

Performance of Nitamin 30L Slow-Release Liquid Nitrogen in Foliar Applications for Dark Tobacco

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Materials & Methods

- Objective: To evaluate the potential for Nitamin 30L foliar nitrogen to replace conventional sidedress and foliar nitrogen sources for tobacco.
- All plots received 150 lbs N/A from Urea (45-0-0) pretransplant incorporated on May 17
- ‘Narrowleaf Madole LC’ dark tobacco transplanted May 21.
 - 40” row spacing, 32” plant spacing (4900 plants/A)
- Experimental design: Randomized Complete Block with 4 replications.
 - Plots 4 rows, 40 ft. long, all 4 rows treated with data collected from center 2 rows.

Materials & Methods

- Ammonium nitrate (34-0-0) sidedress applied to designated plots on June 20 (1 month after transplanting).
- Foliar Nitamin 30L (30-0-0) applications began June 13 (4 wks) and were repeated every 7 to 10 days.
 - Nitamin 30L applied broadcast to all 4 rows at 15 gal/A
- Tobacco harvested at 7 weeks after topping, fire-cured
- Data collected: crop vigor, fire-cured yield, quality index

Treatments

Trt	Preplant Urea	Sidedress Am Nit	Total Foliar N	No. of Foliar Applications	Total N/A
	45-0-0 Lbs N/A	34-0-0 Lbs N/A	Nitamin 30L Lbs N/A	App./season	PP+SD or PP+Fol
1	150	0	25	4	175
2	150	0	50	4	200
3	150	0	75	6	225
4	150	0	100	8	250
5	150	0	150	8	300
6	150	25	0	0	175
7	150	150	0	0	300
8	150	150	8*	8*	308

*Foliar applications in treatment 8 were Super Bulldog 30-10-10 at 1 lb N/A per application (total 8 lbs N/A from 8 foliar applications). All other foliar applications (trts 1-5) were with Nitamin 30L with total foliar N split between # of applications.

