

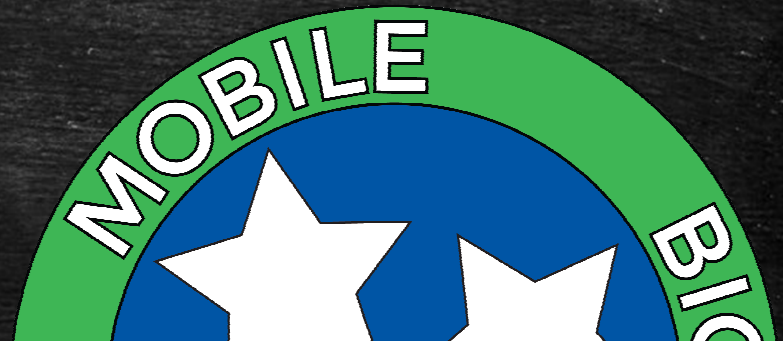


GROWING WINTER CANOLA

CO-OP CROP PRODUCTION WORKSHOP

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TENNESSEE STATE UNIVERSITY
DECEMBER 9, 2015

National Winter Canola Variety Trial



Benefits of Winter Canola

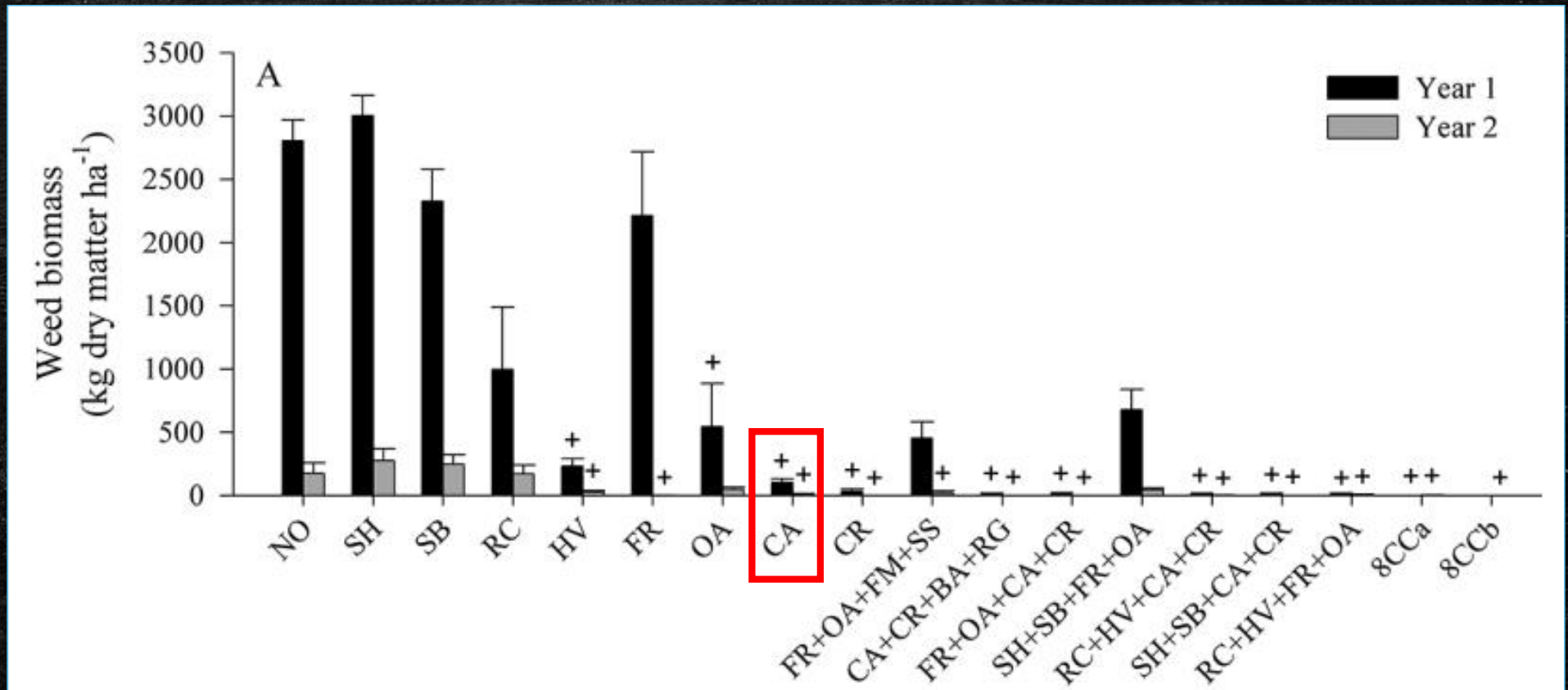
Pollinators

