

No-Till Dark Tobacco Production

UKREC, Princeton, KY - 2004



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No-Till Dark Tobacco Production

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- 'Narrowleaf Madole' set June 11
- 40" row spacing, 30" plant spacing (5227 plants/A)
- Established tall fescue burned down with Roundup
- Spartan (12 oz/A), Command (2 pt/A), Ridomil (1 pt/A), Lorsban (1 qt/A) applied to surface prior to setting.
- Data collected:
 - Plant injury and height
 - Weed control
 - Soil tension compared to conventional tillage
 - Fire-cured yield, grade index, and revenue

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- Postemergence Herbicide Treatments:
 - Exp SU 1 (0.1 oz/A) early post over-the-top
 - Exp SU 1 (0.1 oz/A) late post-directed (hood)
 - Exp SU 2 (1 oz/A) early post over-the-top
 - Exp SU 2 (1 oz/A) late post-directed (hood)
 - Exp 3 (1 oz/A) late post-directed (hood)
 - Exp 4 (8 oz/A) late post-directed (hood)
 - Untreated

*All rates in oz product/A.

- Randomized Complete Block design
- 4 replications of treatments

Dark Tobacco Response to Early Postemergence Herbicide Applications

*Ratings taken 10 days after application.

Herbicide	Rate	Crop Injury	Crop Height
	oz/A	0-100%	cm
Exp SU 1	0.1	19	65
Exp SU 2	1.0	34	58
Untreated		0	78
LSD _{0.05} =		3	8

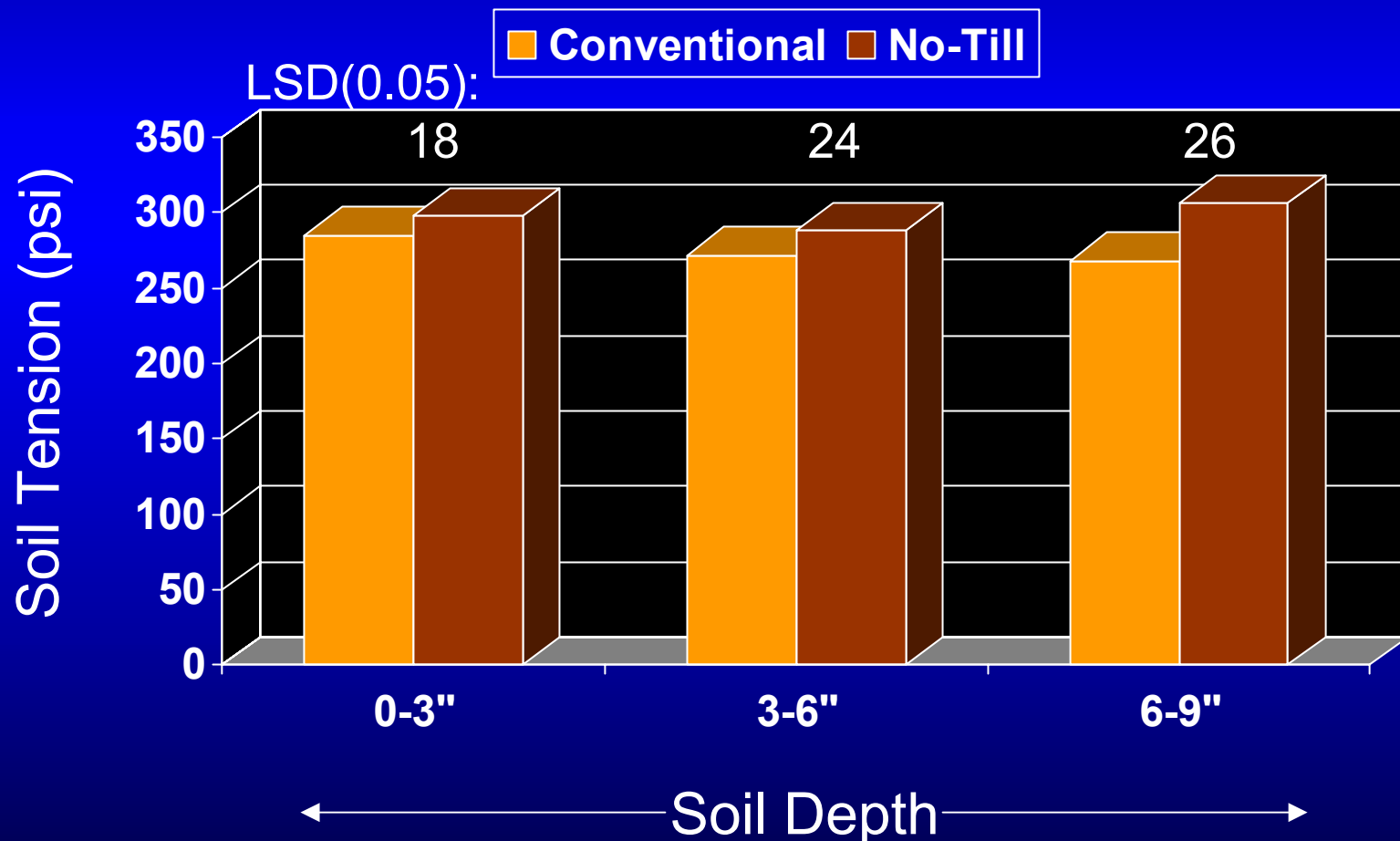
Late-Season Dark Tobacco Response and Weed Control from Herbicides

*Ratings taken 4 wk after PD applications.

