**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**
- 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 lenticeled 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 represent 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'