

Study Feeding When Spraying

An army of chomping and sucking insect enemies is about to launch its annual invasion. From now to midsummer, cankerworms, caterpillars, aphids, lace bugs, webworms, leaf miners, and mites or red spiders will begin attacking the leaves of valuable shade and ornamental trees across the country.

Is the invasion serious? Consider the spring or fall cankerworms, sometimes called inch worms or measuring worms. In abundance, they are a serious threat to oak, elm, hickory, maple, cherry, apple, linden, or birch trees. They can defoliate trees over a wide area and even drop to the ground on tiny threads.

Trees suffering severe and repeated attacks by leaf-eating insects may die since leaves manufacture essential plant foods, utilizing raw materials from the soil and air. This food then moves back through the inner bark to feed all the living plant cells. Thus, dam-

age to leaves impairs the life processes of a tree by cutting off or limiting the food supply.

PRACTICALLY any beetle, grub, or caterpillar which eats the surface of a leaf can be controlled by spray applications of malathion or other insecticides. Feeding habits, however, differ so greatly that knowledge of the life history of the specific insect is essential if control is to be successful.


Elm leaf beetle larvae, for example, feed on the underside of leaves, and spray applications should be made with this in mind. The least caterpillar begins to feed almost before there is any leaf surface, while other insects do not appear until leaf growth is established. Some insecticides may prove to be more effective than others in controlling leaf eaters, especially where the young hatch over a prolonged period. Treatments, therefore, frequently vary for the many different insect pests.

Spraying for spruce gall aphids and gall mites is usually done before the buds open. Spraying for cankerworms and tent caterpillars, conversely, is most effective later in the spring when small worms start feeding on new leaves. Seasonal variation and geographical location prohibit prediction of exact spray dates, and spray programs must be adjusted to wind and weather conditions.

SINCE some infestations occur in cycles, tree men can predict the magnitude of the threat in advance of leaf growth by observing such signs as the abundance of egg clusters on limbs. Cankerworm infestations may be damagingly severe for several years, and then virtually disappear for two or three years before the onslaught begins anew.

Now, more than ever, shade trees are recognized as a vital natural resource, and spray programs to protect them are growing increasingly important. Accelerated travel and commerce have introduced new leaf enemies in the past several decades. Minnesota webworm, now causing heavy damage to mimosa and honeylocust trees, was unknown in the US prior to 1942.

Watch for signs of the arrival of these insect enemies and don't delay initiation of effective and safe control.



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Apply Nitrogen For Healthy Turfs

EAST LANSING -- To grow a good lawn in Michigan, it's a pretty safe bet you'll have to apply nitrogen.

The rate of nitrogen application will vary with the turfgrass variety and the type of soil on which it is being grown. But Dr. Paul E. Rieke, Michigan State University soil scientist, has established some general guidelines for making these applications:

On Merion bluegrass and bentgrass, apply six to eight pounds of actual nitrogen per year per 1,000 square feet for the highest quality turf. This should probably be applied in at least three or four applications, says Rieke, since it is never a good practice to apply more than two pounds of actual nitrogen per application.

The six to eight pound rate is recommended only for these grasses when they are getting plenty of water.

ON HEAVILY watered sandy soils, this rate of application should go up to about eight pounds per year, because some of the nitrogen can be lost due to leaching. The rate can be reduced on loams or heavier soil where there isn't as much leaching.

On low management turfs, such as sandy soil without irrigation, the rate of actual nitrogen applied per year should only be four to six pounds.

That's because of the droughty nature of the sandy soil, explains Rieke.

On other Kentucky bluegrass, three to four pounds of actual nitrogen per 1,000 square feet should be applied on turf getting a lot of irrigation. The rate should be reduced to two to three pounds on non-irrigated turf.

For red fescues, only one to three pounds of actual nitrogen should be applied per 1,000 square feet per year. The high range would be used on heavy soil and/or that which is heavily irrigated, says Rieke.

MSU RESEARCH shows that for a good lawn, you should start fertilizing early in the spring and make several more applications throughout the growing season.

This means applying about 40 per cent of your total fertilizer requirement now, about 20 per cent in June and July and the other 40 per cent in August and September.

A more practical approach to lawn fertilization would mean

just two applications a year—one in the spring and one in the fall.

If your lawn has come through the winter with a good stand and color, fertilize a little later in the spring. This will mean less mowing, less nitrogen, and fewer clippings to remove.

"You should still remove those clippings, however, if your aim is a very fine lawn," contends Rieke.

