Seeded Bermudagrass Establishment Using Subsurface Drip Irrigation. (C05-weeaks115421-Poster)

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Abstract:

Innovative methods to conserve water loss during irrigation are being evaluated and implemented in many parts of the U.S. Subsurface drip irrigation (SDI) is one such method. A study conducted in Lubbock, TX evaluated establishment of seeded bermudagrass, Cynodon dactylon. The primary objective of this study was to determine if seeded bermudagrass could be established using SDI. The study consisted of four irrigation treatments replicated four times. Treatments consisted of lateral line spaced at 30, 46 and 61 cm. Emitter spacing was equal to distance between lateral lines. The 17 mm polyethylene tubing was buried at a depth of 15 cm with emitters engineered to deliver 3.4 L h-1. The control treatment consisted of 90 degree pop-up sprinklers. During establishment of seed, soil was irrigated with enough water to show wetting patterns on soil surface. Primary objective of establishing seeded bermudagrass using SDI was successful. Full turfrass coverage was noted at week 10, 10, 11 and 9 for the 30, 46, 61 cm and control, respectively. Data indicated that salinity accumulated in the top 0-15 cm depth for all SDI treatments and salinity of the control was significantly lower.

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