goosegrass control by correlating soil and air temperatures with goosegrass germination. To compare three widely used herbicides for preemergence crabgrass control on their effective control of goosegrass.

Tests in 1976 and 1977 showed benefin and DCPA were more effective in controlling goosegrass than bensulide. The target date for applying preemergence herbicide for goosegrass could be set when soil and atmospheric temperatures reach 55° to 68° F. Goosegrass emerged on May 9th when the average soil temperature was 68° F. Results of this test questions the effectiveness of the preemergence herbicides for goosegrass control and the proper timing of applications.

Postemergence tests with several herbicides indicate promise for acceptable controls. Metribuzin and asulam were the most promising postemergence treatments.

NORTH CAROLINA STATE UNIVERSITY - Dr. Leon T. Lucas, Project Leader

Funds Granted - \$1,000 - Spring Dead Spot Study

Several fungicides and nitrogen sources and rates were tested. Tests in previous years had shown that spring dead spot was more severe the spring following late summer ammonium nitrate applications. Some degree of control was obtained from very heavy applications of fungicides with Tersan 1991 at 1 ounce per 100 square feet. However, the high cost of such treatments make this approach impractical except for use as a drench directly applied to the afflicted area.

Results of rates and time of applications of fungicides - 1977

	Treatment			Turf Quality	% SDS
ı.	Tersan 1991 (1 oz/100 ft ²)	Oct., Nov.,	Dec.	8.00	.5
2.	11	Oct.		7.75	.3
3.	17	Nov.		7. 75	1.8
4.	II .	Dec.		3.50	13.8
5.	Terraclor 75 (1.3 oz/100 ft 2)	Oct., Nov.,	Dec.	5.00	14.0
6.	11	Oct.		6.00	7.5
7.	11	Nov.		5.00	9.8
8.	11	Dec.		5.75	5.3
9.	Vitavax	Oct., Nov.,	Dec.	5.25	8.3
10.	11	Nov.		5.25	8.0
11.	Mertect	Oct., Nov.,	Dec.	6.75	5.8
12.	11	Nov.		6.50	6.8
13.	Tersan 1991 (.5 oz/100 ft ²)	Oct., Nov.,	Dec.	8.00	.5
14.	" $(.25 \text{ oz}/100 \text{ ft}^2)$	11	- •	6.75	4.5
15.	Terraclor (.66 oz/100 ft ²)	Oct., Nov.,	Dec.	6.00	9.5
16.	" (.33 oz/100 ft ²)	"		5.00	9.3
17.	Check			4.50	11.3
18.	Tersan 1991 (1 oz/100 ft ²)'sp:	ray Oct., Nov	., Dec.	8.75	0