DEVELOPING SALT, DROUGHT AND HEAT RESISTANT TURFGRASSES FOR MINIMAL MAINTENANCE

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Research Accomplished:

1. This year the initial set of 27 buffalograss selections was evaluated in the last of 4 experiments that make up the salt resistance stress evaluation series.

2. Buffalograss appears to have a rather low potential for salt resistance, at least in the limited germ plasm base that was tested. This plant material base was from Texas collections.

3. Buffalograss plant material from the Nebraska program under the direction of Dr. Terrance P. Riordan is currently being increased for salt resistance evaluation. Perhaps this plant material has a broader genetic base and will have greater salt resistance potential.

4. The past year has also allowed the completion of evaluation on the initial set of 29 zoysiagrass selections. There were 4 experiments with 4 replications of each selection in each experiment.

5. There are selections in the initial zoysiagrass set which appear to have good salt resistance. The selections could be useful in both cultivar improvement and perhaps used in saline environments without additional selection pressure.

6. Bentgrass plant material (45 entries) from the improvement program under the direction of Dr. M. C. Engelke has been received. The material is currently being increased for salt resistance evaluation.