soils, from well drained to somewhat poorly drained with light to moderate textures. It does not do well on droughty or wet sites. The species is hardy to the south shore of Lake Ontario, and to northeast Kansas but may not be reliable in USDA zone 4 or colder.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment

Planting 1-0 nursery bare-root stock is preferred. Older plants are usually too large for easy planting. Take care to properly place the root system in the planting hole or trench. Black alder will respond to phosphorus fertilizer, particularly when planted in acid soils. Plant dormant stock early in the spring as possible. Containerized plants can be planted in early summer as well. There are 321,000 seeds per pound. Black alder should be planted in mixtures with other species for critical area treatment. Spacings of 6x6 to 10x10 work well. Underseeding with a cool season grass mixture is recommended.

Management

All trees and shrubs respond very strongly to effective control of weeds and sod. Mechanical or chemical controls are acceptable as long as they are used according to the label. Failure to control sod will result in growth reduced by 50% or more.

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

None have been released in the US. A few nurseries produce this tree to meet the needs of orchard and mine revegetation interests.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method.

Trade names and control measures appear in this document only to provide specific information. USDA, NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

Prepared By & Species Coordinator:

USDA NRCS Northeast Plant Materials Program

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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