61 insects/minute
73 lbs/acre

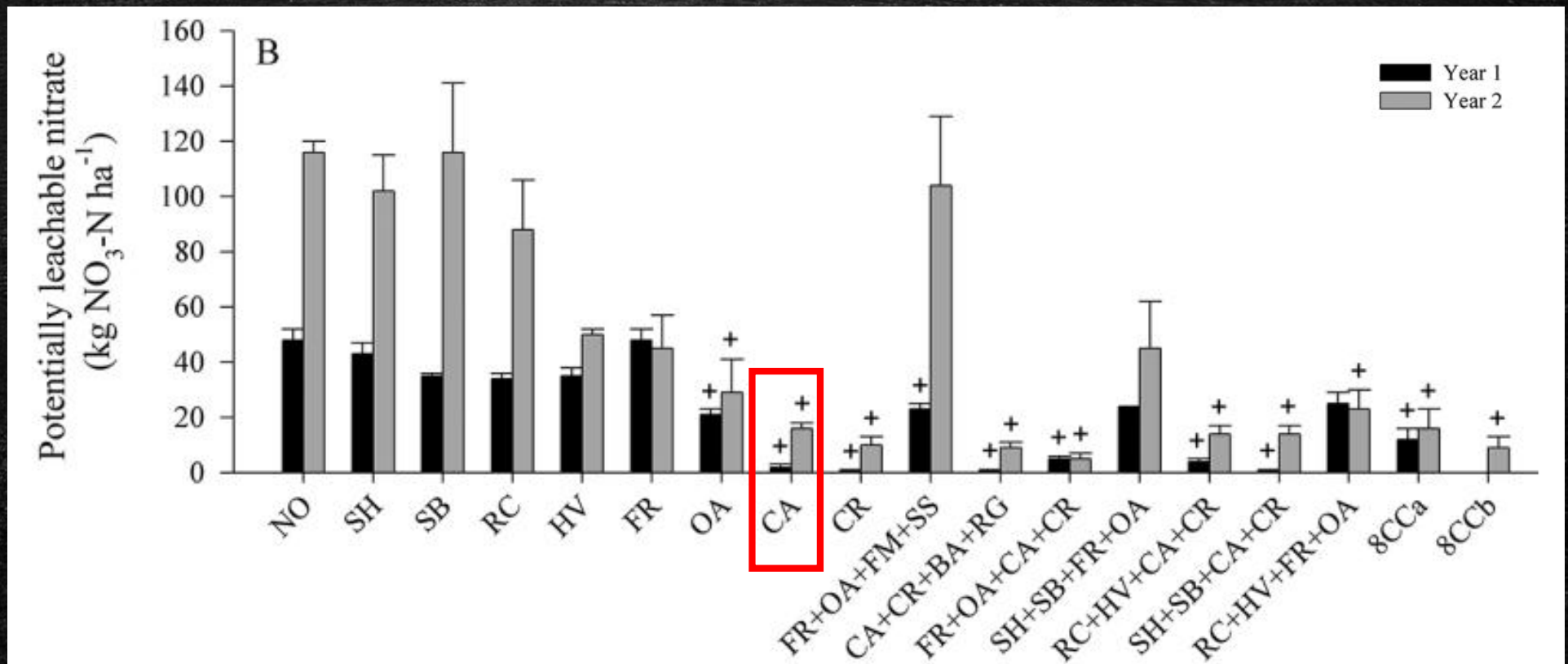
Eberle et al. 2015



Benefits of Winter Canola



Benefits of Winter Canola



Benefits of Winter Canola

Rotation	Wheat yield			
	Chickasha	Lake	Perkins	Lahoma
	-----pounds/acre-----			
Canola-wheat	2342	1621	1338	1499
Continuous wheat	2045	1327	1216	1348

