

TURFGRASS TRENDS

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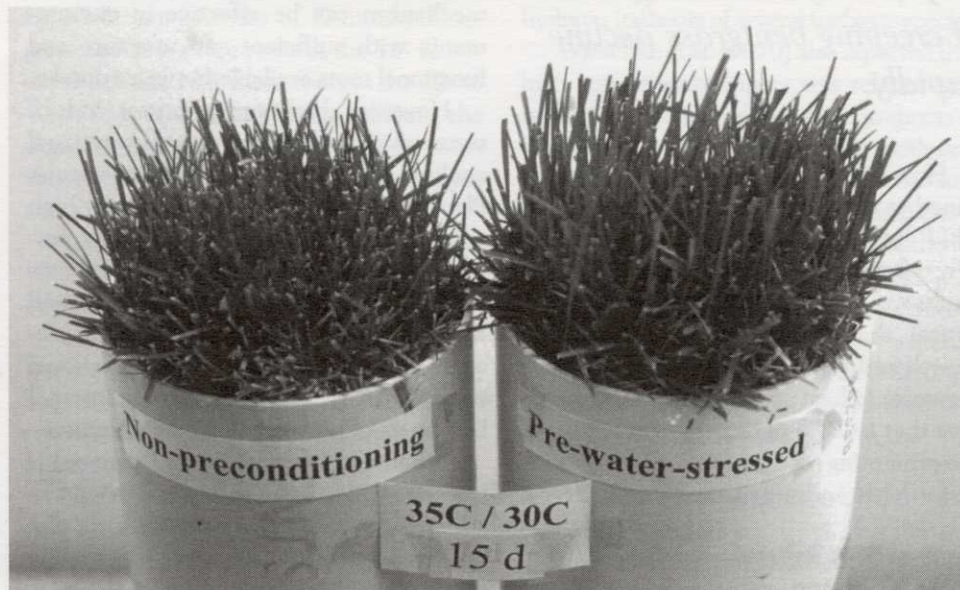
PHYSIOLOGY

Summer Decline of Cool-season Turfgrasses: Heat Stress and Cultural Management

Highly stressed turfgrass needs special consideration in managing irrigation and mowing, as well as a realization that the plants' mechanism for dealing with high temperatures can be rather complex

By Bingru Huang

Turf quality decline of cool-season grasses during summer is a major problem in turfgrass management in the transitional and warm climatic regions. The optimum temperatures for cool-season grasses are 60 to 75 F for shoot growth and 50 to 65 F for root growth (Beard, 1973). However, air temperature often approaches 95 F or higher during summer in those regions. Therefore, high temperature is a major stress-causing



Drought preconditioning facilitates water uptake during heat stress, as is evidenced by the Kentucky bluegrass on the right that has outgrown the grass on the left.

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