2011
Evaluation of Sidedress Nitrogen Sources for Dark Fire-Cured Tobacco

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Evaluation of Sidedress N Sources for Dark Tobacco

2011 - MSU West Farm – Murray, KY

- Field site: Grenada silt loam, tobacco/soybean/grass rotation
- Soil test results: P index 62 (high); K index 216 (med); pH = 6.2
- 1 ton/A lime applied and incorporated with disk early spring
- 150 lbs N/A; 80 lbs P_2O_5/A; 180 lbs K_2O/A applied June 6 as broadcast incorporated application.
- PD7309LC dark tobacco transplanted June 14, conventional tillage
  - 4900 plants/A (40” row spacing; 32” plant spacing)
- RCBD with 4 replications, plots 40 ft. long, 4-rows.
- All sidedress N treatments applied July 22, incorporated with cultivator
- Tobacco crop vigor evaluated late August
- Seasonal weather conditions: wet early season, hot but average moisture thereafter.
  - Rainfall supplemented with drip irrigation in trial
- Tobacco harvested early October, fire-cured

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2011 - MSU West Farm – Murray, KY - Treatments

Trt #	Sidedress N Treatment	Sidedress N/A (lb/A)	Total N/A (lb/A)
1	No sidedress N	0	150
2	Sulf-N 26 ammonium sulfate nitrate	150	300
3	50/50 blend of Sulf-N ammon sulfate/urea	150	300
4	Ammonium nitrate (33.5-0-0)	150	300
5	UAN-32 liquid (32-0-0)	150	300
6	UCAN-17 (CN-9 + UAN-28, 17-0-0)	150	300
7	Potassium nitrate (13.5-0-45)	150	300

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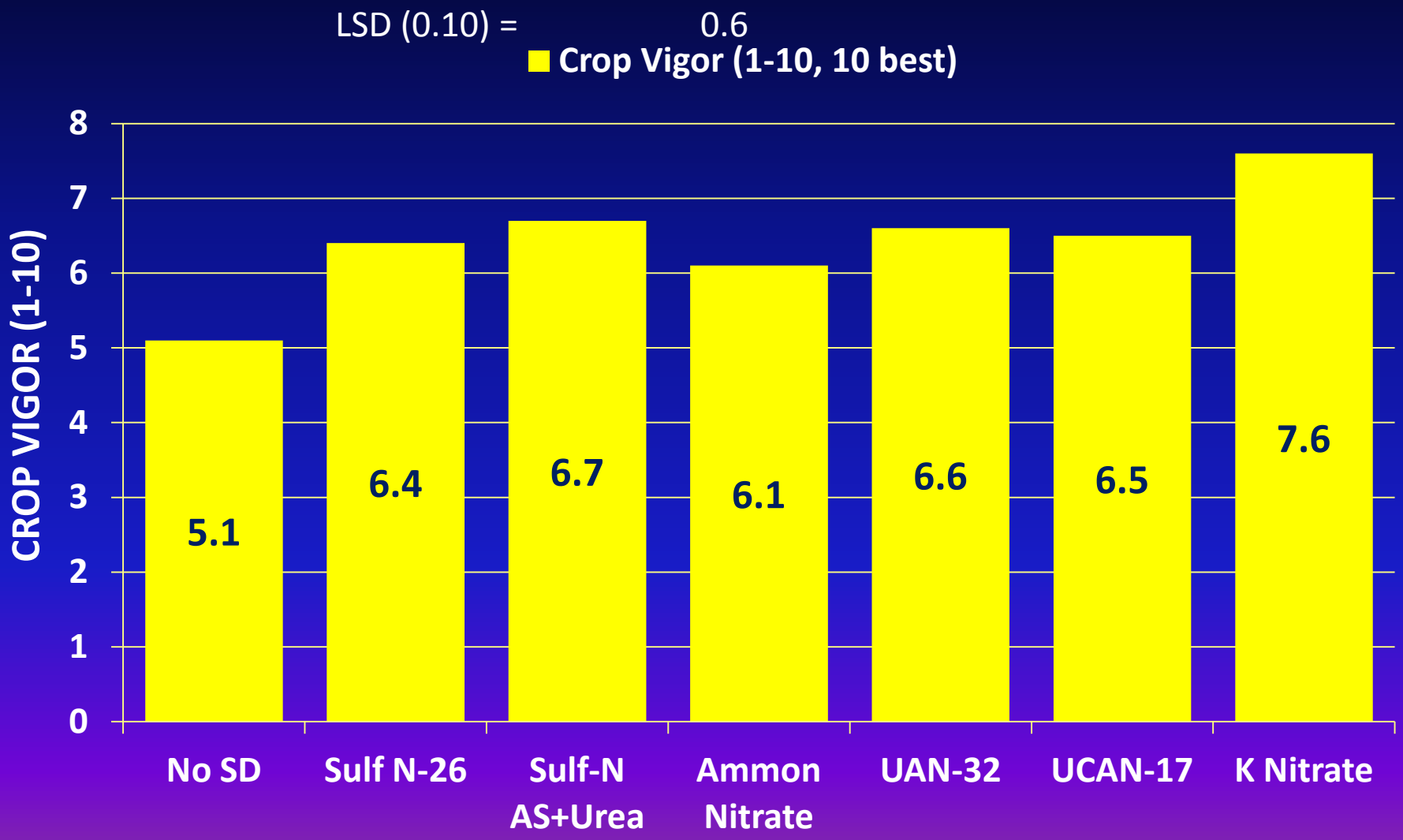
Mid-Late season crop vigor (Aug 31)