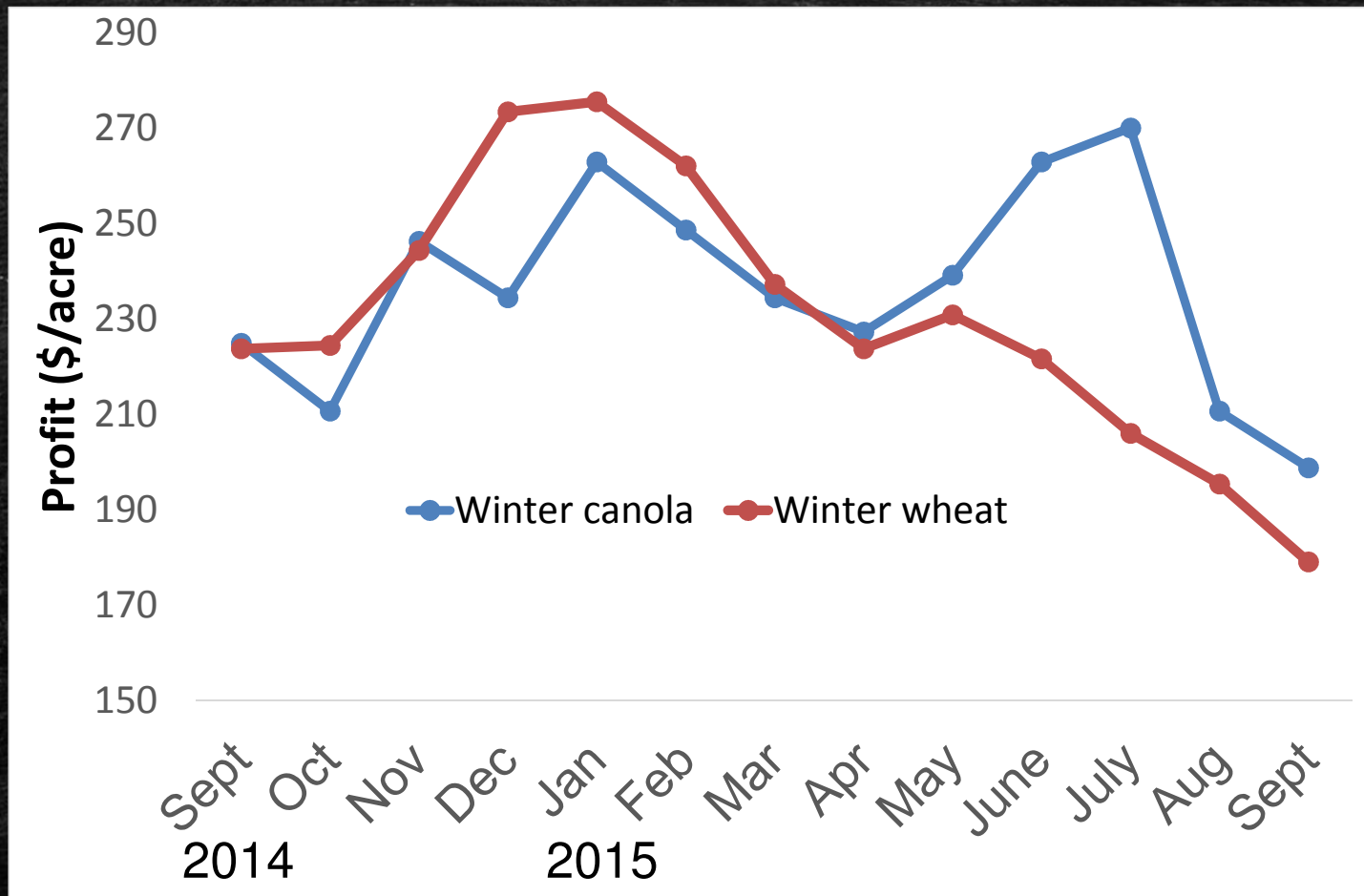
Bushong et al., 2012

Benefits of Winter Canola

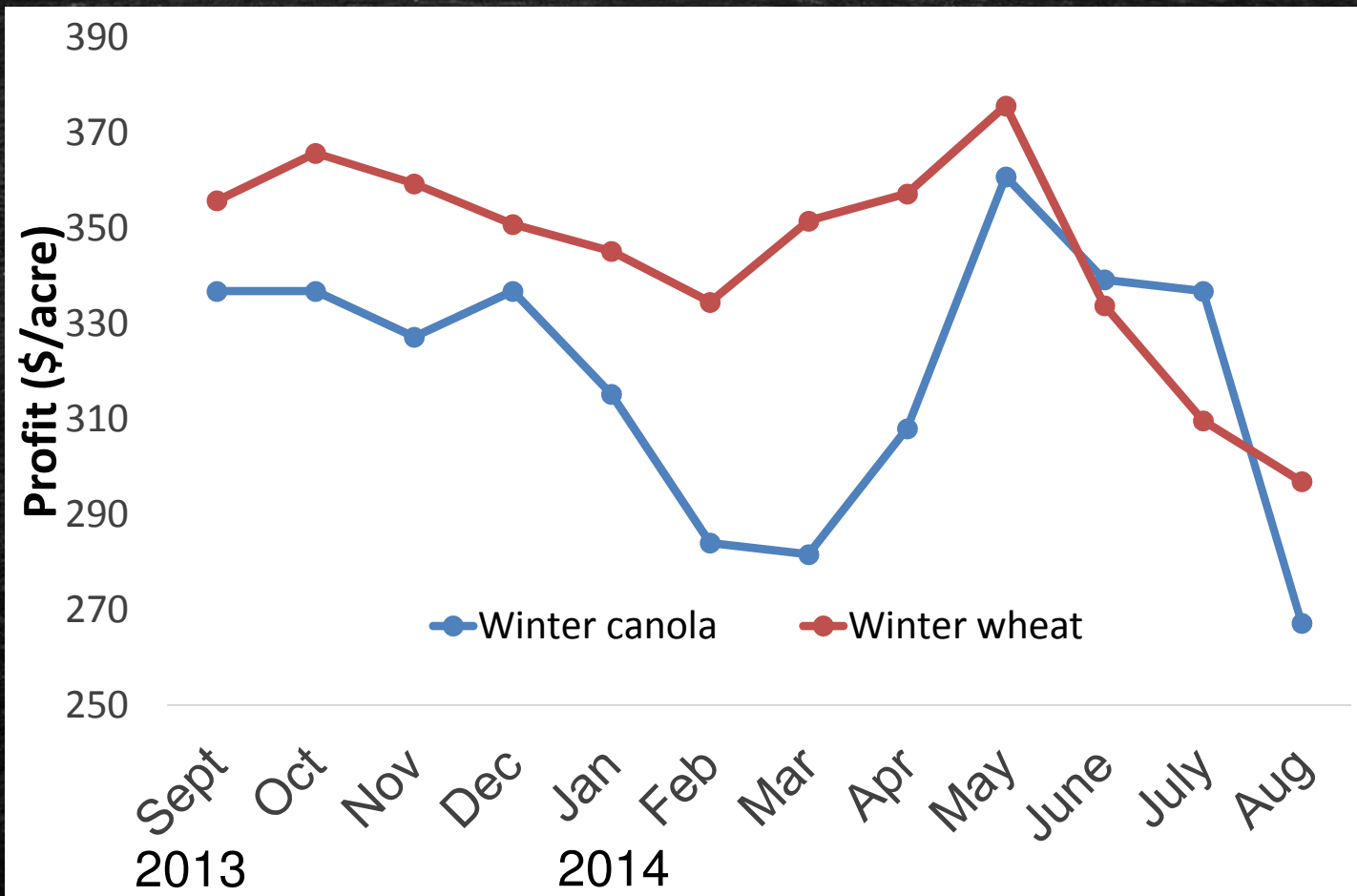
Rotation	Canola price \$/bushel	Net return \$/acre/year		
		Chickasha	Lake	Perkins
Canola-wheat	9.07	80	50	10
	6.12	28	-2	-34
Continuous wheat		-19	-48	-19

