

## BLACK LOCUST

(*Robinia pseudoacacia*)



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Prepared by J. H. Kirch, forester and horticulturist serving as Marketing Manager, Industrial Chemicals, for Amchem Products, Inc.

Black locust, sometimes known as common locust, yellow locust or white locust is a medium-sized tree usually 30 to 45 feet in height with a diameter of 1 to 1 1/2 feet. The genus *Robinia* comprises about 20 species of trees and shrubs native only to North America.

Originally, the range of black locust was from Central Pennsylvania south to Georgia and west to Iowa and Kansas. Now, due to wide-spread planting and naturalization, the species is found in most of the states east of the Rocky Mountains. Black locust is found on moist fertile soil especially on rich bottomlands, but it is also present on rocky and sterile mountain slopes. It is very common on abandoned strip mine soil and is a valued species for spoil bank planting.

To the right-of-way manager, it is a member of the "root suckering" group of trees, so named because of their ability to sprout prolifically along lateral roots when the main stem is destroyed by chemical or cutting. Others in this group are the allanther (*Ailanthus altissima*), sumac (*Rhus* spp.), persimmon (*Diospyras virginiana*) and sassafras (*Sassafras albidum*). No group of species has been more troublesome to control on the rights-of-way east of the Mississippi River.

The black locust is readily distinguished by its 8 to 14 inch pinnately compound leaves with 7 to 19 subopposite or alternate leaflets which are usually 1 1/2 to 2 inches long and 1/2 to 3/4 inches wide.

The flowers resemble those of a pea, appearing in May, usually after the leaves. They are perfect, cream-white, about one inch across and very fragrant. The flowers are borne on slender stalks about 1/2 inch long and are arranged in loose drooping racemes 4 to 5 inches long.

Whether a plant species is desirable or undesirable often depends on the situation in which it occurs. This is true of all the trees to be discussed in this series of articles on identification. For example, maple (*Acer rubrum*) is a useful ornamental in landscape plantings because of its early red flowers, pleasing growth habit, and spectacular autumn foliage coloring. It is a nuisance on the right-of-way because of its resistance to chemical treatment. Similar comments could be made about the other species to be described. They have ornamental, and economic value, but not on a utility right-of-way which must be kept clear of tall vegetation. Strong resistance to treatment makes it especially important that a few "problem" species be clearly recognized when they are encountered in clearance work. Otherwise there may be needless disappointment, and waste of time and material through inappropriate treatment. J. H. Kirch.

Late in the summer the 2 to 4 inch long fruit pods of black locust appear and often persist far into the winter. They usually contain 4 to 8 small dark brown mottled seeds.

Black locust is sometimes confused with honey locust (*Gleditsia triacanthos*), but the branched thorns 2 to 4 inches long along the bark and twigs and the slightly serrate margin of the leaf easily distinguish the honey locust.

In general, amine foliage sprays of 2,4-D plus 2,4,5-T at 2 pounds of each per 100 gallons of water have been more effective than low volatile esters applied at similar rates. This is probably because the sensitive leaflets are not as quickly destroyed by the amine sprays and some translocation can occur. Interestingly enough, low volume aerial sprays using invert emulsions of 2,4-D/2,4,5-T have given better control in many cases than high volume ground sprays. This, again, may be due to the fact that the leaflets remain alive several days longer from aerial sprays than ground applications.

Picloram, dicamba, 2,3,6-TBA and amitrole applied as foliage sprays have given excellent root kill of locust. Recently, combinations of picloram and 2,4-D, dicamba or 2,3,6-TBA and 2,4-D plus 2,4,5-T, or amitrole added to the water phase of water-in-oil invert emulsions applied from the air have given good control of locust and other root suckering species growing in association with it.

Pellets of picloram and fenuron have been good for spot treating of this species.