

THE HONEY LOCUST AS A SHADE AND LAWN TREE

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Interest in the selection of desirable shade and lawn trees has increased rapidly during the past few years. The ravages of the Dutch elm disease and phloem necrosis on the American Elm and the threat of the oak wilt menace to our native oaks have influenced many plantmen to seek a suitable substitute which may be relatively immune to serious diseases. Observations throughout many sections of the United States and Canada indicate the desirability of the honey locust (*Gleditsia triacanthos* L.) as a tree possessing many of the qualifications deemed essential for shade and lawn purposes.

The common northern honey locust (*Gleditsia triacanthos* L.) has a native range throughout the entire midwest, extending from the Appalachians to the Great Plains, and from Ontario to Texas. It has been widely planted throughout most of the United States, and apparently is growing quite satisfactorily from the Atlantic to the Rockies. It is extremely tolerant to a wide pH range and thrives on a variety of soils from occasional poorly aerated moist sites in portions of the midwest to the drouthy conditions of western Kansas and Nebraska. Hardiness is apparently correlated with early maturity of the current year shoots. The more northern strains cease growth fairly early and overwinter well in regions where the winter temperature drops to - 30 degrees F. or below.

Under conditions of high fertility and adequate moisture the honey locust is a rapidly growing tree and may attain a similar height to the undesirable Chinese elms and silver maples in the same period of time. The ultimate height may be as great as 140 feet when it reaches its maximum size at about 120 years of age. It is quite long lived. A tree recently removed in Dayton, Ohio showed 327 annual rings.

Lawn grasses grow well beneath the light shade of honey locust trees. Apparently there is just enough shade to discourage perennial weeds and to cool the ground surface so that grasses thrive better than if exposed to full sun. Experiments at the Ohio Station with pasture grasses growing beneath black walnuts and black locusts have shown not only increased growth, but also a higher nutrient content as compared to similar grass plots in the open. It may be presumed that the honey locust affects lawn grasses in somewhat the same way. Observations under various site conditions have always shown luxuriant growth of grasses beneath these trees.

A tendency of the honey locust toward late foliation in the spring coupled with fairly early leaf fall in the autumn presents an opportunity for lawn grasses to flourish during these cool moist growing periods in practically full sunlight. A carbohydrate reserve is thus established within the roots of the grasses. Probably the most desirable characteristic of the honey locust from a street and lawn tree viewpoint is that there is practically no clean up problem in the fall when the seedless varieties are used. The very thin and soft tissue of the leaflets decomposes almost overnight so that only the long slender petiole remains for the raking operation. Even these midribs decompose quite rapidly, and the amount of debris beneath the trees is rather negligible.

Young trees of the honey locust have a shallow and fairly fibrous root system which permits easy transplanting. Formerly, it was thought that the roots were nodule-bearing and fixed atmospheric nitrogen. This theory has since been disproven.

The species thrives under a variety of atmospheric conditions in regions of both low and high humidity. It is extremely tolerant of smoke, soot, and the general conditions often found within large cities.

The open framework and resilient structure of the honey locust seems to be highly resistant to wind, ice, and storm damage. A broken honey locust tree is rare indeed. Cavities seem to be practically non-existent. Callusing and bark regeneration proceeds rapidly after wounding. Tree repair is at a minimum with this species. The pruning needs are light, and bracing and cabling seldom needed. Lightning very rarely strikes individuals of this species.

Insects have been of minor importance in the past. The honey locust scale (*Chionaspis gleditsiae* Sanders) and the cottony maple scale (*Pulvinaria vitis* L.) are occasionally found on trunk and branches. They are easily controlled by the usual dormant sprays. The most serious pest is apparently the mimosa webworm (*Homadula albizziae* Clarke) which seems to attack honey locust even more readily than its other host, the famed mimosa tree (*Albizzia julibrissin* Duraz.) of our southern states. This Australian insect was first noted near Washington, D.C. in 1940 and now is distributed throughout large portions of Maryland and Virginia. Damage consists of webbing the leaves together by a small caterpillar and subsequent feeding on the tissues. Near defoliation often results. The insect may be controlled with DDT but it will probably require more than one spray per season.

Continued - THE HONEY LOCUST AS A SHADE AND LAWN TREE.

Surely the honey locust species offers a rare opportunity for developing trees to fit specific needs and requirements.

(From "Arborist's News - Vol. 15, No.2, February, 1950.)

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NEW CHESTNUT VARIETIES RESIST CHESTNUT BLIGHT

The U. S. Department of Agriculture reports the development of three new chestnut varieties which produce a great quantity of large, sweet nuts and are resistant to chestnut blight.

Graft trees of the new varieties, called Naking, Meiling and Kuling, are now available through tree nurseries.

Developed under the direction of Dr. H. L. Crane of the Beltsville, Md. research center, the new trees are the culmination of nearly 40 years of research.

(From "Arborist's News - Vol. 15, No.2, February, 1950.)

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A PROGRAM - any assignment that can't be completed by one phone call.

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A TREE THAT OWNED ITSELF

For one hundred and twenty-two years a great oak tree in Athens, Georgia, legally owned itself and the ground on which it stood. Under the terms of a deed dated in 1820 its owner, William H. Jackson, gave to this tree, "entire possession of itself and all land within eight feet of the tree on all sides." The Tree stood at a street intersection and, it is said severely handicapped traffic as the city grew and expanded. However, no legal action was taken to condemn it and the property. Jurists reportedly expressed the opinion that no court had the right to order the tree removed since "by title drawn and duly conveyed the tree owns the land on which it stands, and it can be destroyed only by an act of God. - such "act" occurred on the night of October 8, 1942 when without warning, the tree fell, victim of decay in the trunk. (Arborist News - Feb. 1950)

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A CONFERENCE -- A conference is a group of people who individually can do nothing but who can meet collectively and agree that nothing can be done.

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CHEMICAL APPLICATION GUIDE

Considerable interest in the chemical application guide was indicated at the NGSa conference in Boston by many of the district superintendents. Requests for the guide are now coming in by mail from persons throughout the nation. If you have not signed up for one of these guides as yet, please do so before they are depleted.

Don Strand
Distribution Committee

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AN EXPERT - An expert is a person who avoids all the small errors as he sweeps forward to the grand fallacy.

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THE TREE, A FRIEND OF MAN, SPEAKS

The following quotation from posters to be found in public parks in Europe was sent to Arborist's News by our former secretary, R. P. White.

"Ye who would pass by and raise your hand against me, harken ere you harm me. I am the heat of your hearth on the cold winter nights: the friendly shade screening you from the summer sun; and my fruits are refreshing draughts quenching your thirst as you journey on. I am the beam that holds your house, the board of your table, the bed on which you lie, and the timber that builds your boat. I am the handle of your hoe, the door of your homestead, the wood of your cradle, and the shell of your coffin. I am the gift of God and friend of man. Ye who pass by, listen to my prayer. Harm Me Not." (From Arborist's News - Feb., 1950)

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TO EXPEDITE - To confound confusion with commotion.

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ARE YOUR DUES PAID?

A few members have failed to pay dues for 1948 and 1949. We are sorry but unless your dues are paid, this is the last issue of the BULL SHEET you will receive until payment is made in full.

If your dues are delinquent, look up the statement you received recently and send your check to the Treasurer, Walter Kilmer, 2143 Maple Road, Homewood, Illinois --- right now!

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INCENTIVE PROGRAM - A scheme to titillate a submerged urge.

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