Bushong et al., 2012

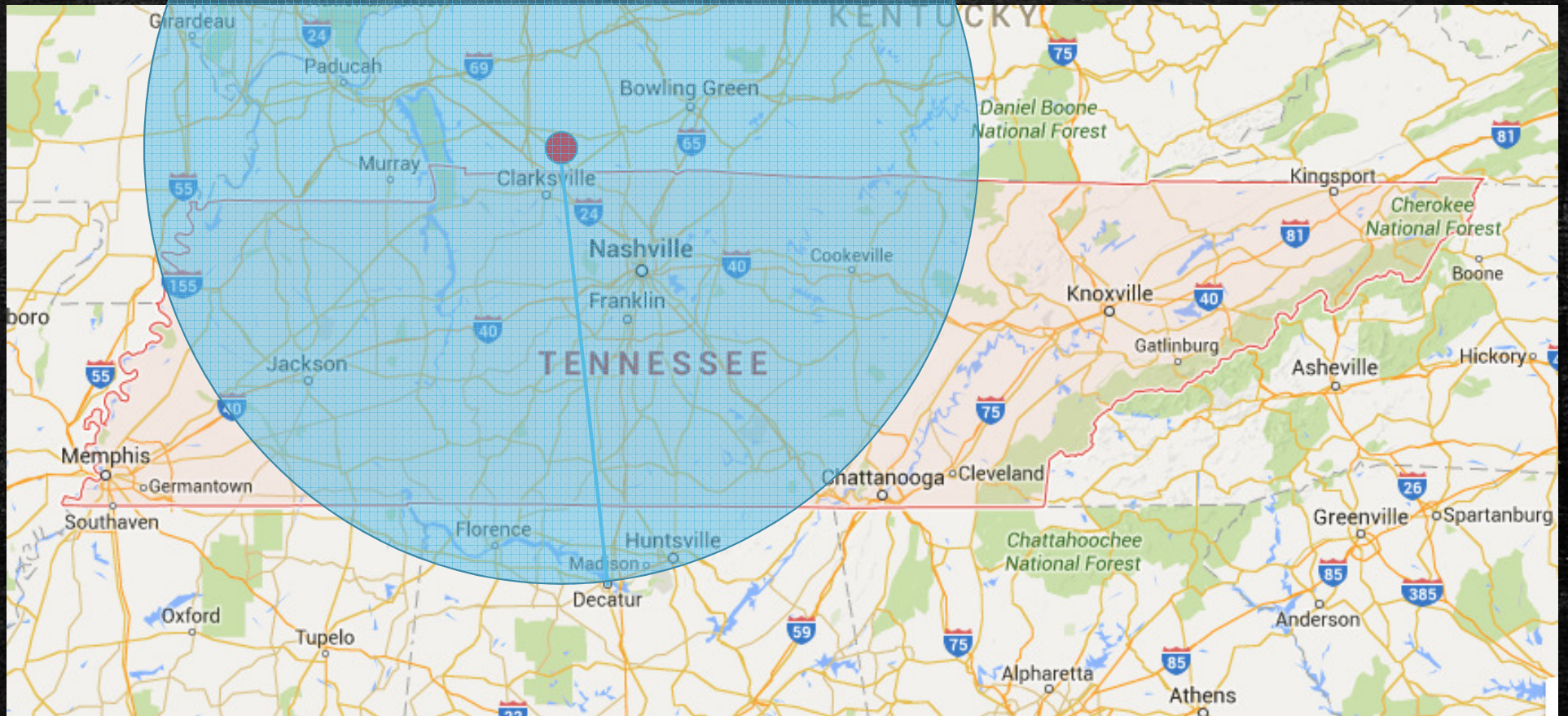
Benefits of Winter Canola



Benefits of Winter Canola



Benefits of Winter Canola



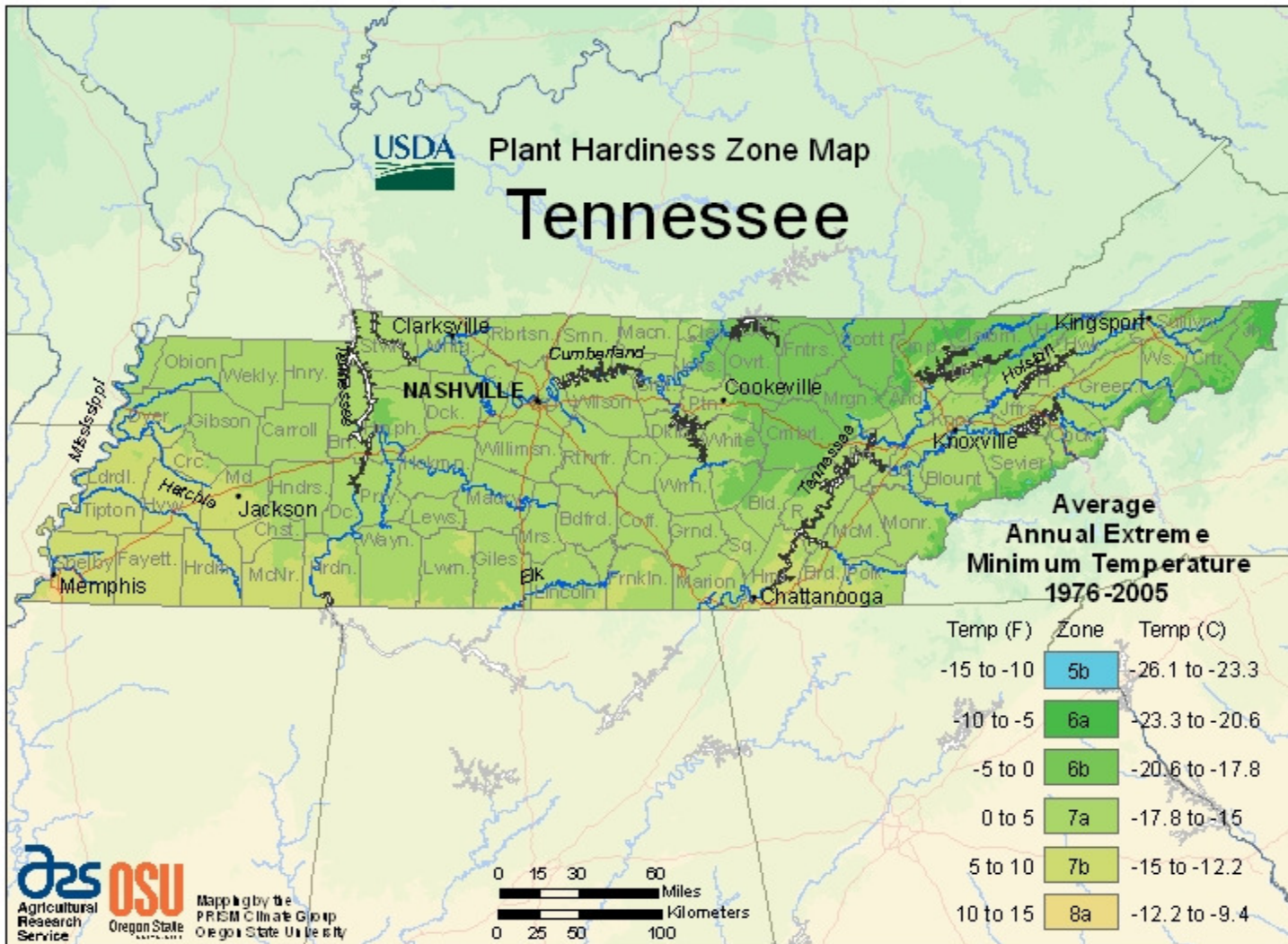
Canola



Canola seed



USDA Plant Hardiness Zone Map
Tennessee



Fertilizer

N, P, K, S, B

Herbicides

Conventional tillage

Treflan granular (5 – 10 lbs/acre)

Treflan liquid (1 pt – 1 qt/acre)

No-till

Gramoxone (2 pts/acre)

Prowl (3 pts/acre)



