

(Oak Wilt continued)

Spore mats are seldom produced on the white oaks.

It is important to remember that oak wilt is commonly confused with drought stress. The following items can help distinguish one from the other.

OAK WILT:

- More common, during first half of summer
- Small leaves, thin crown, wilting
- Edges and tips of leaves turning color first
- Leaves drop soon after discoloring
- Dying trees found in groups (root graft transmission)

DROUGHT STRESS:

- More common during last half of summer
- Regular size leaves, little wilting
- Leaves browning uniformly
- Leaves stay attached to tree
- Dying trees scattered throughout stand
- More common on stressed sites
- Often with trunk sprouts

Positive identification of oak wilt requires recovery of the fungus from trees suspected of having the disease. During the growing season, samples can be sent to the University of Illinois plant clinic in Urbana.

MANAGEMENT

At present, there is no cure for oak wilt. Management therefore consists of preventing the spread of the disease within an oak stand. Four considerations should be kept in mind:

1. If possible, avoid pruning oaks in known oak wilt areas during approximately mid April to early July. "Picnic" beetles are thought to move the fungus from the spore mats to fresh pruning cuts during this period.

2. If oaks must be pruned during this time, pruning cuts should be covered with a wound dressing. This is one of the few times that wound dressings are a recommended arboricultural practice. The dressing keeps the picnic beetles away from the fresh wound.

3. Sever root grafts between diseased and healthy trees. Oaks within 50 feet of diseased trees already may be infected without showing symptoms. Consider such trees to be suspect and place additional barriers between them and neighboring oaks. Root grafts can be severed by trenching to a depth of 3 to 4 feet or by chemical methods (Vapam).

4. Remove diseased red oaks as soon as possible. If quick removal is not possible, the trunks should be girdled to keep the fungus from spreading into the root system and to speed drying of the trunk. Diseased white oaks do not need to be cut down, but diseased branches should be removed and the tree treated to improve its vitality (proper watering, mulching and fertilization).

A new, systemic fungicide has been labeled for treatment of the oak wilt fungus in Illinois. The fungicide, named Alamo® by the Ciba-Geigy Corporation, can be injected into red and pin oak trees for both preventative and therapeutic treatments. It is not yet labeled for oak species in our area other than red and pin oak. Alamo has been used successfully for the treatment of oak wilt in Texas live oaks. Hendricksen, the Care of Trees has begun to inject red oaks to help prevent oak wilt in red oaks. Unfortunately, we do not yet have a history to base the potential effectiveness of these injections. Research done by the University of Minnesota does look promising, but only time will give an accurate picture.

Rubberized Turf: Old Tires Can Give New Life to Turf!

by Dan Banks, Benham Chemical Corp.

Every one of us can think of some areas where we can't grow grass due to traffic. It's human nature to take the most direct path to a destination, which is not always on a defined walkway or cart path. The result is soil compaction, which does not allow root penetration or sustain turf. Now you can grow turf in these bare areas!

Rubber cannot be compacted. Hence, when rubber is incorporated into a soil mix it also cannot be compacted and root penetration is achieved. Chopped rubber, made from used car tires, is a perfect rubber source for this use.

For three years, Trey Rogers of Michigan State University and Michael Venota, a graduate student, have been incorporating chopped rubber into turf. Last year they tilled 10,000 pounds of rubber into 10,000 square feet of Michigan State University's football players' practice field. The Michigan Turfgrass Foundation has supported a graduate assistantship for this research. Much of the final data has still not been collected, but we have some general guidelines for its use.

The shredded rubber is available in three sizes and has three different uses:

1. 3/8" — Soil Integration
2. 1/4" — Aerification
3. #10 — Topdressing

Keep in mind the object is to prevent compaction so the larger the particle the better the performance.

Those who have successfully installed the rubber recommend that 25-30% of soil be rubber. This rubber has been tilled into a depth of one foot. Here's an example of how to figure how much rubber is needed:

Rate: 25 to 30% rubber in soil tilled into a depth of 12".

How Much: 1 cubic yd = 800 lbs. of rubber

Example: a 5' wide x 20' long x 1' deep area

5' x 20' x 1' = 100 cubic feet

(27 cubic feet in a cubic yard)

100 cubic feet divided by 27 = 3.7 cubic yards

For 30% rubber mix:

3.7 (cubic yards) x .30 (30%) = 1.11 cubic yards of rubber needed or 800 lbs.

The rubber is packaged in a gaylord shipping container. This container holds 800 lbs. or 1 cubic yard. This material is shipped direct from the shredding facility to you and a minimum of 3 gaylords or 2,400 lbs. is required for delivery. The cost is relatively inexpensive, approximately \$.18 a pound delivered to most areas in Michigan.

EarthCare Technologies Corporation
featuring ISOLITE porous ceramics

Rich Wagner

2702 Turnberry Road St. Charles, IL 60174
(708) 513-0297 FAX (708) 513-0298