DORMANT OIL SPRAYING FOR CONTROL OF SHADE TREE INSECTS

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Shade trees in full foliage and in vigorous health are one of the most beautiful of all our natural heritages. They constitute the principal feature of any sizeable landscape plan, and whether it be winter or summer their massive, graceful lines add greatly to our enjoyment and pleasure in being outdoors close to nature.

People in general are becoming more conscious of the value of having healthy, vigorous shade trees growing in their playgrounds, school yards, parks, home living areas, golf courses, etc. In spite of this increasing awareness of the value and need for shade trees, all too often these trees are subjected to severe insect attack leaving them devitalized and

often destroyed.

Many of the insect pests most injurious to shade and ornamental trees and shrubbery have the habit of living over winter on some part of the exterior surface of their hosts in such positions and in such forms that they can be destroyed by covering them with a spray of petroleum oil. This practice is called "dormant spraying" because it is done when the trees are dormant (not in an actively growing condition) and the oil sprays used are termed "dormant oils."

The value of dormant oil, such as STANDARD Dormant Spray Oil No. 1 (DENDROL) in shade tree insect control is limited to the sucking insect group chiefly, and in this group principally to the scale insects. On first thought it might seem that the value of dormant oils in the entire scheme of shade tree insect control is somewhat restricted and of relatively minor importance. This is not so however, because of the fact that the scale insects are the most generally prevalent and destructive - frequently the only truly important pests causing significant damage to the most valuable trees in given localities. Hence, it often happens that effective control of threatening outbreaks of scale by use of a dormant oil spray may provide all or most all of the insect control required to keep the trees or shrubbery in a healthy condition.

Chewing insects, with some exceptions do not overwinter on the tree and are thus not susceptible to control by a dormant spray of any kind. Pine bark aphid, spruce gall aphid, and spruce mite overwinter on the trees and thus they can be controlled by dor-

mant oil spray application.

Scale insects are very small, soft-bodied with saclike, rounded or pear-shaped bodies that are found attached to the bark of all parts of trees and shrubs. During most of their lives they are affixed to one spot, although when the louse-like young are hatched, they crawl for short distances to new locations. In spite of their small size and apparent helplessness, some of the scale insect species are among the most destructive pests attacking shade trees and shrubs. They reproduce in tremendous numbers under favorable conditions, producing masses of insects that may completely cover the bark of branches and twigs.

Nearly all scale insects are subject to destruction by dormant oils. All are not easy to kill, however, and it is, therefore, necessary to work out different strengths of an oil spray that will be effective against the various species. Some, for example, as the Oak Kermes, require a six or seven per cent spray for their control, while others as the San Jose scale, need only 2½ to 3% oil for equally effective destruction. Other

typical recommendations are:

Oyster shell scale - 6 to 7% (6 to 7 gals, to 94-93 gals, water)

Scurfy scale - 4 to 6% Cottony maple scale - 4% Europeon elm scale - 4%

The best time to spray from every standpoint is to apply dormant oils in early spring when the trees are dormant, but as close as possible to the time when growth starts. The season should be advanced far enough so that mild temperatures are prevalent, or in other words, after danger from severe freezing weather is definitely past. If at all possible, bright, calm, warm days should be selected for spraying.

The different kinds of shrubs and trees vary greatly in their relative susceptibility to injury from oil sprays. Certain species, such as hard maple, Norway maple, hickory, copper beech, and weeping beech are dangerously susceptible and should never be sprayed with dormant oils. Butternut, walnut, mountain ash and boxwood should be sprayed only if critically required. As far as is known, all other common shade trees can be sprayed safely if proper precautions are taken.

Instances of tree injury from the use of the safest oils, such as DENDROL, are extremely rare, and it is worthy to note that DENDROL is one of the very safest dormant oils that can be used.

CONGRATULATIONS —O—

Bill Malpede of Pistakee C. C. is a father for the third time. The boy was born on January 23.

Harold Reed of Ridgemoor C. C. is now a grandfather. The new baby, a boy, was born February 1 to his daughter, Mrs. Elaine Johnson. Harold is recovering nicely.

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THE MARCH 10 MEETING

Mr. Waren Roseman with the assistane of Mr. Howard Foster and Mr. Herman Burns of Romy Hammes Tractor Sales, Kankakee, Ill. showed several movies which were both educational and entertaining.

A film of a Rattle Snake Hunt in Okeen, Oklahoma and "Holiday for Bill" were most entertaining while a third film on Water Pond Construction using the Ford Tractor and Dearborn Implements proved very educational.

In the other half of our educational program, Al Johnson, Educational Chairman introduced a panel of Superintendents who gave practical research talks

on various subjects.

Ray Gerber, Supt. Glen Oak Country Club gave a resume of his experiments last fall with Nugreen, a synthetic urea product. Don Strand, Supt. Westmoreland Country Club spoke on modern, up to date methods of topdressing greens, Bert Rost, Supt. Park Ridge Country Club spoke on his work on weed control with 2,4-D and 2,45-T. Bob Williams, Supt. Beverly Country Club, gave an interesting talk on research being done with by-products of corn refining as a possible source of fertilizer.

There was a good turnout for the meeting in spite of the miserable weather and all who attended were enthusiastic about the type of program presented

at the meeting.

Carl Beckstrum of St. Charles C. C. reports that his son, Charles H., is now at Camp Gordon at Augusta, Georgia. He went in the infantry the first week in February.

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Mrs. Emil Cassier, wife of Emil of the Sycamore C. C., spent two weeks in December in the hospital undergoing a major operation. She is recovering rapidly.