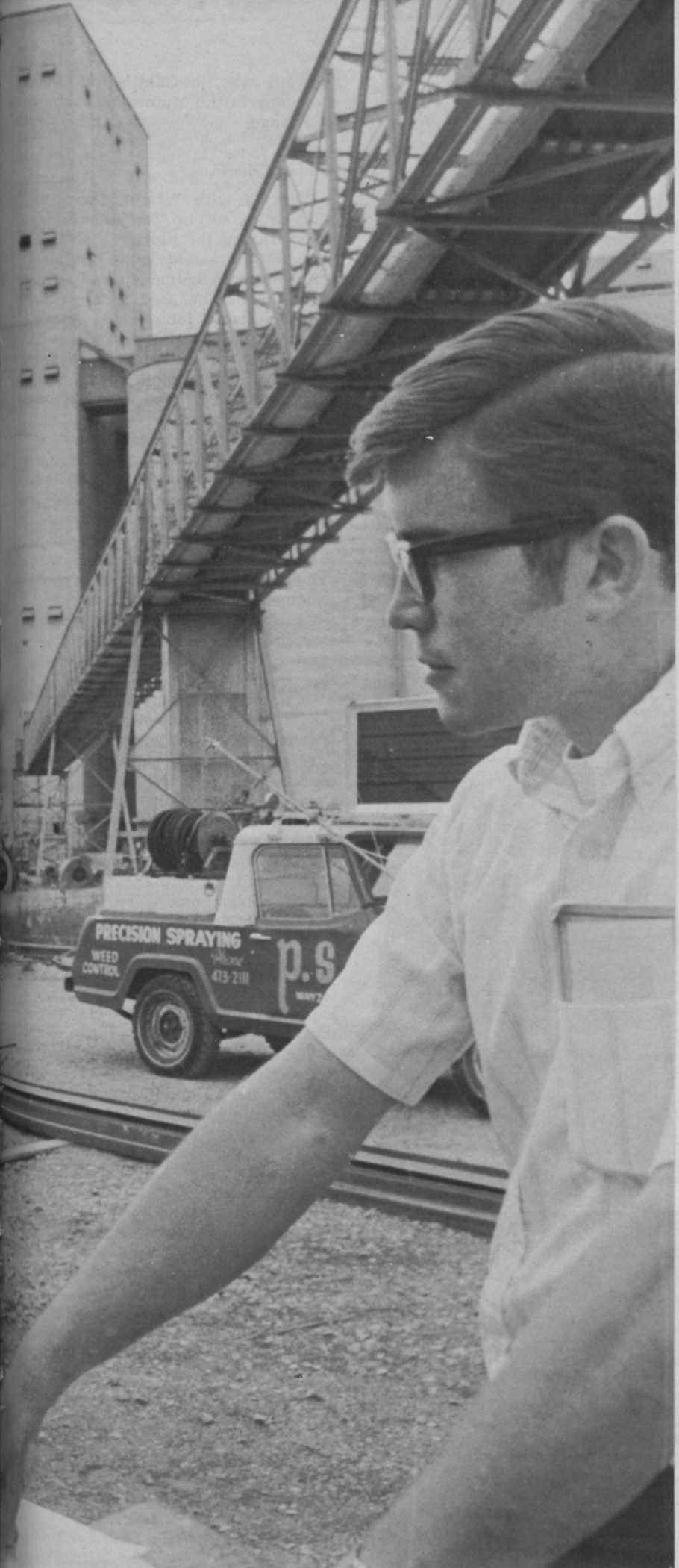

Geigy Uses 'Maxi-Plot' To Introduce Herbicides

By ED SORGATZ
Field Representative
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FANTASTIC potential exists in the industrial weed control business. Our question was: How could this potential be developed?

With seven triazine herbicides, our company felt it had one of the most versatile and effective lines of soil sterilants for industrial weed control. Yet sales of these products had been small in the Minneapolis-St. Paul area relative to the acreage that should be treated.

