

New Controls to Help Combat Dutch Elm Disease; North Carolina Reports Spread of Elm Problem

A new chemical compound, Vapam, can now be used to kill roots halfway between trees and effectively stop movement of Dutch elm fungus from infected to healthy trees through the root systems.

Another new development is the use of a systemic insecticide, Bidrin, to control the elm bark beetle. The insecticide is injected into the trunk, moves throughout the tree, and kills the beetle when it feeds on the tree.

Bidrin holds considerable promise that it may be the answer to the control of the elm bark beetle, according to Herbert Johnson, extension plant pathologist at the University of Minnesota. Large-scale tests are currently being conducted in Wisconsin. Although not available at present, Bidrin may be ready after the tests.

Several N.C. Counties Hit

Reports from North Carolina indicate that Dutch elm disease has now spread to several other counties. It was first discovered last September at Greensboro. The disease has since been found as far west as Davidson county, north to Rockingham and Caswell counties, northeast to Northampton and Halifax, and east to Edgecomb and Nash.

Known to exist in these widely separated counties, the area encompassed is not yet blanketed by the disease, explains Fred Whitfield, extension forestry specialist at North Carolina State College.

"The infection is spotty within this area," Whitfield said. "But no comfort can be found in this fact since it spreads rapidly and can't be completely controlled."

North Carolina is following sanitation practices in its effort to contain Dutch elm disease. However, it is found that in many cases individual property owners won't take the responsibility to destroy infected elm wood. "Because of this," Whitfield says, "it becomes necessary for local officials to recognize

the danger elms are in and take action on a community basis."

At the University of Minnesota, Herbert Johnson reminds arborists that of the many things that can happen to elms, most are not related to Dutch elm disease. Dutch elm and other wilt diseases have fairly distinct symptoms.

If wilting is noted, take a section about a half inch in diameter and make a clean cut across it. If there is wilt fungus present, a brown line or series of dots in the white wood appears just under the bark.

A laboratory test is needed to determine whether it is Dutch elm or some other wilt fungus. This test can be made at most experiment stations.

The most effective method to control Dutch elm disease is sanitation—destruction of all dead and dying elm wood. Control of the elm bark beetle consists of dormant spraying in the spring or fall. Spraying should be done only on elms in a radius of 300 to 500 feet from locations of known infected trees.

The bark does not show Dutch elm symptoms. Miscellaneous insect tunnels under the bark may

be caused by several insects. The distinctive tunnels of the elm bark beetle are easily identified. Elm wood containing such tunnels should be destroyed immediately, Johnson advises.

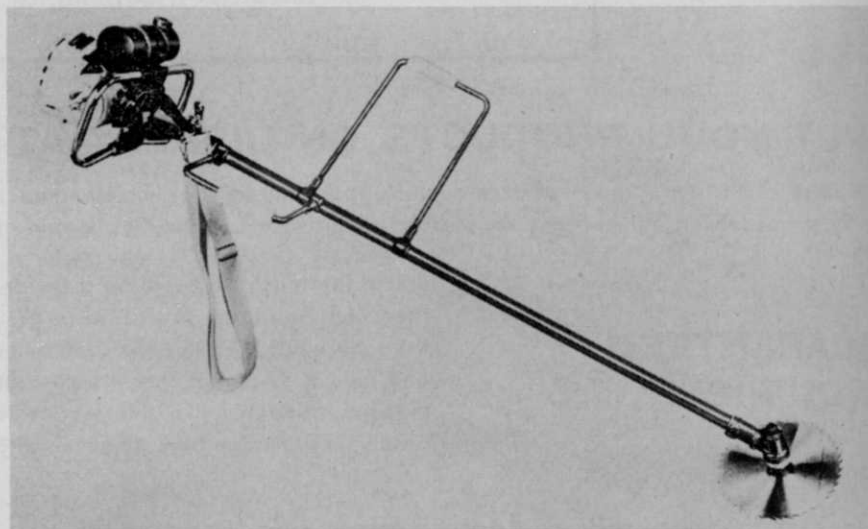
Illustrations and descriptions of Dutch elm symptoms are in Minnesota Extension Folder 211, "The Dutch Elm Disease," available from the Bulletin Room, Institute of Agriculture, St. Paul, Minn. 55101.

Gas Co. Enters Fertilizer Field

Entry into the fertilizer business, with plans to construct a fertilizer complex, were announced recently by Lone Star Producing Co., a wholly owned subsidiary of Lone Star Gas Co., Dallas, Texas. An investment of more than \$20 million is planned, the firm revealed.

Newly-formed Chemical Division of Lone Star Producing Co. will become a basic producer of nitrogen products, made from natural gas, for use in agricultural fertilizers, a company spokesman stated. Fertilizer complex will be located in the heart of the Texas Blacklands area.

"We expect to begin operation of the complex in approximately 18 months," Roy E. Jury, vice president in charge of the Chemical Division, reported.



This medium-duty brush cutter is powered by a 2½ hp, 2-cycle gasoline engine and is said to cut through growth two inches in diameter with a scything motion. It will saw through trees five inches in diameter. An all-position diaphragm carburetor permits tipping the unit to prune low branches overhead, Rowco Mfg. Co., the producer, says. Named the Brushking Model 330, the machine's carrying weight is 28 pounds. Additional information is available by writing Dept. 330, Rowco Mfg. Co., 48 Emerald St., Keene, N. H.