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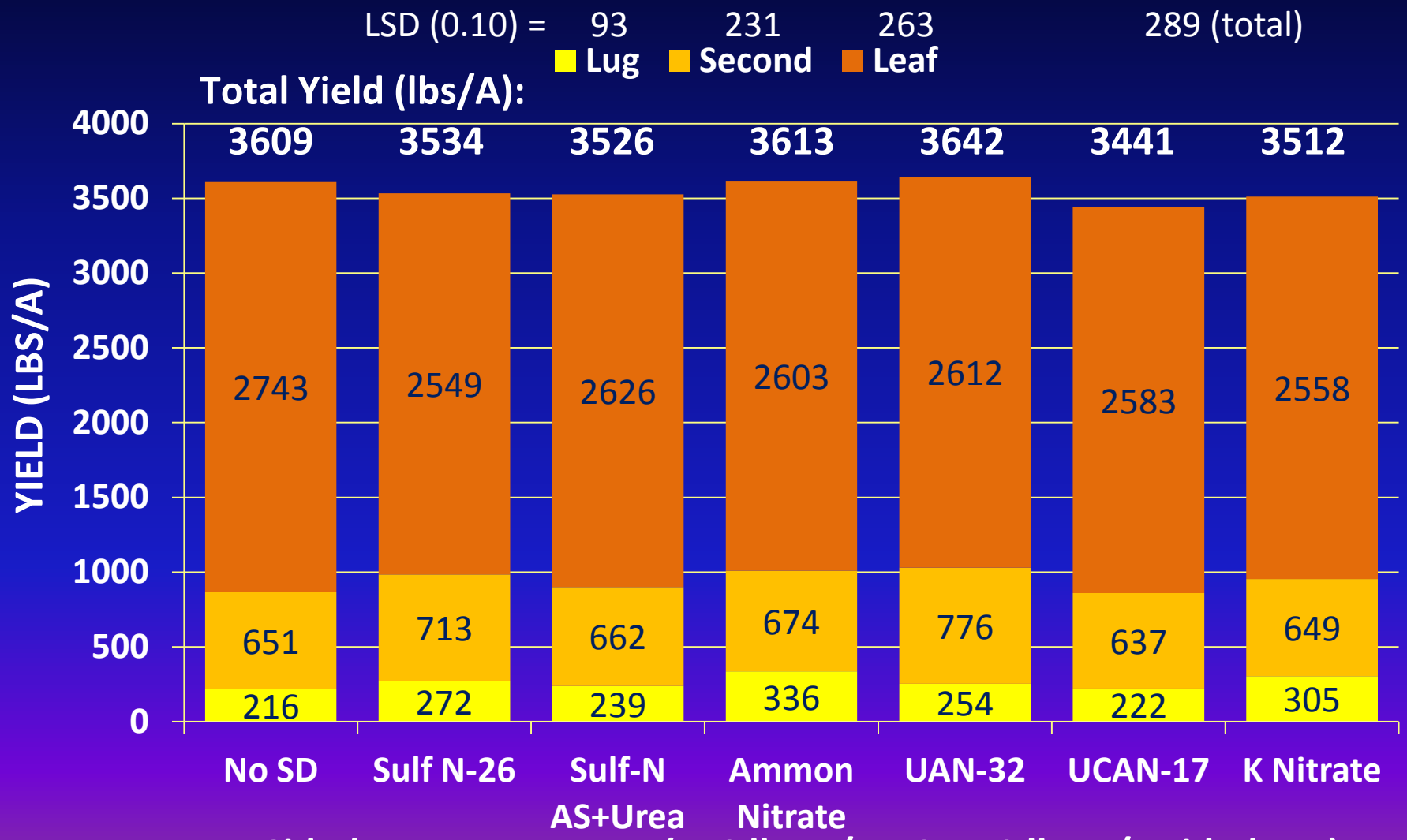
2011 - MSU West Farm – Murray, KY – Dark-Fired Yield Data