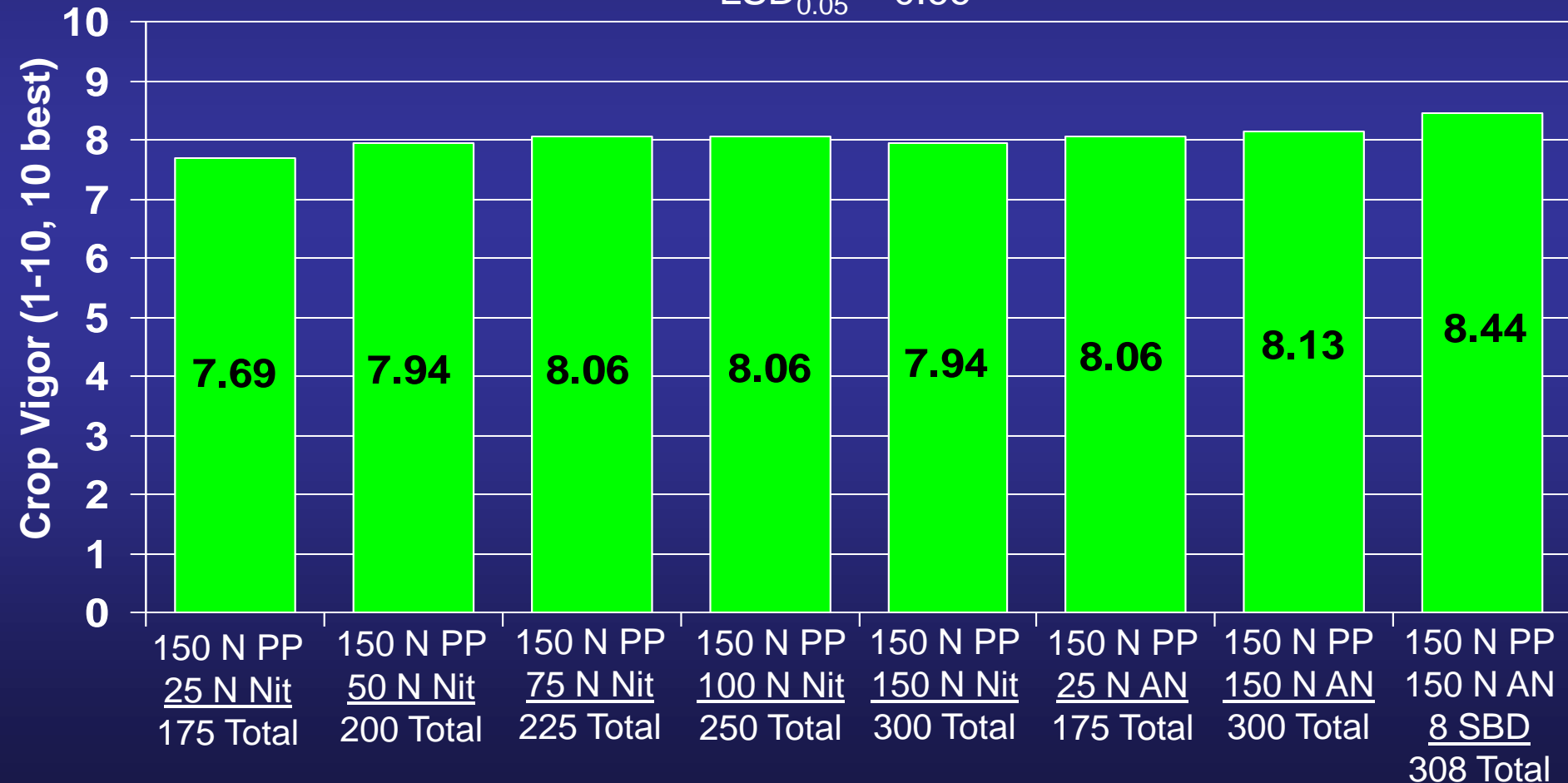
2007 Nitamin Trial

Late-Season Crop Vigor

August 28, 2 weeks after last foliar Nitamin application, preharvest

■ Crop Vigor (1-10, 10 best)

LSD_{0.05} = 0.66

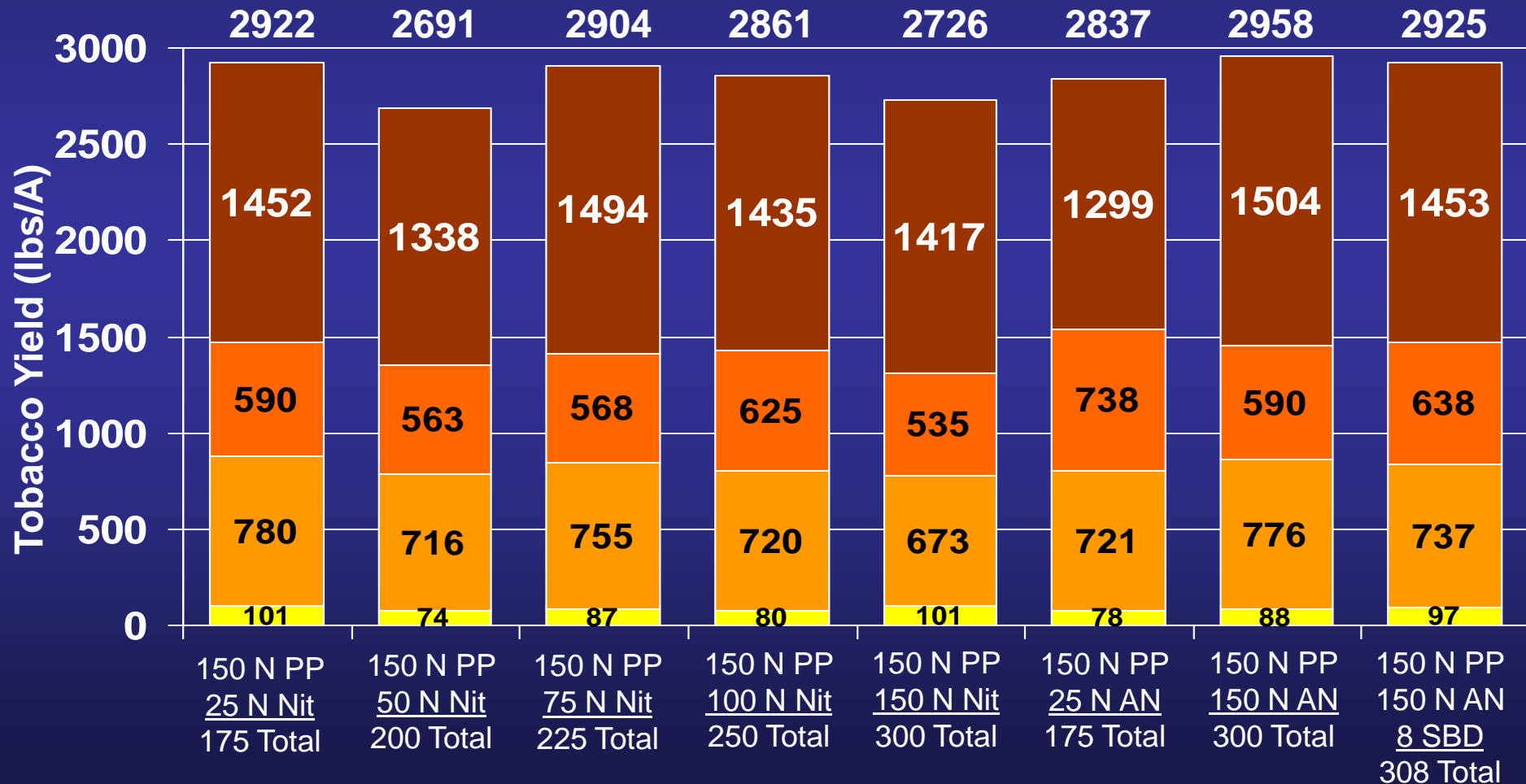


2007 Nitamin 30L Trial

Dark-Fired Tobacco Yield, UKREC, Princeton, KY

LSD_{0.05} = 39 127 187 237 300 (total)