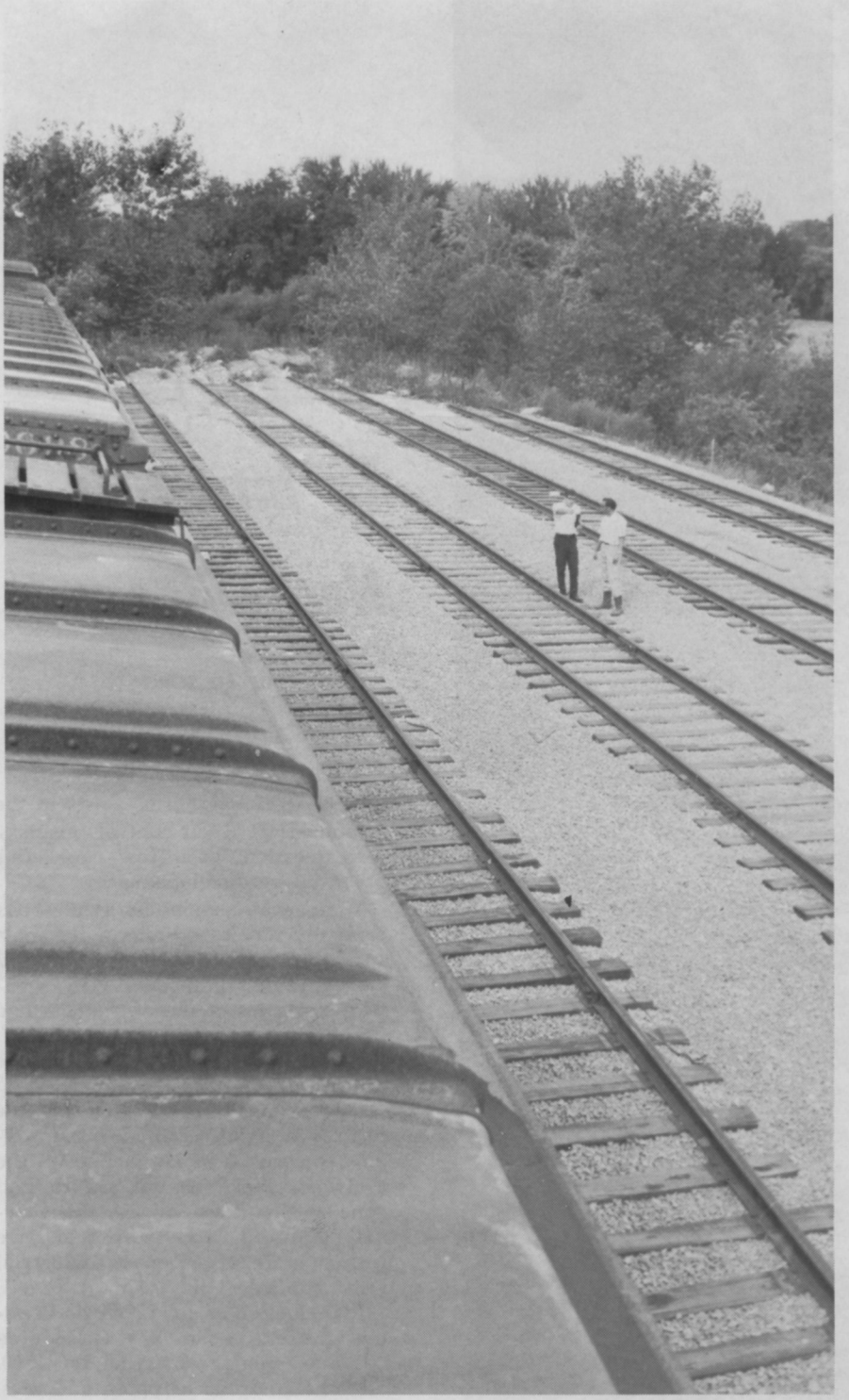
One primary reason was that we had been involved in a rather explosive corn herbicide market in the Midwest. Most of our effort had gone in this direction. As this market matured and solidified, we turned more attention to industrial weed control.

Introduction of our products to potential users in the Twin Cities area became a major objective for 1969.

With hundreds of potential users, individual calls were not feasible.

We decided the greatest number of people could be reached in the least amount of time by establishing a large-scale industrial weed control demonstration. We planned to follow through with an industrial weed control clinic and tour of the plots.

Custom chemical applicator Bob Wright, owner of Precision Spraying, Wayzata, Minn., was consulted for advice on locating the demonstration. He selected a site that exhibited characteristics that would test the maximum capability of ours and competitive companies' products.



A check plot tells the real story of just how effective the various herbicide combinations were. The picture above covers all or portions of Areas 17 through 21. Refer to the sketch and key on the facing page to determine what herbicides were used.

