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Florida-Friendly Landscaping™ PROGRAM

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Gleditsia triacanthos var. inermis 'Shademaster': 'Shademaster' Thornless Honeylocust[1]

Edward F. Gilman and Dennis G. Watson[2]

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Introduction

Many horticulturists consider this to be one of the best cultivars of Honeylocust. Thornless Honeylocust is a deciduous native North American tree which grows 50 to 70 feet tall and almost as wide. It forms a graceful, vase-shape to oval outline almost like a smaller version of American Elm. It will grow two to four feet each year during the first 15 years after planting. Branches are upright with lower branches held horizontally on older specimens as the branch tips droop to the horizontal. The trunk is reported to be straight on `Shademaster', but many specimens appear to have several ascending trunks (codominant branches or trunks) with no dominant leader, maintaining a vase shape. The pinnately compound leaflets are very light and airy, and provide soft, dappled shade below. Since Thornless Honeylocust is also one of the last trees to leaf out in springtime and one of the first to lose its leaves in fall, it is one of the few trees well-suited for growing a lawn beneath it. The tiny leaflets turn golden yellow in fall before dropping and are so small they easily vanish into the grass below, without any raking being necessary. The tree is often bare by the end of September in USDA hardiness zone 8.

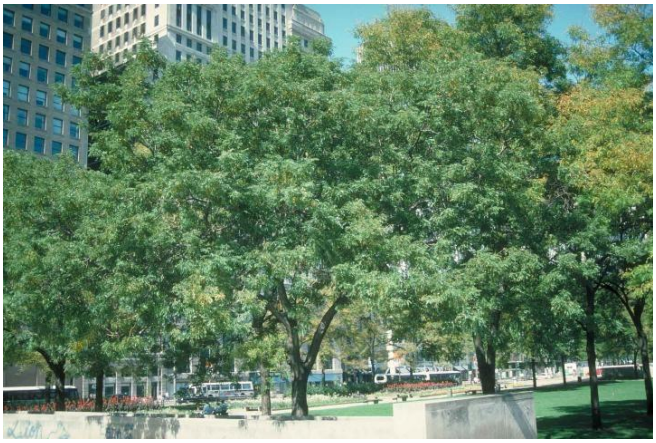


Figure 1. Middle-aged *Gleditsia triacanthos var. inermis* 'Shademaster': 'Shademaster' Thornless Honeylocust
Credit: Ed Gilman

General Information

Scientific name: *Gleditsia triacanthos var. inermis*

Pronunciation: gleh-DIT-see-uh try-uh-KANTH-oase variety ih-NER-miss

Common name(s): 'Shademaster' Thornless Honeylocust

Family: *Leguminosae*

USDA hardiness zones: 5A through 8A (Fig. 2)

Origin: native to North America

Invasive potential: little invasive potential

Uses: urban tolerant; street without sidewalk; shade; specimen; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn > 6 ft wide; highway median; reclamation

Availability: not native to North America

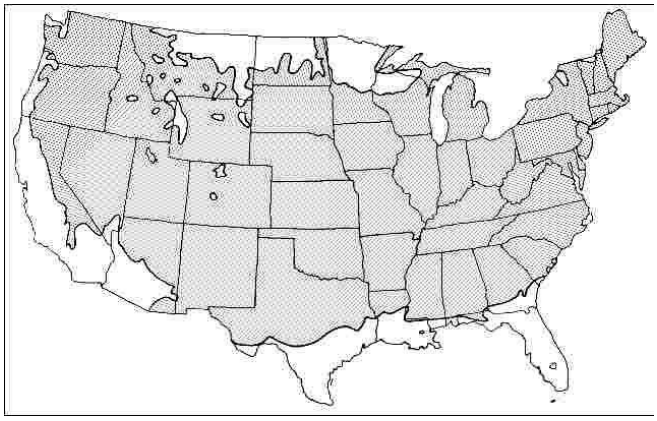


Figure 2. Range

Description

Height: 50 to 70 feet

Spread: 35 to 50 feet

Crown uniformity: symmetrical

Crown shape: vase, upright/erect

Crown density: moderate

Growth rate: fast

Texture: fine

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: bipinnately compound, odd-pinnately compound

Leaf margin: crenate

Leaf shape: oblong, lanceolate

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: less than 2 inches

Leaf color: green

Fall color: yellow, copper

Fall characteristic: showy

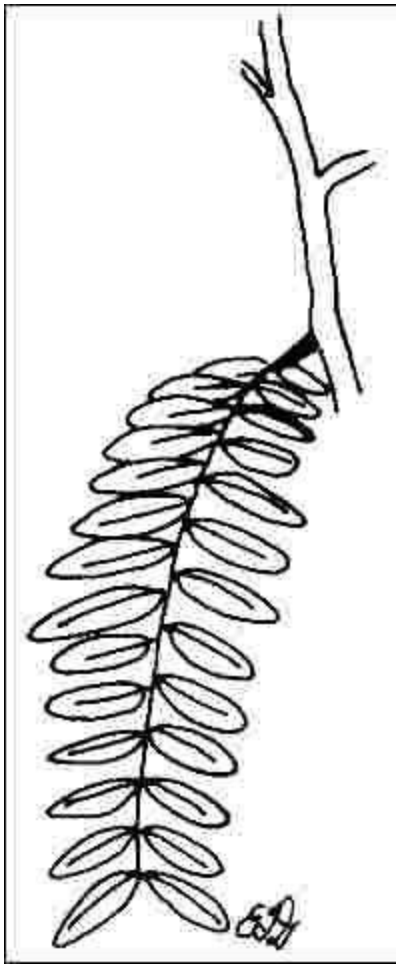


Figure 3. Foliage

Flower

Flower color: yellow

Flower characteristics: not showy

Fruit

Fruit shape: no fruit

Fruit length: no fruit

Fruit covering: no fruit

Fruit color: no fruit

Fruit characteristics: no fruit

Trunk and Branches

Trunk/bark/branches: branches don't droop; showy; typically one trunk; thorns

Pruning requirement: little required

Breakage: resistant

Current year twig color: brown

Current year twig thickness: thin

Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade

Soil tolerances: sand; loam; clay; acidic; alkaline; occasionally wet; well-drained

