Thorne Hall is headquarters for the Wooster, Ohio, station, and is typical of the stately buildings which grace many similar facilities across the country. Vegetation maintenance personnel will find themselves welcome at these centers of technical know-how! This and the shot of Dr. Davis on the facing page are courtesy of the Ohio Agricultural Experiment Station. All other photos by Weeds and Turf.

Use Your AG Experiment Station

A RE YOU obtaining informative literature from your state agricultural experiment station? If not, a great deal of useful aid is going by the board. Weeds and Turf recently visited the facilities of the Ohio station and discovered that benefits of research carried on at these institutions are not being gleaned to their fullest.

The Ohio State Agricultural Experiment Station, located in Wooster, occupies 1600 acres. Adding substations and tracts at Ohio State University in Columbus brings the total to 3200 acres. Nearly 250 persons are employed by the station, including personnel cooperating with OSU and the U.S. Department of Agriculture.

Fields represented include agronomy, animal science, forestry, entomology, horticulture, and many others. Agronomy is the field in which we were interested in our visit. It consists of what would be called plant science. Investigations range from soil studies concerning plants to radiation uptake in crops (a recently initiated study). Turf culture and pest control also fit into this branch.

In 1950 a pasture and turf program was begun. Since then it has grown so that the Ohioans now hold annual Lawn and Ornamental Field Days every third Tuesday and Wednesday in September. Here Station scientists release findings of research and demonstrate the results of experimentation. Usually about 600 persons attend this program.

"Demand for information about turf has been steadily rising," Dr. Richard R. Davis, Agronomy Department Head, told us. "Ohio State now offers a course in turf management at Columbus. Later the University will probably sponsor a short course on the same subject. This illustrates that an Ag station is 'not just for farmers.'"

Dr. Davis showed us around the plots that had been set up to test various chemical and mechanical treatments on turf.

In chemical tests of preemergence crabgrass control, Dr. Davis said results with Daetral and Zytron have been the most consistent. Among postemergence chemicals, the most widely used are AMA and DMA. These may discolor Kentucky bluegrass but no serious injury results if they are used in recommended amounts.

Fungus disease control receives

Agriculture experiment stations don't limit themselves to farm crop research, as many knowledgeable applicators have already discovered. Most such stations have research programs in turf management and tree maintenance, and many have studies related to weed and brush control. This article describes how one of the many ag stations operates, and tells how to make the most of services offered in state centers.
Most phases of turf management are studied at agricultural experiment stations. At Wooster, for example, there are plots for sod renewal (above left). Bentgrass varieties (above right) are planted in strips and tested for response and resistance to crabgrass and other pests. Area at the right has been laid out in a grid pattern where fungicides are tested. Dollar spot is evident at the lower left of the photo.

the attention of Professor Harmon A. Runnels. Some plots of varieties of close-cut and high-cut bentgrass are given chemical treatments to prevent the occurrence of fungus diseases. Those fungicides he found effective against snow mold (Typhula sp.) are “Calo-clor or Calocure, Dyrene, Scutl F-92 or F-96, Panogen Turf Spray, Tersan OM, Ortho Lawn and Turf Fungicide, Acti-dione-Thiram, PMAS, Kromad, Cadminate, Miller 658, and Elcide 73.” These were applied once in December at twice the recommended summer dosage for control.

Dollar spot (Sclerotinia homoeocarpa) is another fungus disease damaging in Ohio. “Calocure, Kromad, Ortho Lawn and Turf Fungicide, and Acti-dione-Thiram provided better than 90% control” against this disease.

Recently striped smut has turned up at the Experiment Station on Kentucky bluegrass. None of the chemicals have been able to control it, and it is not known how widespread the disease is or will be.

Several professors at the station carry on turf insect control experiments. Professors Joseph Polivka and Roy Rings, in their work on turf grubs, prescribe aldrin, dieldrin, chlordane, or heptachlor as soon as damage is sighted or if it is expected.

In the weed department, we were told that nimblewill is the worst of the perennial grass pests in Ohio. There seems to be no control for its persistent growth habits.

Dr. Davis told us that work with 2,4-D on campus lawns has shown that the amine type (used because it is less volatile) controls most of the broadleaved weeds. He mentioned that care must be taken when using 2,4-D in lawns near tomatoes which are ultrasensitive. Those weeds not controlled by 2,4-D, like ground ivy, chickweed, and white clover, can be controlled with silvex (2,4,5-TP). Knotweed and speedwell are resistant to both silvex and 2,4-D, but some reports have come in showing that endothal (2 to 4 lbs. per acre) will kill them.

Successful results of improved techniques of weed and turf pest control (as well as work in other fields) are published and available to all taxpayers at a nominal fee (some are even free). So if you are not already taking advantage of the research of your state institutions, write for a bulletin of available publications, obtain a program of the field days which would interest and inform you, or visit your local Ag Station.

Dr. Richard R. Davis is head of agronomy at the Ohio ag station, one of many such sources of helpful data and advice.