

It's a contest that's played out on the ground—healthy grass pitted against crabgrass and goosegrass. But Country Club 19-4-6 Fertilizer and Crabgrass Preventer with Team¹⁴ has the defensive strength of benefin and trifluralin, yet it's gentle on your turf. The combination of these two proven herbicides kills the seeds of annual bluegrass, smooth and hairy crabgrass, goosegrass, as well as green and yellow foxtail as they germinate. And our premium quality fertilizer strengthens both Northern and Southern turfgrasses at the same time.

It can all be accomplished in one pass for full season control with Lebanon's new Country Club 19-4-6 Fertilizer and Crabgrass Preventer with Team[™]. Follow application instructions on the package—because successful teamwork hinges on everyone following the game plan.

Better turf care from the ground up.

If you have any questions about our new Country Club 19-4-6 Fertilizer and Crabgrass Preventer with Team[™], or any of our other products and services, call our *Greenline* today at 1-800-233-0628; in Pennsylvania, call 717-273-1687. And start getting help with your game plan against crabgrass and goosegrass . . . from the ground up.





Circle No. 137 on Reader Inquiry Card



by Balakrishna Rao, Ph.D.

Pine problems

Problem: Well-established, large Scots pine trees are turning brown and dying, and we are unable to find any evidence of insect or disease problems. Do you have any idea what the problem might be? If so, I would appreciate your comments to help save these and other pines. (Ohio)

Solution: Since you were unable to see any disease or pest problems, I suspect the possibility of pinewood nematode causing wilt problems. Scots pine (*Pinus sylvestris*) are reportedly very susceptible to this pest.

For positive identification, send plant tissue samples to a diagnostic clinic like Ohio State University, which is equipped to perform nematode assay. Generally, 6-inch long, 2- to 3-inch diameter branches close to the trunk are sufficient to determine the nematode activity.

At the present time, there is no chemical control for this wilt disorder. Since nematodes are reported to be spread by insects like pine sawyer beetles, controlling the insect activity might help in managing the nematode problem. Dead and dying trees should be cut and removed to prevent breeding sites for insect vectors. Disinfect pruning tools before using them on healthy trees, since the nematode can be transferred through wounds.

Although the importance of fertilization with this problem is not fully understood, extension personnel do recommend maintaining good cultural practices and a good fertilization program. Reports also suggest that controlling needlecast and pine tip blight diseases may aid in minimizing wilt problems.

Managing black locust plants

Problem: What chemicals and methods can be used to control black locust plants growing near highways or slopes? The plants are about 2- to 4-inches in diameter and growing rapidly. (Chicago)

Solution: Black locust plants can be effectively managed by the use of chemicals through foliar sprays, basal trunk treatments, or stump treatments.

For foliar sprays, Garlon 3A plus 2,4-D or dicamba plus 2,4-D combinations can be used. Spraying should be sufficient to wet the leaf surface rather than to the point of runoff. Since these treatments will discolor and show "burn out," this method may not be aesthetically acceptable in many areas.

Another approach is to do basal trunk treatments. Apply combinations of Garlon plus 2,4-D ester or dicamba plus 2,4-D ester formulations on the trunks about 18 inches above the ground level.

In places where the above methods are not acceptable or feasible, consider using the stump treatment methods. Reports indicate that cutting back the black locust plants to ground level first and then immediately applying Tordon to the cambium layer will provide adequate control. Read and follow the label specifications for best results.