

that are relatively less susceptible to drought injury. This can be partially explained by the relationship between the degree of leaf firing and the ratio between the shoot proline level before and after water stress.

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Breeding and Development of  
Zoysiagrass

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The zoysiagrass germplasm nursery continues to be maintained in both the greenhouse and in replicated field plots. The winter of 1985/86 was relatively mild, with very few of the zoysia accessions actually going dormant. Environmental parameters are being continuously monitored and visual observations recorded on relative plant performance.

Considerable emphasis was directed in 1985/86 toward identifying unique genotypes within the Oriental and Domestic zoysiagrass collections which appeared to be well adapted to turf conditions in the Southern United States. In the fall of 1985, several experimental zoysiagrass genotypes were selected from the 1980 turf trials, as well as from the Oriental zoysiagrass collection for inclusion in an accelerated field testing program. These genotypes have been and will be designated DALZ lines, to signify elite genetic resources. Of particular interest are two lines, designated DALZ8501 and DALZ8502 which are accessions from the Plant Introduction Station, Experiment GA in 1981. Data is presented in TABLE 5 to demonstrate the superior regrowth characteristics of these accessions over commercial or other experimental varieties. These two clones along with approximately 20 others are being increased in the greenhouse to provide sufficient plant material for establishment and extensive field testing beginning in 1987.

The occurrence of a rather severe nematode infestation resulted in a major delay in vegetative propagation of plant material. The nematode was identified as Meloidogyne sp. [root knot nematode], which apparently is relatively common on zoysiagrass. Regardless, the incident resulted in delayed planting of the experimental plots.

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