October 1st, 2013



October 29th, 2013



November 27th, 2013



January 24th, 2014



April 15th, 2014



May 30th

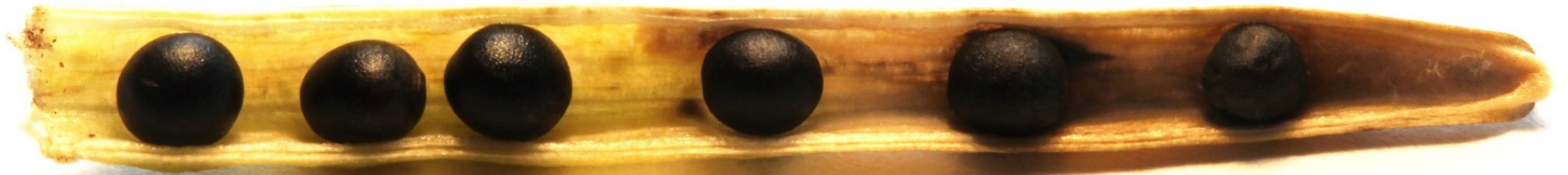


May 22nd



May 22nd

Harvest

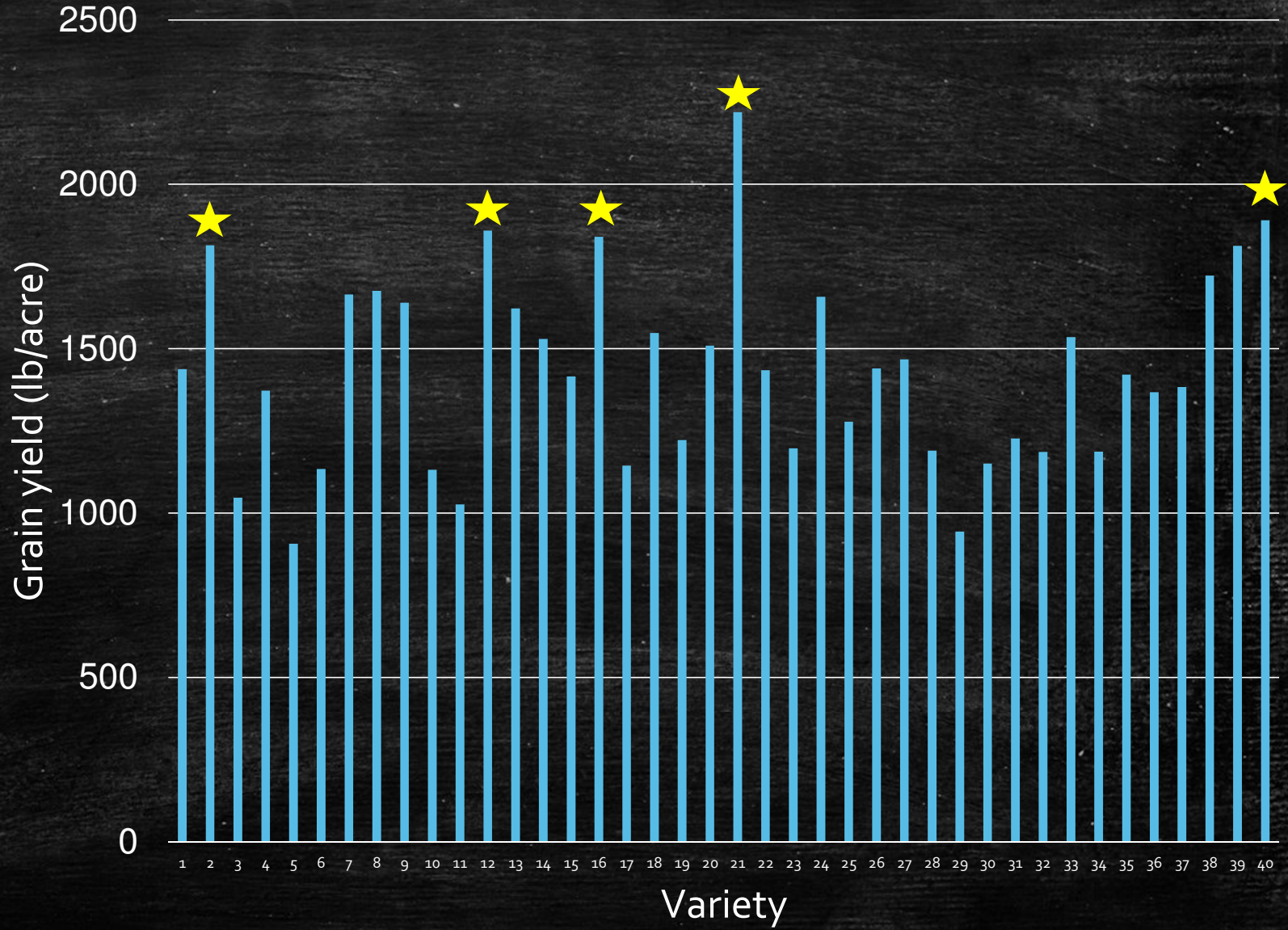


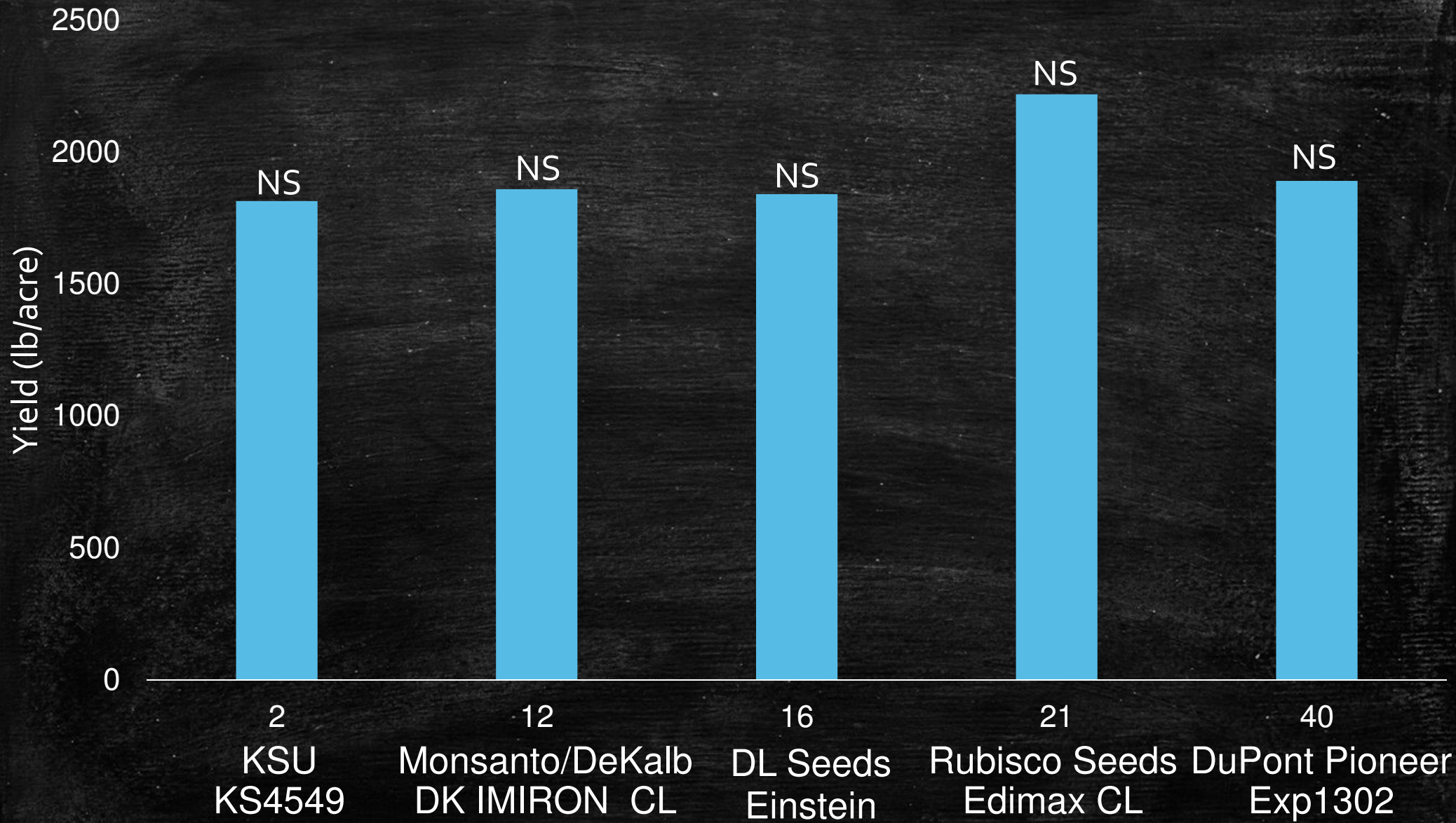
Storage

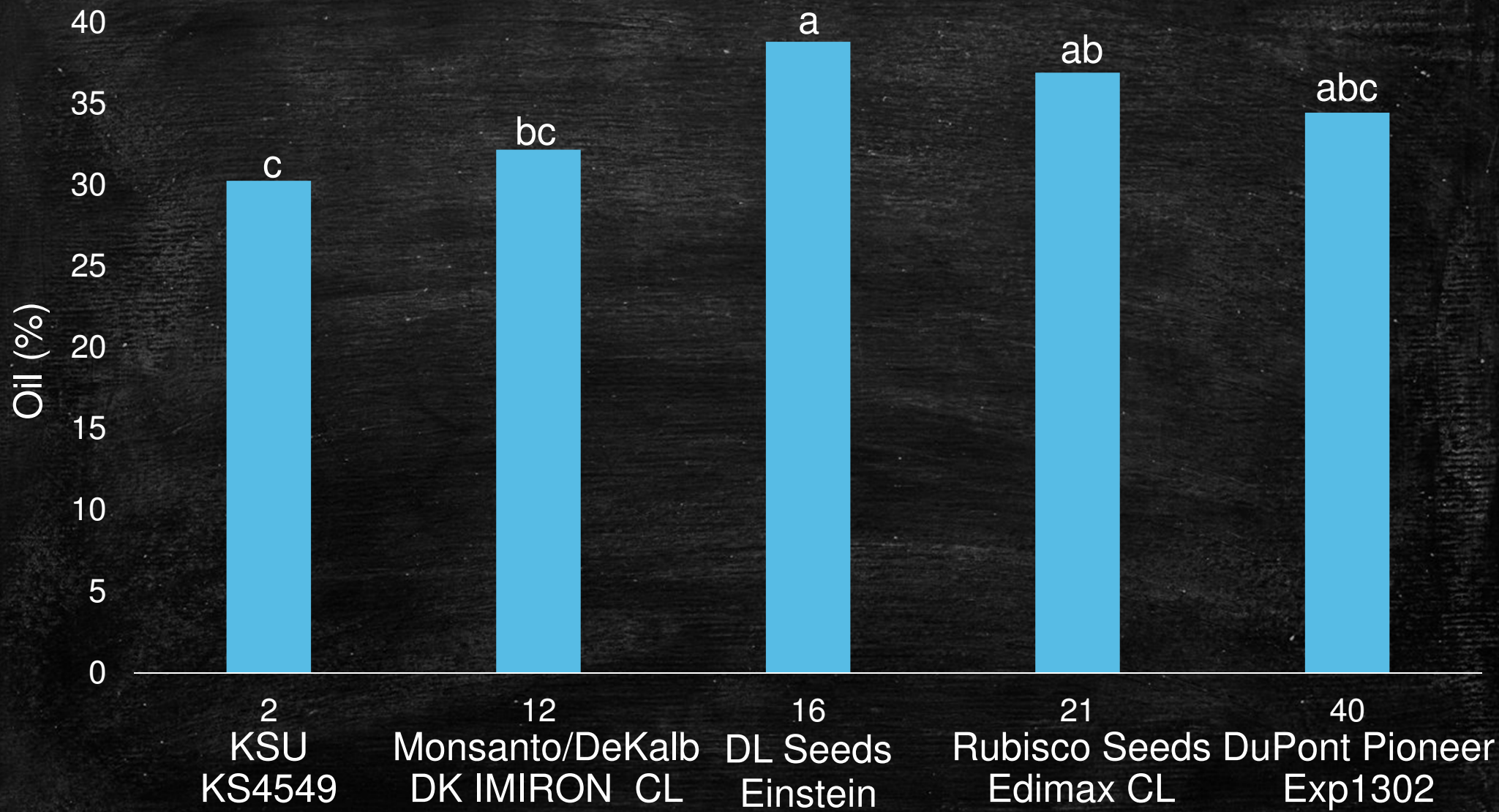