Drought tolerance: high

Aerosol salt tolerance: high

Other

Roots: can form large surface roots

Winter interest: yes

Outstanding tree: no

Ozone sensitivity: unknown

Verticillium wilt susceptibility: resistant

Pest resistance: resistant to pests/diseases

Use and Management

Most trees are mostly seedless making it a much "cleaner" tree than the species but occasionally some trees will flower and produce red/brown, 10-inch-long seed pods. Some pods may begin appearing 10 to 15-years after planting. These pods are delicately twisted giving them better momentum when they finally loosen their hold on the tree and sail smoothly away on a sudden, brisk fall breeze. Although a legume, Honeylocust does not fix nitrogen in the roots. On mature trees, the bark becomes very dark which makes the bare trees in winter especially striking against the glistening white snow or blue sky.

Some trees grow a central leader and would require little pruning but others grow many upright, codominant branches. These trees will need to be trained when they are young with two or three prunings spaced several years apart. Strive to develop one central trunk with upright, spreading branches spaced several feet apart along the trunk. This will form a tree which is highly desirable for street and parking lot planting, but do not plant it as the staple of your city tree canopy as pest problems have caught up with Honeylocust in some areas. Some damage from ice storms have been reported but, as with many other trees, proper pruning can help prevent this. Street trees planted on 25 to 30-foot-centers form a canopy over a residential street. However, it has been overused in some areas.

The tree needs full sun but has no particular soil preferences and is useful in dry or alkaline areas, although it tolerates flooding in its native habitat along stream banks. Suited for planting as far west as western Oklahoma and Texas, it tolerates compacted, poorly aerated soil and flooding for a period of time and does well in confined soil spaces. It also appears to tolerate saline irrigation which is common in parts of Texas and Oklahoma, and some coastal communities. Thornless Honeylocust adapts well as a city street tree and is tolerant to small planting pits in concrete, and is salt tolerant.

Several other cultivars are available: `Imperial' grows only 30 to 35 feet tall, casts heavier shade, thornless and seedless until about 15-years-old when some seeds may appear; `Majestic', 60 to 65 feet tall, upright-spreading, few seeds, and dense, dark green foliage; `Moraine', one of the best thornless forms, seedless; `Rubylace' has rich red new foliage, seedless, 50 to 60 feet tall; `Skyline', narrow upright form, 50 to 60 feet tall, half as wide, very few seeds; `Sunburst', golden yellow new foliage, seedless, 50 to 60 feet tall, favored by plant bugs and leaf hoppers.

Pests

Insect problems frequently cause early leaf drop, leaving trees bare by early fall. This is a pest-sensitive tree.

Aphid infestations can be troublesome.

Boring insects may be prevented by keeping trees healthy with regular fertilization.

The combination of plant bug and leafhopper feeding causes the leaves to drop. Plant bugs may be more common on the yellow-leaved cultivar `Sunburst' than on green leaved types. Both insects are green so will be hard to detect.

Pod gall midge causes unusual reddish galls at the tips of the branches. The galls appear in late spring and may be most common on thornless, seedless cultivars. These have become quite a problem in many areas. Control is difficult.

Spider mites cause an autumn-like yellowing of the leaves. Diagnosis of this problem is difficult due to the small size of the insect and leaflets. Look for the mites

and their webbing near the midrib at the base of the leaflets.

Mimosa webworm is becoming a big problem in some areas of the south. It makes the tree look dry and unsightly in the middle of the summer.

Leafminers can also be a problem.

Diseases

Canker causing fungi attack branches and trunks causing dieback of parts or the entire tree. Keep the trees healthy and avoid unnecessary wounding. Infected areas have discolored bark, peeling bark, discolored sapwood, or a crack between the diseased and healthy bark.

Leaf spots caused by fungi and bacteria may be a problem. Rake up and dispose of infected leaves. Southern landscapes may be more affected by leaf spotting fungi.

Powdery mildew may cause a white coating on the leaves but is seldom serious.

[1] This document is ENH440, one of a series of the UF/IFAS Department of Environmental Horticulture. Original publication date November 1993. Revised December 2006. Reviewed February 2014. Visit the Ask IFAS website at https://ask.ifas.ufl.edu for the currently supported version of this publication. © UF/IFAS. This publication is licensed under CC BY-NC-ND 4.0 *To learn more about creating and maintaining attractive landscapes that protect Florida's water and natural resources, visit ffl.ifas.ufl.edu/.*

[2] Edward F. Gilman, professor emeritus, UF/IFAS Department of Environmental Horticulture; Dennis G. Watson, former associate professor, UF/IFAS Department of Agricultural and Biological Engineering, Gainesville, FL 32611.

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