Herbicide	Rate	Applic	Injury	Horsenettle	Honeyvine Milkweed	Morningglory
	oz/A	POT/PD			0-100%	
Exp SU 1	0.1	POT	14	36	26	52
Exp SU 1	0.1	PD	2	40	54	63
Exp SU 2	1	POT	19	59	35	61
Exp SU 2	1	PD	3	57	50	64
Exp 3	1	PD	10	63	30	47
Exp 4	8	PD	53	91	68	90
Untreated	0	-	0	0	0	0
LSD _{0.05} =			4	8	7	5

Influence of Tillage on Soil Tension

*Soil penetrometer measurements taken 2 d after soaking rain.
Conventional measurements taken from adjacent area.
Data are mean of 30 random measurements/tillage system.



No-Till Dark Tobacco Yield

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LSD_{0.05} =

111

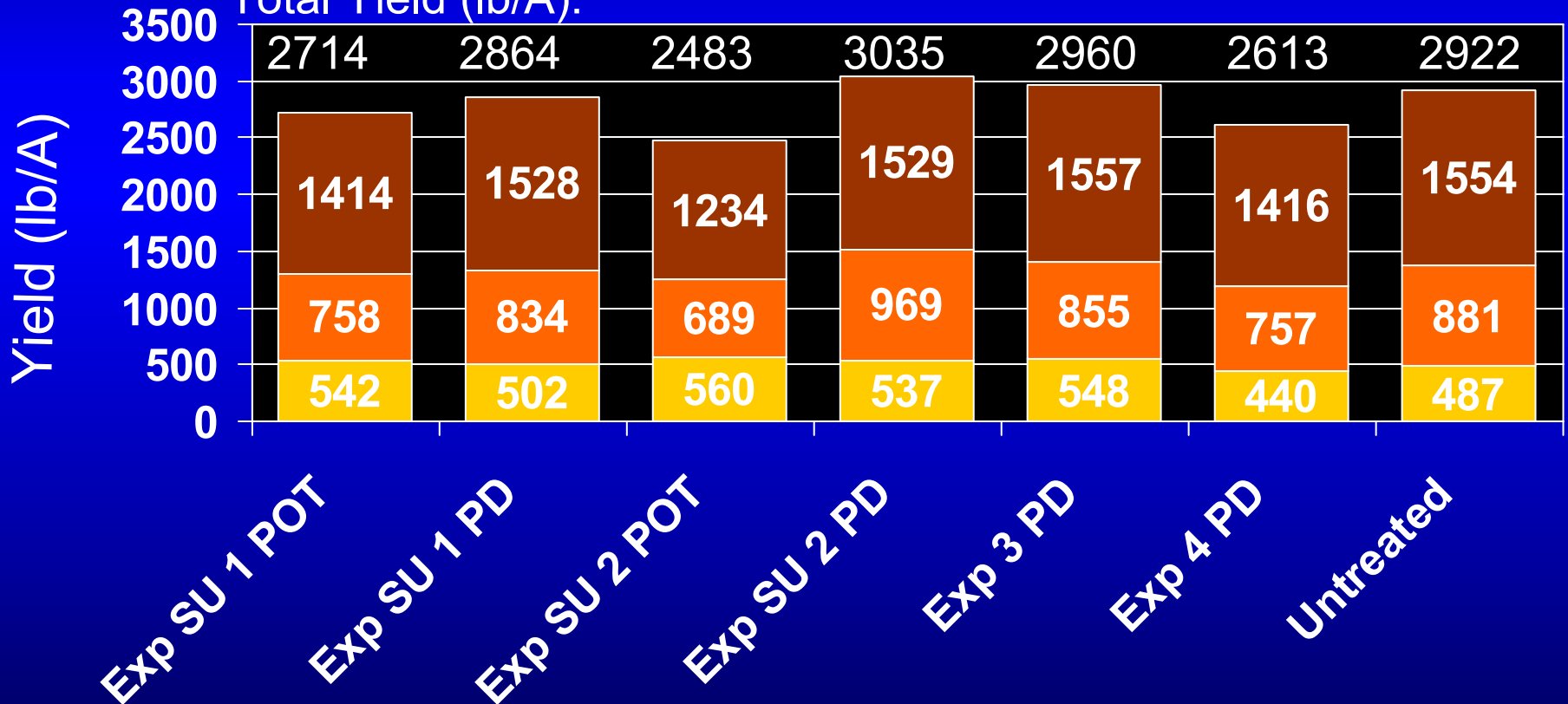
169

341

351 (total)

■ Lug ■ Second ■ Leaf

Total Yield (lb/A):



No-Till Dark Tobacco Grade and Revenue

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**Grade Index and Revenue based on 2004 Federal Grade and Price Support for Type 22 dark-fired tobacco.*

Herbicide	Rate	Applic	Grade Index	Gross Revenue
	oz/A	POT/PD		\$/A
Exp SU 1	0.1	POT	64.3	5066
Exp SU 1	0.1	PD	67.2	5511
Exp SU 2	1	POT	59.8	4427
Exp SU 2	1	PD	60.9	5279
Exp 3	1	PD	68.0	5728
Exp 4	8	PD	67.0	4979
Untreated	0	-	68.0	5684
LSD _{0.05} =			9.1	1010