Wisconsin's SWAT Team

Jim Storandt Assistant Nursery Manager Griffith State Nursery Wisconsin Rapids, WI

I would like to tell you about a group or team of individuals working together to assist nursery managers here in Wisconsin with the diagnosis and control of pest problems in our state nurseries. The SWAT team, as it is called, is made up of 15-20 professionals who work for the Wisconsin Department of Natural Resources, the U.S. Forest Service, and the University of Wisconsin. They have specialties in the areas of plant pathology, soil science, entomology, nursery management, and forestry. Many of the team members have been working with the state nursery program for several years. The basic idea behind the formation of this group is to utilize all the expertise and experience that this group represents and concentrate this on identifying and controlling disease and insect problems as they arise. This is not an official organization of any kind; there are no membership fees. There is no special funding allotted for work done with the SWAT team.

As the coordinator of the group, I have the responsibility of keeping the various individuals informed on the projects being conducted at the three nurseries. I try and maintain contact with the members and disseminate a brief update a couple of times a year summarizing the work being done. The team members also keep in touch with nursery managers on a regular basis.

Once a year, we all meet for a one-day session at one of the nurseries. At this meeting, the members present short summations of project updates putting emphasis on results and conclusions. Although the group is mainly a trouble-shooting group for a specific pest problem, there are also several ongoing studies related to pest control and soil management which interest us all. After the short presentations, there is plenty of time allowed for discussion. These meetings are quite informal and that's the way we wish them to remain.

Some examples of project updates presented at this year's meeting in June were:

- An update on using Benomyl for controlling Jack Pine gall rust.
- A look at alternatives to Methyl Bromide fumigation.
- An update on work being done with shading, and how it relates to White Spruce stunting.
- An update on isolation work being done to identify our mysterious root-rot condition in White Pine.
- How mycorrhizae can affect nutrient uptake of seedlings.
- We also heard data presented from spring field survival checks of White Pine outplantings.

The meetings are also a time to plan future work projects among the members. Our main focus for the past few years has been to identify and control the cause of White Pine mortality at the Wilson Nursery. There are several pathologists taking regular plant and soil samples to try and culture out the pathogen, soil samples are being taken from the infected areas to try and determine if there are any common soil deficiencies in these areas, fall surveys are being done at the nursery to determine the extent of the infection, outplant studies have been done in the spring to see if the root conditions are affecting seedling survival, over 25 field visits have been made to check actual field survival, special efforts have been made to inject vorlex along the pipelines as a clean-up measure since the problems seem worse in beds adjacent to the pipelines, cultural controls of leaving buffer strips along pipelines have been tried and show real promise. We think we are starting to get a grip on controlling the problem, although it still hasn't been identified. What I am trying to point out is that there are several people all concentrating on this problem, and I think we are making progress.

We think that this team approach can be helpful in solving nursery pest problems. No doubt that in many cases the nursery manager can recognize, identify, and control a pest problem by using his field experience. But having a group of people with a variety of expertise and a willingness to cooperate in nursery pest management is an asset to any nursery program.