KILLING BENT

The object of the experiment was to find a chemical which would effectively kill bentgrass in one application and would allow overseeding after one week without any residual effect on the overseeded bluegrass.

The experiment was divided into three parts: 1.) $3' \times 10'$ bent plots at the agronomy farm, 2.) one square foot bent plots in the greenhouse, and 3.) $3' \times 10'$ plots between the greenhouses. At the plots at the agronomy farm, the following chemicals were sprayed on 63 plots: FeSO4, cacodylic acid, Sindone, Polycide, paraquat, and N-Dure. After about 10 weeks of experiments, these chemicals did not effectively kill the bent. They did what is called "contact kill", burning the leaves but not killing the crown or roots.

Therefore, a chemical was needed which would be absorbed strictly through the roots. The following chemicals had this property and were used on the 23 plots in the greenhouse: Randox, Pramitol 25E, Caparol 80W, TCA, Tordon, Dowpon, Fisons NC 4780, Sinbar, powdered potassium azide, and gasoline. All these chemicals will effectively kill bentgrass (crown, roots, and leaves). However, only gasoline effectively killed the bent and allowed successful overseeding with bluegrass. All the other chemicals had a residual effect on the overseeded bluegrass.

The last part of the experiment was carried on outdoors on $3' \times 10'$ bent plots between the greenhouses. Three-hundred and fifteen grams of 10%granular potassium azide were spread on one plot and then watered in with 5 gallons of water. Then this plot was covered with black plastic which was removed 48 hours later. This particular plot was overseeded with bluegrass 96 hours after the original date of application of the potassium azide. Bluegrass was seen coming back up in this plot two weeks later.

On another $3' \times 10'$ bent plot between the greenhouses, 2.7 gallons of gasoline (75 ml./sq. ft.) were used. This plot was overseeded one week later and bluegrass was seen coming up ten days later.

In conclusion, I would say that gasoline is the best answer to killing bent. Seventy-five ml. is the minimum amount per square foot which can be used. Ten percent granular potassium azide is the next best answer to killing bent. A cover must be put over the treated bent plot for effective kill when using potassium azide. Be extremely careful when handling this chemical. It is very toxic. No matter what chemical is used to kill it, bent should ve verti-cut before treating to give better penetration of the chemical.

> Special Problem Purdue University Senior Dave Fearis



DR. FERGUSON RESIGNS

Dr. Marvin H. Ferguson, Mid-Continent Director and Research coordinator for the United States Golf Association Green Section has announced plans to resign from that position. After September, 1968, Dr. Ferguson will be engaged in private business as president of Agri-Systems of Texas, Inc.

Agri-Systems of Texas, Inc., will provide a variety of services to turf and to agriculture in general. Areas of activity will include golf course design and construction supervision, irrigation systems design and installation, laboratory services for physical analyses of soils, sod production and sales, and consultation services for the turfgrass industry and for agriculture.

Agri-Systems will maintain a permanent staff of highly qualified turfgrass specialists and this staff will be supplemented with consultants who are specialists in specific phases of plant science, soil science, and agricultural engineering.

Offices and laboratory of Agri-Systems of Texas, Inc. are located at 1200 Villa Maria Road, P. O. Box 3757, Bryan, Texas 77801.



