**UCRTRAC Accumulative Research Summary**
**Section C: Unbiased Product Testing (fertilizers, pesticides, equipment, etc.)**
**Project 3**

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**Title:** Two-Year Evaluation of Nitrogen Products Applied on Tall Fescue in Riverside, California: 1995-1997.

**Objective:** To evaluate the performance of nitrogen fertilizer products (in terms of visual turfgrass quality and clipping yield) when applied to established tall fescue over two consecutive, one-year trials (both running from March to March).

**Location:** A mature plot of Bonsai tall fescue located at the UCR Turfgrass Field Research Facility.

**Duration:** 2 years

**Funding Source:** Nine fertilizer manufacturers

**Findings:**

- An annual nitrogen rate of 6.0 lb/1000 $ft^2$ produced good quality tall fescue with an average visual quality rating of 6.4 (on a 1 to 9 scale, with 1 = poorest, 5 = minimally acceptable, and 9 = best tall fescue). This average includes all treatments for two years that were applied at an annual nitrogen rate of 6.0 lb/1000 $ft^2$.

- Nitrogen treatments, which included differences in annual nitrogen rates, nitrogen source, and number of applications per year, significantly affected visual turfgrass quality ratings. Selected treatments, involving either a fast-release or slow-release nitrogen source, performed well in these studies.

- Seasonal temperatures influenced visual quality and clipping yield measurements, with the most favorable conditions for tall fescue performance during the period of mid-September through late November, and mid-February through early July. Tall fescue nitrogen fertilizer strategies should be developed in consideration of seasonal growth patterns, once the annual nitrogen rate has been defined.

- Generally, those treatments that had the highest annual average visual turfgrass quality also had the greatest annual accumulative clipping yield. This suggests that tall fescue visual quality follows leaf growth.

**Status:** A two-year study was completed and first-year and final reports prepared. Findings were reported in *Turf Tales Magazine* and *Better Turf Thru Agronomics*. Other popular articles may be prepared.

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