The site was the Continental Grain Company in the Minneapolis suburb of Savage.

Testing Criteria

Working with Wright, these criteria were set up for establishing and spraying the plots:

1. Wright would spray all plots with the same equipment and in the same manner he used on any similar commercial job.
2. All plots would be at least ⅛ acre with the exception of a few smaller plots where our research department wanted to test some new pellet formulations.
3. Chemical cost/acre would be kept in the $45-$60-per-acre range.
4. Major competitive products (duPont, Amchem and Niagra) would be tested also.
5. Applications were to begin in the fall of 1968, and continue with pre-emergence and post-emergence treatment in the spring of 1969.

Continental Grain Company property provided an excellent test because of the weed control problems that would be encountered.

First, we had about 20 species of weeds to deal with. Secondly, the organic matter content of the soil and railroad track ballast was extremely high because of the continuous rain of grain chaff that is normal for this type of facility. Thirdly, we had to contend with the constant track spillage from railcars loading and unloading.

Fall applications were made on Nov. 11, 1968, on about two acres.

Unexpected Obstacle

Mother Nature deposited an unexpected and major obstacle upon the test during the winter and spring. Winter brought record snowfall. Continental is siutated near the banks of the Minnesota River. When the record snowfall melted, most of our plots were inundated with six feet of water. Only areas close to the elevator that had been diked remained dry.

Most of our fall work was destroyed, but we did make at least one interesting discovery. Our Pramitol 25E, though flooded, did not have to be retreated.

Pramitol 25E, a relatively soluble liquid herbicide, is formulated to control both deep-rooted and shal-

low-rooted weed species. Whereas other herbicides either on or very close to the surface of the soil washed away, Pramitol 25E apparently moved into the soil far enough to give weed control all summer.

At the time the fall plots were retreated, on May 27, 1969, the spring pre-emergence treatments were also made. These encompassed about two more acres. Post-emergence treatments on another acre were made on June 10, 1969.

Clinic and Tour

Sixty persons came to a clinic and tour in late June. Guests included representatives from the oil and gas industries, lumber industry, state and county highway departments, city park and health departments, state agronomy services, and others.

This broad cross-section of guests gave us a variety of answers to the question: What is your weed problem? The clinic confirmed our belief that tremendous potential exists in industrial weed control.

After a noon luncheon, guests were given sketch maps of the demonstration site, and a tour of Continental Grain property was conducted.

Just about all of the applications were giving good weed control at the time of the tour. Guests were invited to tour the plots again at any time in the future.

Most treatments looked good throughout the summer of 1969. But the true test of the residual capabilities of these herbicides will be disclosed in the coming spring and summer. By this time, all the chemicals will have been down at least a year.

