Growth Responses of Bermudagrass to Different Levels of Nutrients of the Culture Medium. (C05-pessarakli161402-Oral)

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Abstract:

This study was conducted in a greenhouse, using hydroponics technique, Hoagland solution No. 1, to find an optimum nutrient requirement of bermudagrass (Cynodon dactylon L.), cv. AZ common. Five treatments (Full, 1/2, 1/4, 1/8, and 1/16 strength nutrient levels) were used in a RCB design with 8 replications. Shoot and root lengths, dry weights (DW), and % of canopy green cover were evaluated. Shoot length significatly decreased at lower (1/8 and 1/16) nutrient levels. However, root length was stimulated at lower (1/4, 1/8, and 1/16) nutrient levels. Both shoot and root DW responses followed exactly the same pattern as shoot length, significantly decreased at lower (1/8 and 1/16) nutrient levels. The differences in shoot lengths and shoot and root DW were not significant among the full, 1/2, and 1/4 strength nutrient levels. The % of canopy green cover decreased only at the lower (1/8 and 1/16) nutrient levels. This reduction was more pronounced as growth period progressed.

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