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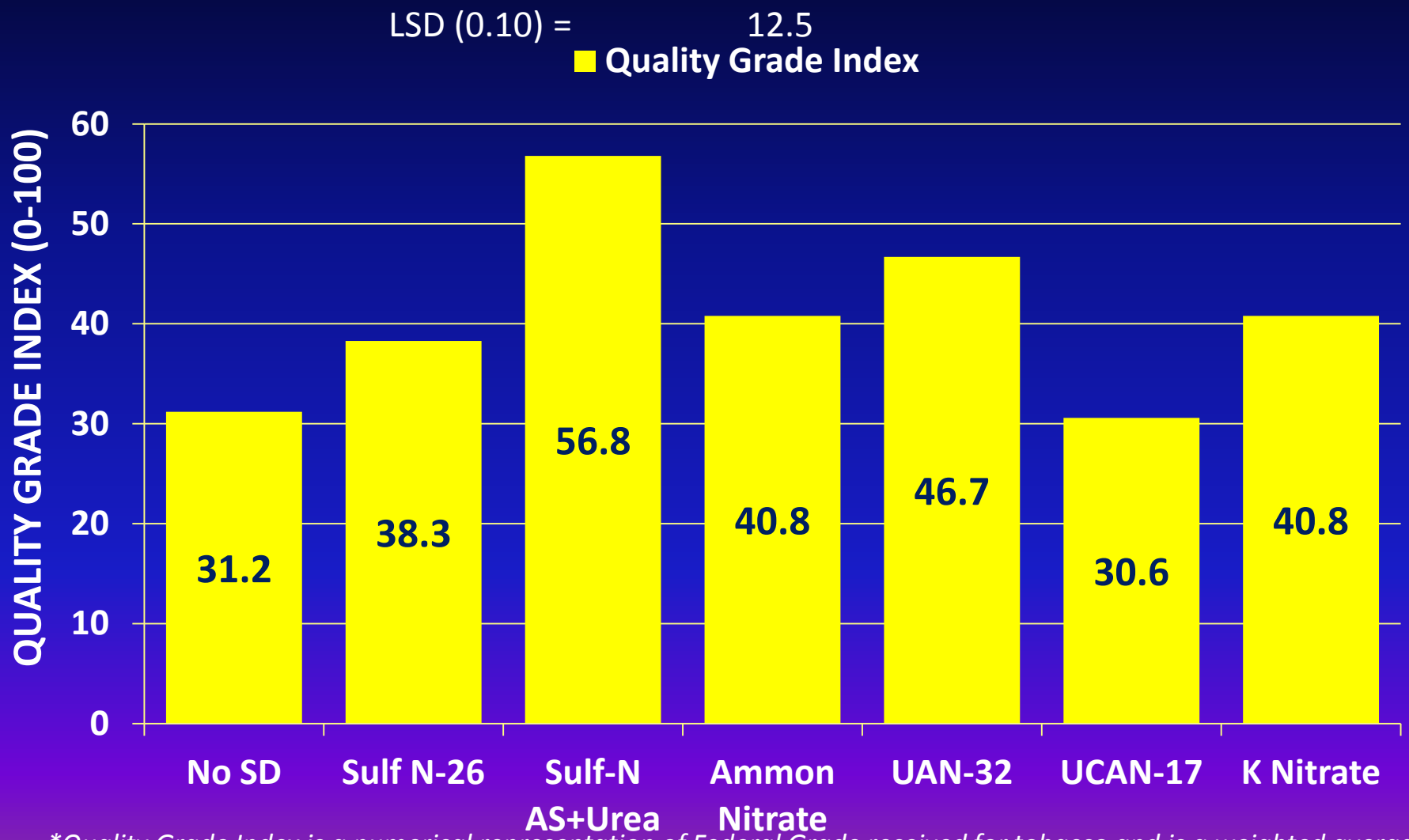
2011 - MSU West Farm – Murray, KY – Dark-Fired Quality Grade Index*



**Quality Grade Index is a numerical representation of Federal Grade received for tobacco and is a weighted average of all stalk positions (lug, second, leaf).*

Evaluation of Sidedress N Sources for Dark Tobacco

2011 - MSU West Farm – Murray, KY – Trial Summary

- Best crop vigor from potassium nitrate, lowest in tobacco receiving no sidedress N.
- Slight yield differences seen in lugs:
  - Highest lug yield from ammonium nitrate, lowest lug yield from no sidedress N or UCAN-17.
- No significant differences seen in total yield
- Differences seen in quality grade index
  - Highest grade index from 50:50 blend of Sulf-N ammonium sulfate:urea
  - Lowest grade index from no sidedress N or UCAN-17