ask the expert

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Magnolia scale

We have a problem with magnolia scale. Our local nursery person told our client to spray with Cygon. Instead, we applied oil once in early summer and again in late summer. We found a few dead scales but a number of scales are still juicy and fleshy. What should we do?

- MISSOURI

Magnolia scale is a serious pest on magnolia in many locations in the United States. The label that I have doesn't recommend using Cygon spray as you may experience some phytotoxicity.

The oil treatment you provided may not be effective for a couple reasons. We don't recommend oil treatment in summer months to manage the large mature scales. Also, the rate you have used (1%) is too low. I prefer 2% oil applied at different timings.

The 2% oil treatment should be targeted towards young second instar crawlers (nymphs). These young crawlers should be active on leaves around late August through September. By November through December, they will move from leaves to twigs. Therefore, an application of 2% oil during late September/October, and again during February/March, will help manage them. Oil doesn't have residual, so good coverage is important. In addition, if the problem is severe, you can use insecticides such as Dursban (the one you mentioned) during late August through early September (at least for the next season).

Cytospora canker

On a large estate property, several spruce trees' lower branches show

extensive needle drop and some of the needles have purplish discoloration. The branches' inside canopy has some whitish resin. The trees are 35 ft. tall and growing in sandy soil. No nylon thread at the base of the stems was found; however, on many trees there are no root flares. What might be the cause?

- MICHIGAN

Based on the symptom pattern, the problem is most likely related to Cytospora canker. This fungus establishes on stressed and weakened trees, particularly as they age.

You mentioned that the trees are growing in a sandy soil. This may contribute to moisture deficiency at different times, particularly during drought conditions. Also, evergreens can become injured during winter due to insufficient moisture for uptake. Even though moisture may be in soil, it may be frozen during winter.

However, on sunny and windy days, exposed plant parts may lose a lot of water. Since the moisture is frozen, it will cause an imbalance in water uptake, resulting in winter drying and subsequent injury. Some of the injury may not be evident the following spring. This year I have seen a number of evergreens showing the adverse effect of drought. Therefore, consider exposure to extremes in moisture and/or temperature contributing to the decline.

There is no fungicidal recommendation for cytospora canker disease management. Reduce stress and provide good growing conditions and water as needed during dry periods. Improve plant health through proper mulching, watering and fertilizing as needed.

Regarding the lack of root flare, check out the possibility of fill around trunks that would contribute to stress. Some trees may not demonstrate a pronounced root flare, particularly when they are younger.

Dutch elm disease

One of our representatives sold Dutch elm disease management using Arbotect. It has been sold as treating once every two years. When I reviewed the label, it says one-year preventive or three-year therapeutic rates. What would be the best approach?

- ILLINOIS

Arbotect can be used preventively or therapeutically depending upon the disease activity and need basis. The Dutch elm disease should be managed preventively where feasible. An alternative option is to treat therapeutically. In this situation, reports indicate that success depends upon the severity of the disease in the tree. If the tree has less than 5% crown infection (flagging symptoms), there's a chance of recovery. If there is more than 5% crown infection and dieback, the tree may not respond well.

Make sure the injections are made on root flare as close to the ground as possible. It may be necessary to remove soil from root flare and then inject. Also, make sure that the injection "Ts" are not placed in the

"valleys" of root flare and that the correct drill bit is being used. Drill into the current year's growth for optimum uptake.



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