

Common Honeylocust



Common Honeylocust (*Gleditsia triacanthos*)

General Description

A fast-growing medium-sized tree adapted to a wide variety of soils, including alkaline soils. Seedlings are very susceptible to winter dieback. The largest tree in North Dakota is 60 feet tall with a canopy spread of 40 feet.

Leaves and Buds

Bud Arrangement - Alternate, zigzag pattern to the twigs.

Bud Color - Brown.

Bud Size - Terminal absent, laterals small, some scaly, rather inconspicuous.

Leaf Type and Shape - Pinnately compound, 20 to 30 leaflets, or bipinnately, 8 to 14 pinnae, leaflets are oblong-lanceolate; leaflets on bipinnate leaves smaller.

Leaf Margins - Remotely crenate-serrulate, base of petiole swollen and enclosing bud.

Leaf Surface - Smooth, pubescent on midrib beneath.

Leaf Length - 6 to 8 inches; leaflets, 1/3 to 1½ inches;

Leaf Width - 1 to 4½ inches; leaflets, 1/4 to 1/2 inch.

Leaf Color - Bright to deep green; yellow fall color.

Flowers and Fruits

Flower Type - Polygamo-dioecious, perfect and pistillate flowers on the same tree, in axillary racemes.

Flower Color - Greenish.

Fruit Type - Pods, sickle-shaped, twisted, 7 to 8 inches long and 1 inch wide.

Fruit Color - Seeds oval, brown to reddish-brown, and "hard as a bullet!"

Form

Growth Habit - Open, spreading crowns, produce only light shade.

Texture - Fine, summer; medium-coarse, winter.

Crown Height - 30 to 50 feet.

Crown Width - 30 to 40 feet.

Bark Color - Grayish-brown, broken into long, narrow, longitudinal and superficially scaly ridges separated by furrow.

Root System - Produces a strong taproot and a profusely-branched root system that can penetrate deep soils as far as 20 feet.

Environmental Requirements

Soils

Soil Texture - Most favorable sites are rich, moist bottomlands, but adapted to a variety of soils.

Soil pH - 4.5 to 8.0. Exhibits alkaline and saline tolerance.

Windbreak Suitability Group - 1, 1K, 3, 5.

Cold Hardiness

USDA Zone 4.

Water

Drought resistant. Best if not fertilized and watered since faster growth increases susceptibility to winter dieback.

Light

Full sun only.

Uses

Conservation/Windbreaks

Medium to tall tree for farmstead windbreaks or protected sites in southeastern counties of North Dakota.

Wildlife

Limited, but provides some songbird cover and fruit is eaten by small mammals and deer.

Agroforestry Products

Food - Sugar has been extracted from sweet pods.

Medicinal - Contains stenocarpine used as a local anesthetic.

Urban/Recreational

Only thornless male cultivars are recommended for boulevard, specimen, parks, and residential landscaping.

Cultivated Varieties

Imperial® Honey-locust (*Gleditsia triacanthos* var. *inermis* 'Impcole') - Round, spreading form, male.

Shademaster® Honey-locust (*G. triacanthos* var. *inermis* 'Shademaster')

Skyline® Honey-locust (*G. triacanthos* var. *inermis* 'Skycole') - More upright form, male.

Sunburst® Honey-locust (*G. triacanthos* var. *inermis* 'Suncole') - New leaves are yellow.

Honey-locusts are borderline in hardiness for North Dakota. Imperial and Skyline are fairly successful. Shademaster and Sunburst are not recommended for planting.

Related Species

Black Locust (*Robinia pseudoacacia*)

Kentucky Coffeetree (*Gymnocladus dioica*)

Pests

Honeylocust pod gall midge may distort leaflets. Very subject to Tubercularia and Thyronectria canker attack if bark is wounded or winter injury occurs. Extracts from *Gleditsia* species are toxic to several insect pests.