# **Rooting Characteristics for Tall Fescue Cultivars Differing in Morphology. (C05-watkins105636-Oral)**

Authors:

- E.Watkins\* Rutgers University
- B.Huang Rutgers University
- W.A.Meyer Rutgers University

## Abstract:

This study was initiated in order to evaluate tall fescue cultivars for drought tolerance and rooting using a mini-rhizotron imaging system. Eight cultivars, representing the various types of turf-type tall fescue, were used in the study ('Kentucky-31' and 'Falcon' (forage/early-standard type); 'Rebel Jr.' and 'Wolfpack' (standard); 'Plantation' and 'Rembrandt' (semi-dwarf); 'DWP' and 'Matador' (dwarf)). Beginning in 2001, root pictures were taken three times per year: early summer (no drought stress), midsummer (during conditions of extreme drought), and late summer (after the turf had recovered from drought). Preliminary data in 2001 indicate cultivar variations in rooting characteristics. Kentucky-31 and Falcon showed the least drought stress and had a more even distribution of roots throughout the soil profile compared to the other cultivars. Matador showed the greatest amount of drought stress and had the bulk of its living roots in the medium depths (25 cm from the soil surface) of the area that was analyzed.

#### **Corresponding Author Information:**

Eric Watkins Rutgers University Dept. of Plant Science,59 Dudley Rd. New Brunswick, NJ 08901 phone: 7329329711 e-mail: ericw@rci.rutgers.edu

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