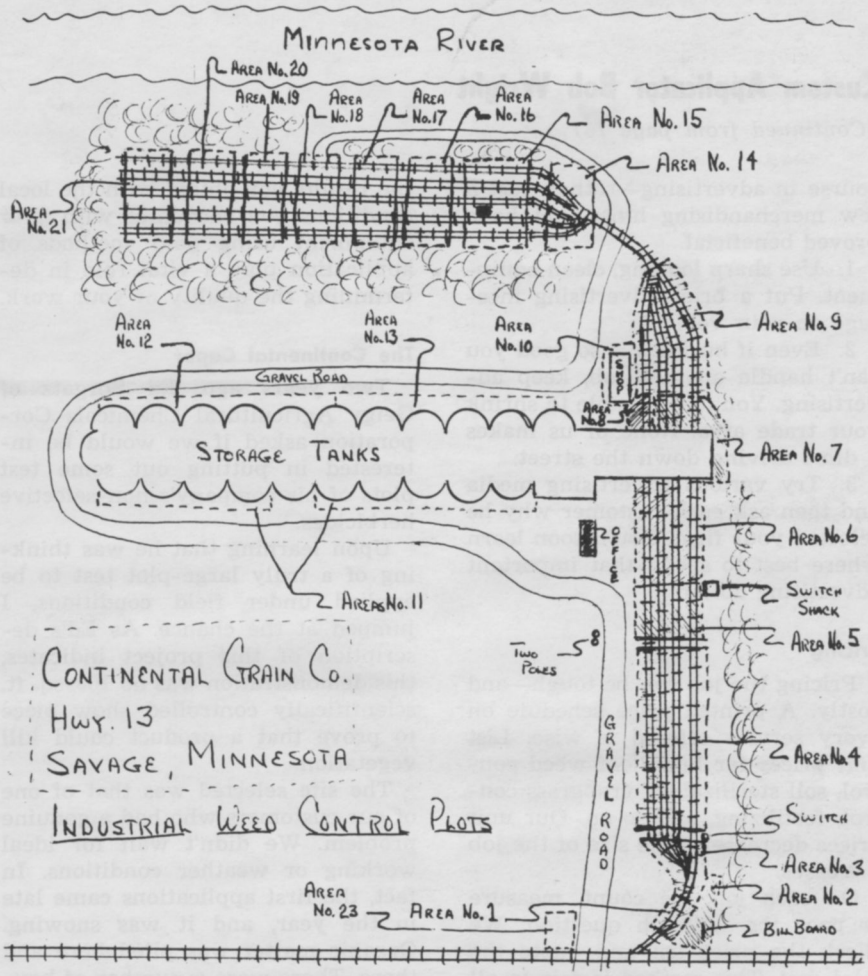
Second Clinic Planned

A second clinic and evaluation tour is scheduled for June 22, 1970. The clinic will convene at 10:30 a.m. at the Burnsville Bowl, two miles east of the junction of Interstate 35W and Highway 33.

Hopefully, a reading on the plots at that time can be passed on to the readers of WEEDS TREES and TURF magazine.

We feel the plot, clinic and tour have been successful. Hopefully, when the residual capacities of all the products can be observed next June, we will accomplish the true objectives of our efforts—to show the potential customer an excellent group of industrial weed control products manufactured by Geigy and compared with competitive products.

Grain spillage from truck and rail traffic complicated the weed control problem.



KEY TO INDUSTRIAL WEED CONTROL PLOTS

Area No. 1 — Small scale granular herbicide research plot contains 20 different applications. Applied 11-20-68.

2. Amchem's Fenamine, 5 gal./acre, sprayed 11-20-68.

3. Sprayed 11-20-68 with Atrazine and Simazine. 10# plus 10#/acre; flooded in spring, did not hold; resprayed 5-27-69 with 5# Atrazine and 4 gal. crop oil/acre.

4. Sprayed 11-20-68 in three strips, western tracks with 20# Atrazine/acre, middle tracks with Amchem's 68-5, 10-gal./acre, eastern tracks with Simazine 20#/acre, flooded in spring, did not hold. Resprayed 5-27-69 with 5# Atrazine and 4 gal. crop oil/acre.

5. Sprayed 11-20-68 with Pramitol, 10 gal./acre south area outside dike flooded. North unflooded. Nothing resprayed.

6. Sprayed 11-20-68 with Fenamine, 5 gal./acre.

7. Sprayed 5-27-69 with 6# Simazine 80W plus 6# Hyvar X plus 6 gal. crop oil/acre.

8. Sprayed 11-20-68 with Pramitol 25E, 8 gal./acre.

9. Sprayed 11-20-68, Pramitol 4 gal. plus Simazine 10#/acre.

10. Sprayed 11-20-68, Atrazine 10# plus Simazine 10#/acre.

11. Sprayed 11-20-68, with Fenamine 5 gal./acre not flooded. Resprayed 5-27-69 with Pramitol, 4 gal./acre.

12. Sprayed 11-20-68, Pramitol 4 gal. plus Simazine 10#/acre.

13. Sprayed 11-20-68. Atrazine 10# plus Simazine 10#/acre.

14. Sprayed 6-11-69 with Pramitol, 8 gal. plus Dacamine 4# plus 4 gal. crop oil/acre.

15. Sprayed 6-11-69, Niagra's Tandex, 10# Dacamine 4#/acre.

16. Sprayed 5-27-69. Simazine 20# plus Dacamine 4#/acre.

17. Sprayed 5-27-69, Atrazine 20# plus Dacamine 4#/acre.

18. Sprayed 5-27-69, Pramitol 8 gal. plus Dacamine 4#/acre.

19. Sprayed 5-27-69, Telvar, 25# plus Dacamine 4#/acre.

20. Sprayed 5-27-69, Hyvar X, 10# plus Dacamine 4#/acre.

21. Sprayed 5-27-69, Hyvar X 10# plus Dacamine 4#/acre.

22. Number skipped.

23. Sprayed 6-11-69, Pramitol 25E, 8 gal. plus Dacamine 4# plus one pint Surfol surfactant/acre.