

RIVER BIRCH

Betula nigra L.

Plant Symbol = BENI

Contributed By: USDA NRCS National Plant Data Center



Robert Mohlenbrock
Midwestern Wetland Flora
USDA, NRCS, Wetland Sciences Institute
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Alternative Names

Japanese red birch, black birch, red birch, water birch

Uses

Economic: River birch sap can be fermented to make birch beer or vinegar. The wood is used to manufacture inexpensive furniture, woodenware, wooden shoes, basket materials, toys, staves, and fuel.

Ethnobotanic: The leaves were chewed, or used as an infusion in the treatment of dysentery. An infusion of the bark was used to treat stomach problems and difficult urination (Moerman 1998).

Landscaping & Wildlife: *Betula nigra* is a very attractive ornamental tree. It is a desirable specimen for estates, golf courses, parks, and public grounds. Many species of birds eat the seeds including wild turkey and grouse. The leaves are browsed by white-tailed deer.

Conservation: River birch is used for strip mine reclamation and erosion control (Grelen 1990). It is used in forested riparian buffers to help reduce stream bank erosion, protect water quality, and enhance aquatic environments.

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

General: Birch family (Betulaceae). River birch is a deciduous medium to large-sized native tree. The leaves are alternate, double serrated, wedge-shaped, and sharp pointed. The flowers are unisexual, borne in separate male and female catkins on the same tree. The bark is light brown to buff, paperlike; exfoliating on young trees, turning to scaly bark on older trees.

Distribution: River birch is distributed throughout North America. It extends from southern New England, west to Kansas and Minnesota, and south to Texas and Florida. For current distribution, please consult the Plant profile page for this species on the PLANTS Web site.

Adaptation

River birch can survive on drier soils, although it is best adapted to moist soils and is usually found along stream banks and in swampy bottomlands that are periodically flooded. Maximum development is reached in fertile areas with a pH of 6.5 to 4.0. It is intolerant of shade and requires full sunlight.

Establishment

Propagation by Seed: Sow seeds in containers or seed trays containing a seed germination medium to which a slow release fertilizer is added. Firm the medium and sow seeds thinly and evenly on top, and cover to desired depth with planting medium (Heuser 1997). Place pots in a sunny location in a cold frame. When seedlings are large enough to handle they should be placed into individual pots and grown in a cold frame for their first winter.

Management

Fertilize young trees in late winter before new growth begins to ensure faster growth. Don't prune this birch and other birches until summer because they are "bleeders" and should not be cut when the sap is flowing.

River birch is quite disease resistant but has severe problems in early spring with aphids and is favored by gypsy moth larvae.

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

Readily available through commercial nurseries. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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