Contributions of the Lance Nematode to Creeping Bentgrass Decline. (C05-fry093851-Poster)

Authors:

- D.Settle* Kansas State University
- J.Fry Kansas State University
- T.Todd Kansas State University
- N.Tisserat Kansas State University

Abstract:

Little is known about how creeping bentgrass quality is influenced by lance nematodes, especially under stressful growing conditions. Our objective was to evaluate the influence lance nematodes on creeping bentgrass growth and quality when subjected to a low mowing height and high soil temperature under controlled conditions. Washed A-4 creeping bentgrass sod was placed on a steamed sand-silt soil, and half of the treatments were infested with 267 nematodes per 100 cc soil. After 4 months, creeping bentgrass visual quality and percent cover were significantly reduced when turf was subjected to a 35 C soil temperature and a 3.4 mm mowing height compared to that receiving a 20 C soil temperature and a 6.4 mm mowing height. Lance nematodes did not reduce visual quality indicators, but did reduce dry plant weights by 50% when clipped at 3.2 mm. Lance nematode populations were not affected by clipping height, but fell by 182 nematodes per cc soil after 4 months in soil maintained at 35 C compared to 20 C.

Corresponding Author Information:

Jack Fry phone: 785-532-1430

Kansas State University fax: 785-532-6949

Division of Horticulture, 2021 e-mail:

Throckmorton, KSU jfry@oznet.ksu.edu

Manhattan, KS 66506

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