

Tailored Water Effect on Bermudagrass Establishment

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Objectives:

- Study the effect the type of irrigation water (tailored [treated effluent spiked with $\text{Ca}(\text{NO}_3)_2$] or potable [supplemented every 14 days with granular $\text{Ca}(\text{NO}_3)_2$ fertilizer]) has on establishment and growth of bermudagrass var. 'Princess 77' (*Cynodon dactylon* L.)
- Determine differences in establishment of sodded and seeded bermudagrass

Scope:

- Bermudagrass 'Princess 77' grown in loamy sandy soil in southern New Mexico fertilized to common practice

Results

Nitrate:

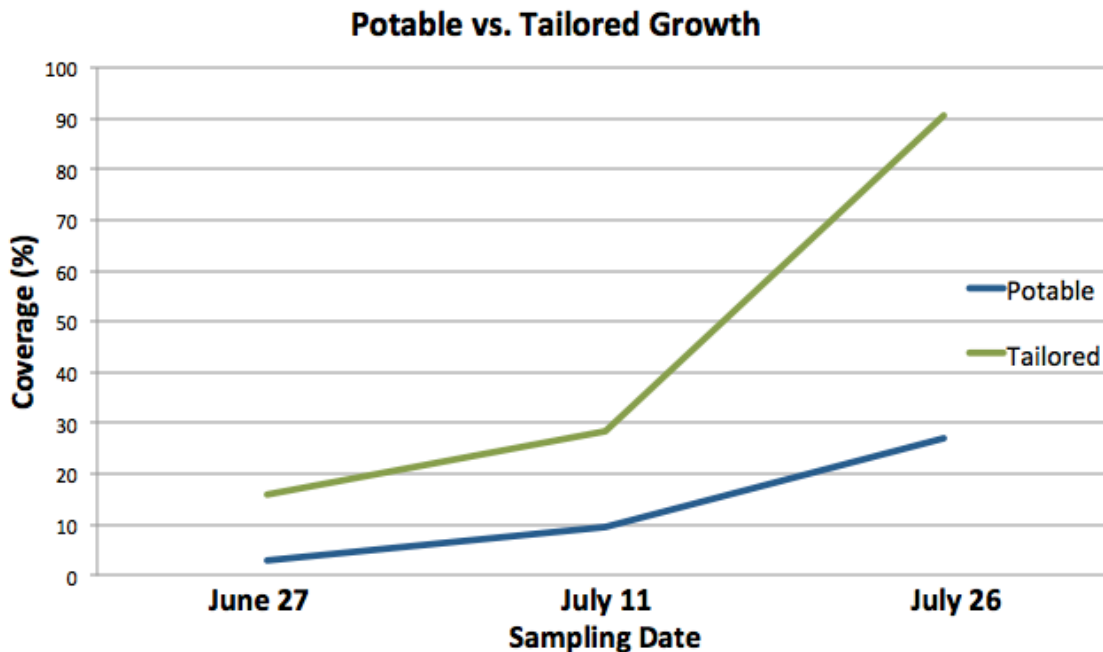
- No difference in nitrate levels by propagation (seeded or sodded)
- After first sampling date, all leachate contained nitrate below EPA standard for potable water (<10 ppm)

SAR and EC:

- Higher in tailored treatments, as expected

Growth:

- Seeded grass irrigated with tailored water grew significantly more than potable treatments
- Coverage increased significantly every two weeks for tailored treatments



Conclusions:

- **Bermudagrass irrigated with tailored water establishes faster than if it is irrigated with potable water supplemented with granular fertilizer**
- **Tailored water does not contaminate groundwater any more than standard potable water practice during establishment**