"When clippings are not removed, some nitrogen is returned to the soil. In this case, nitrogen rates may be reduced 20 to 40 per cent."

Gazebo Solves Pool Problems

A little gazebo, matching the house in architectural detail, can be the means of solving several poolside problems for families that have, or plan to build, a swimming pool.

The gazebo can be used to house pool machinery and still provide near-pool dressing room, and a shaded little lounge.

Construction can be done with flooring and pathway to the pool of the same kind of ceramic tile used in the pool itself.

C&O Plans Centralized Control

The Chesapeake and Ohio/Baltimore and Ohio railroads will spend more than \$1.6 million to modernize the 130-mile line between Ashford, N.Y., and Puncxsutawney, Pa., with the installation of a traffic control system.

Utilizing power switches and automatic signal devices, a traffic control system makes it possible for the right-of-way to be single-tracked instead of double-tracked on certain sections of the railroad.

An operator at a control board in Puncxsutawney, headquarters for C&O B&O's Buffalo Division, will regulate the movement of all trains over the entire Ashford-Puncxsutawney line.

Work on the project is expected to begin soon and will take two years to complete. When finished, 64 miles of the 130-mile line will be single-

tracked. At present, the entire section is double-track railroad.

Rearrangement of signals and installation of necessary power switches and signal lines will be performed by construction gangs now being assembled, and will result in additional employment in the area.

Other work to be accomplished includes the installation of modern, mercury-vapor lighting at the Salamanca, N.Y., yard; the demolition of obsolete buildings at East Salamanca, and track work along the 130-mile line.

State Has Hardwood Potential

Many of Michigan's young and vigorous trees have potential for yielding valuable hardwood lumber at a time when demand for this wood has never been greater, says Lester E. Bell of the Michigan State University forestry department.

But, to be valuable, they need special attention and the application of new technology today.

From growing no longer a "once-in-a-lifetime" crop," Bell reports, "Fertilizers, chemical weed control, and good timber stand improvement practices offer the potential for doubling or even tripling previous growth rates of trees."

Veneer-quality black walnut logs can now be produced in 40 to 60 years and other species in even less time. Further advances in tree genetics should shorten this period more, says Bell.

FERTILIZATION, elimination of grass and low value competition, and artificial pruning of selected individual "crop trees" would greatly increase the value of these existing woodlots.

Planting or favoring existing young seedlings for future stands would also help shorten production time, adds Bell.

Michigan hardwood trees worthy of more intensive forest management include the sugar maple, tulip poplar, yellow birch, American basswood, black cherry, black walnut, red oak and white oak. According to Bell, these species supply most of our high quality veneer and sawlog material today.

"THE CLIMATE, SOIL, and location of the state of Michigan permit many of the nation's most valuable tree species to grow in one part or another of the state, with a few species common throughout," Bell states.

The price is right, too. According to the forestry specialist, current prices for high quality veneer logs range from \$100 per thousand board feet for red oak to over \$500 per thousand board feet for black walnut.

Paper Frocks For Parties

As sociable as a basket of kittens and just as much fun is Floreosence, the newest party line from Valtmark. The trio of paper frockery matches 20-some paper frockery, from coasters to table covers to cups. The paper wardrobe includes a jump suit, long hostess gown and a short tress that also comes in children's sizes.



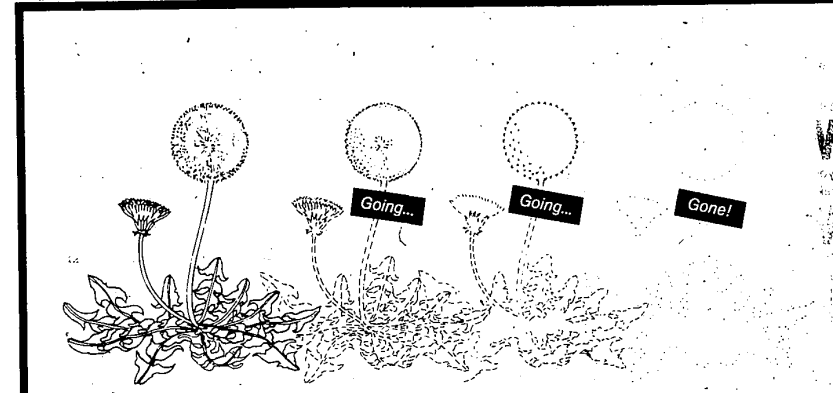
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