

TREES AND SHRUBS

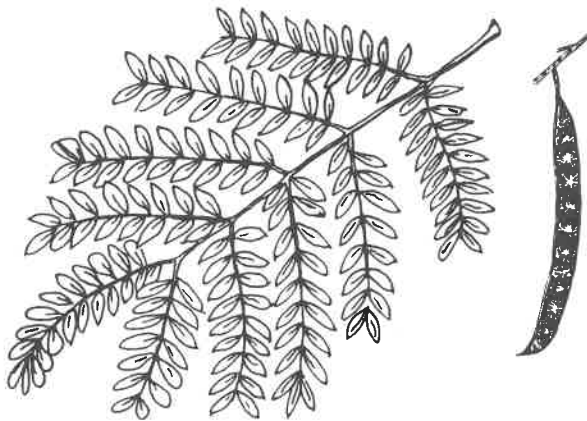
Windbreak Forest Species
Urban Forest Species

HONEYLOCUST

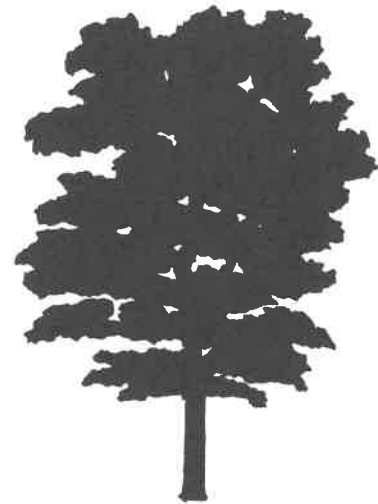
(*Gleditsia triacanthos*)

Description

Gleditsia is named after the German botanist, J. D. Gleditsch (1714-1786). *Triacanthos* is from the Greek *treis*, "three", and *akantha*, "spine", in reference to the branched thorns of the tree. Another common name is common honeylocust.



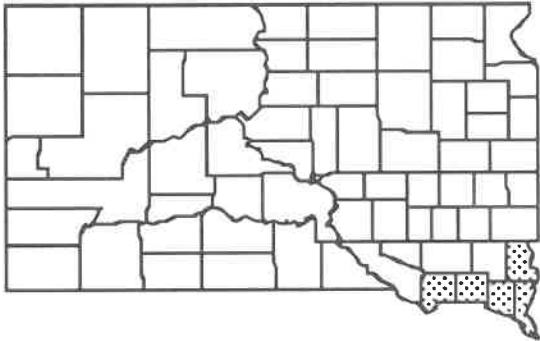
The honeylocust is a member of the pea family, *Caesalpiniaceae*, formerly the legume family, *Leguminosae*. Its leaves are *deciduous*, *alternate*, *pinnate* and *bipinnately compound*, about 15 inches (38 cm) long. There are 15 to 30 *leaflets*, 1 to 2 inches (2.54 to 5 cm) long and oval. Flowers are small, greenish, and occur in *racemes*. Its fruits are reddish-brown, strap-shaped *legumes* about 12 inches (30 cm) long, and sometimes



referred to as a "black banana". The slender, greenish-brown twigs zigzag, with 3-branches and heavy thorns. Honeylocust bark is nearly black, smooth when young, but breaks into long, narrow ridges at maturity.

Distribution

Honeylocust is a midwestern and southern U.S. species, growing from southeastern South Dakota to Pennsylvania and south from Mississippi to Texas. In South Dakota, it is native along the Missouri River from Union to Charles Mix County. Honeylocust can be planted in most East River locations, as well as in the Black Hills.



Native Distribution

Honeylocust is typically a bottomland tree, found along the flood plain of rivers and streams. It does not grow into the water, as do many willows, but generally on low ridges and flats along the river. Despite its natural affinity to water, honeylocust is very drought tolerant.

Honeylocust is intolerant to shade and only becomes established in clearings where it often occurs as a pure stand. It can also be found as a minor species in American elm and green ash forests, but only as a mature tree. It is a very adaptable species, performing well on dry, *alkaline soils*. This is the reason it has become a popular tree to plant in South Dakota.

Natural History

Honeylocust was considered a pest-free tree until recently. The tree had very few pest problems and so was planted throughout the country as a replacement for American elm. Once honeylocust became a common tree, a number of pests began to attack it. This is a good reason why we should not over-plant any one tree species.

Life Span: Honeylocust can live 150 years. In urban plantings, the average life span is much shorter, about 60 to 70 years.

Size: In urban areas, most honeylocusts reach a height of 40 to 80 feet, (12 to 24 m) depending on the *cultivar*. The national champion is in Wayne County, Michigan. It is 204 inches (518 cm) in circumference, 115 feet (35 m) tall and has a crown spread of 124 feet (38 m). The state champion is near Springfield. It is 127 inches (323 cm) in circumference, 67 feet (20 m) tall and has a crown spread of 60 feet (18 m).

Significance

Honeylocust is not a common forest tree. The wood is fairly hard and dense and is used locally where it occurs. In South Dakota, honeylocust is used for windbreaks and as shade trees because it is fast growing and very drought tolerant.

The large legume pod, which provides its common name, is eaten by cattle and wildlife. The sweetish substance between the seeds is readily eaten with the seeds passing through the animal. The seed coats of the undigested seeds are softened by this process and a necessary step for germination. Honeylocust thorns are very sharp and most people do not like to clean up the pods in the fall. To eliminate these objections, a number of "podless" *cultivars* have been developed since the 1940's. These *cultivars* were selected from a honeylocust variety that is thornless (*G. triacanthos* var. *inermis*).

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