

Gleditsia triacanthos var. *inermis* - Thornless Honeylocust (*Fabaceae* or *Leguminosae*)

Gleditsia triacanthos var. *inermis* is an urban tolerant tree, excellent for filtered summer shade and its majestic winter outline.

FEATURES

Form



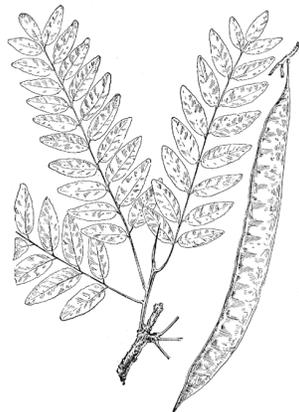
- large deciduous tree
- maturing at 60' tall x 40' wide
- upright oval growth habit, developing a rounded or flat-topped crown with age
- rapid growth rate, often with a second flush of growth in summer

Culture

- full sun
- prefers moist, deep, acid to alkaline soils but is very adaptable and quite urban tolerant (especially to heat, drought, high soil pH, soil compaction, flooding, and salt spray)
- several cosmetic problems (leaf spot, spider mites), but also some serious disease (cankers) and pest (webworms and borers) problems
- abundant availability, including many cultivars, in B&B form

Foliage

- alternate, with pinnately and bipinnately compound leaves often occurring on the same tree
- petiole base swollen, attaching to the young stems at every zig and zag
- leaflets very small, results in light shade (filtered or dappled shade) that permits grass to grow underneath the tree
- autumn color normally yellowish green, but yellow or golden in good years



Flowers

- polygamo-dioecious (male and female flowers on separate trees, but all trees have perfect [male + female] flowers as well)
- pendulous male catkins and smaller female inflorescences are not particularly showy and often lost in the expanding foliage
- golden-green, occurring in late May and early June

Fruits

- most cultivars have little fruit set
- however, some do, being up to 1.5' long twisting pods, changing from yellow green to dark brown-red to purplish at maturity, containing many hard seeds
- fruits abscising in late autumn (the common name comes from the sweetness of the fleshy pod) and causing quite a litter problem when in abundance
- the thorny native species usually has tremendous fruit set

Twigs

- zigzag and brown-red, somewhat streaked, with no terminal bud

Trunk

- often straight for 5-15', then dividing into several large branches
- bark is smooth, tan-olive to gray-olive, and heavily lenticled when young, but soon becoming deeply fissured, forming flared gray plates with an orange interior bark, then becoming somewhat scaly with age

USAGE

Function

- shade or specimen tree
- often used, along with Green Ash (*Fraxinus pennsylvanica*), for tightly confined, high urban stress areas such as parking lot islands and downtown street tree squares, where they eventually get too large and surface roots become a problem

Texture

- fine texture in foliage and bold when bare
- open density in foliage and when bare

Assets

- fine-textured foliage
- very urban tolerant
- filtered shade
- rapid growth and establishment
- minimal leaf litter, making autumn cleanup unnecessary
- wet site tolerant

Liabilities

- surface roots often become a major mowing problem with age
- locust borers and webworms are significant pests
- fruit pods (if present) may present a fruit litter problem

Habitat

- Zones 4 to 9
- Native to floodplains of the Eastern and Southern U.S.



SELECTIONS

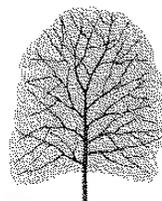
Alternates

- urban tolerant shade trees with rapid growth and establishment (*Acer x freemanii*, *Fraxinus pennsylvanica*, *Platanus occidentalis*, *Populus deltoides*, *Quercus shumardii*, etc.)
- trees with filtered shade (*Amelanchier*, *Betula* species, *Malus*, *Robinia pseudoacacia*, etc.)
- shade trees for wet or dry sites (*Alnus glutinosa*, *Fraxinus pennsylvanica*, *Nyssa sylvatica*, *Platanus occidentalis*, *Salix alba*, etc.)

Cultivars – Variants – Related species

- many cultivars exist, often noted for differences in mature height, spread, and growth habit
- G. triacanthos* var. *inermis* 'Halka' - upright with horizontal branches for a rounded mature habit of 45' x 45', with vigorous growth in youth for rapid establishment
- G. triacanthos* var. *inermis* 'Imperial' - compact cultivar, maturing at 30' x 30', with very dense shade for a Honeylocust, perhaps the best to use as a street tree
- G. triacanthos* var. *inermis* 'Sunburst' - new growth emerges lemon yellow in spring, gradually changing to medium green, with occasional flushes of new growth throughout the summer, maturing at 35' x 35'

- G. triacanthos* var. *inermis* 'Shademaster' - vigorous, vertical growth, vase-shaped in youth and middle age, maturing at 45' x 35'



- G. triacanthos* var. *inermis* 'Skyline' - vertical growth with a central leader through most of its life, pyramidal in shape, maturing at 45' x 40'