Total Yield (lbs/A): Trash Lugs Seconds Leaf



2007 Nitamin Trial

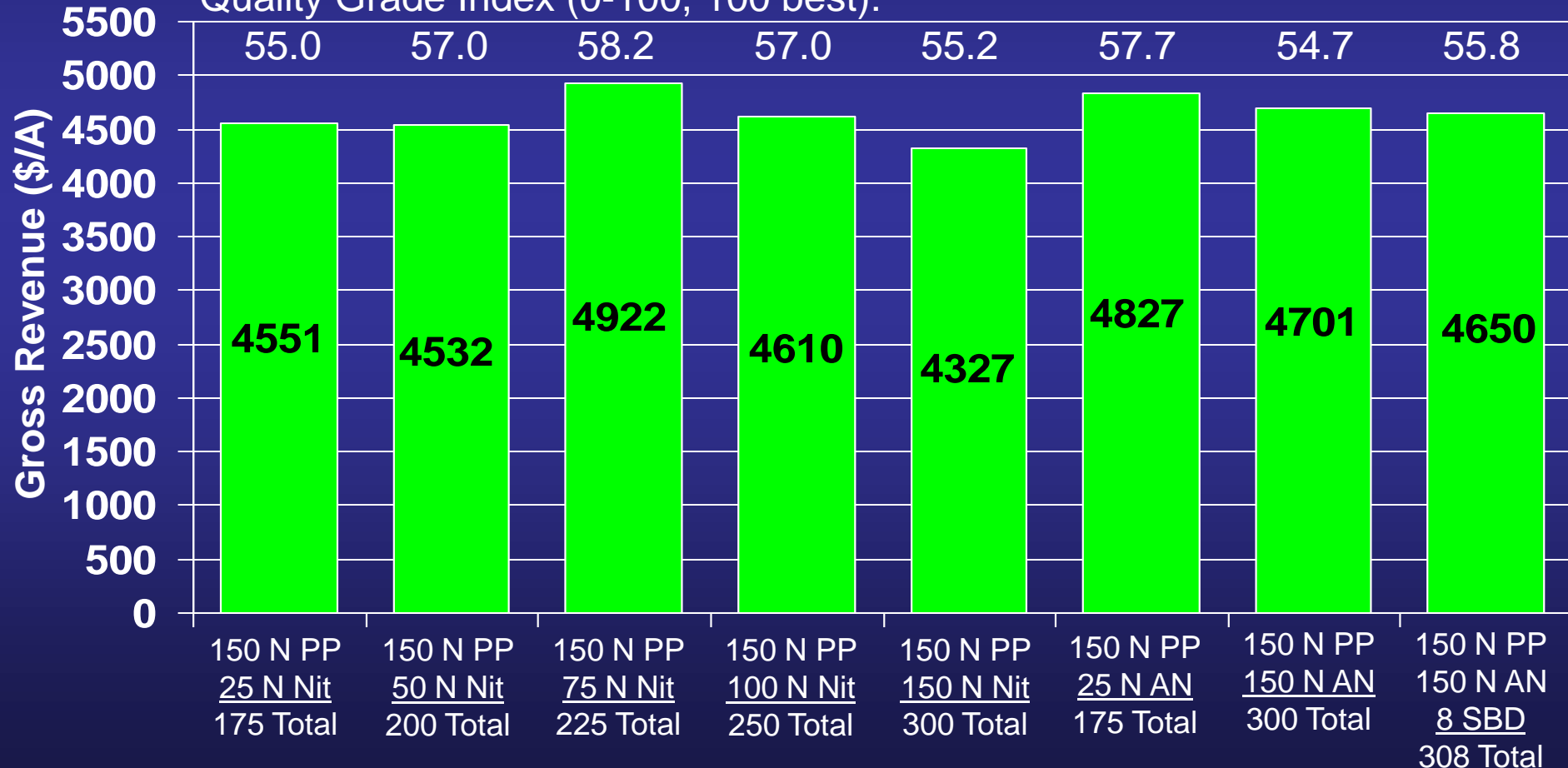
Quality Index and Gross Revenue

*Quality Grade Index and Revenue based on 2004 USDA grade and price support for Type 22 dark-fired tobacco.

LSD_{0.05} = 11.5 (grade index)
826 (gross revenue)

■ Gross Revenue (\$/A)

Quality Grade Index (0-100, 100 best):



2007 Nitamin Trial Summary

- Late-season crop vigor ratings generally followed N rate/A. Lowest crop vigor from 150 urea + 25 Nitamin, highest crop vigor from 150 urea + 150 AN + 8 SBD Fol.
- No significant differences in total yield/A from any treatment. Highest numerical yield from 150 urea + 150 AN (300 lbs N/A total) = 2958 lbs/A.
- No significant differences between treatments for quality grade index or gross revenue. Highest numerical grade index and gross revenue from 150 urea + 75 Nitamin (6 foliar Nitamin app.) with grade index of 58.2 and gross revenue of \$4922/A.
- Extremely dry conditions for 2007 growing season.