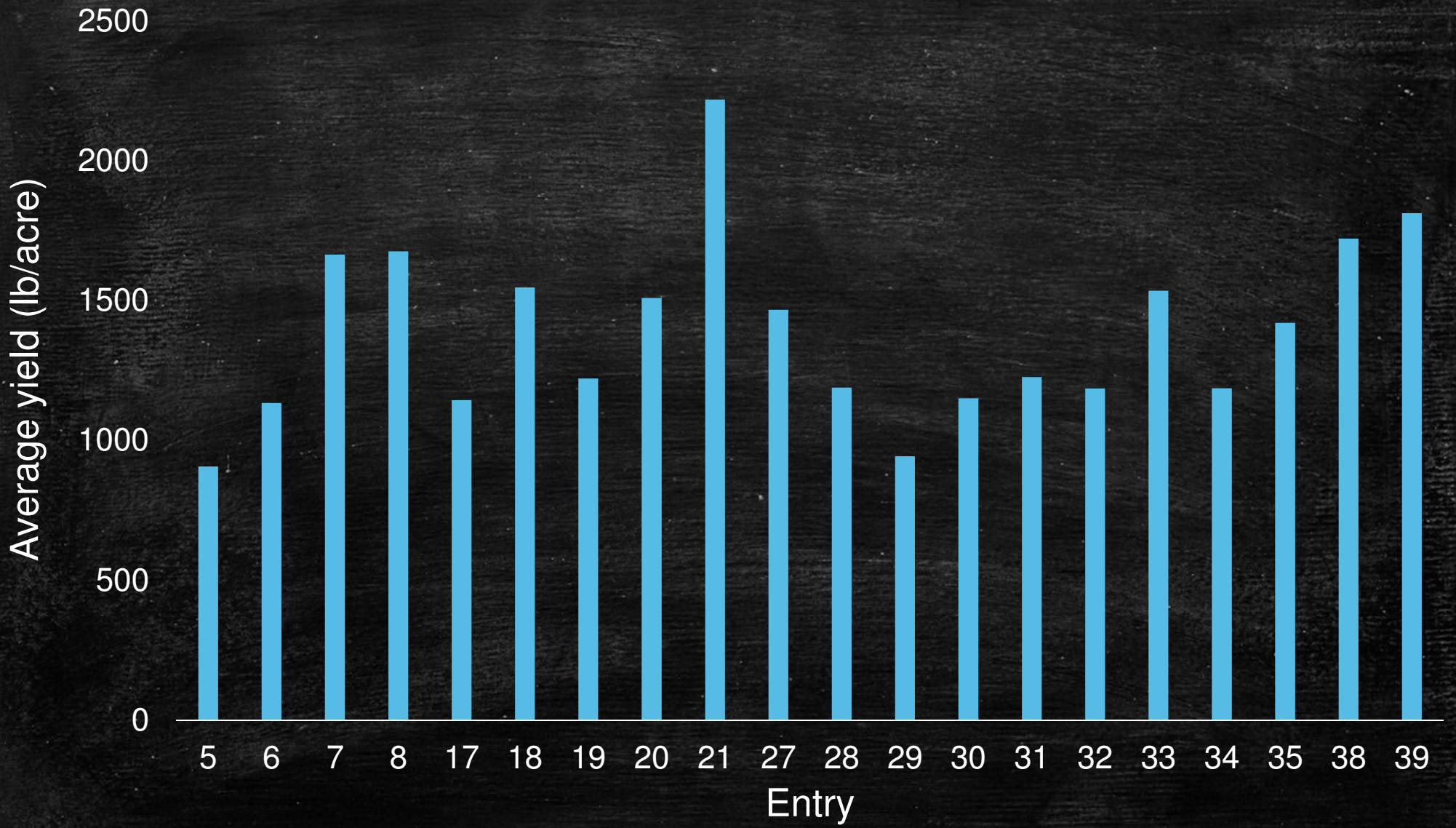
Results

Yield









Results

	1 st planting date	2 nd planting date	3 rd planting date
	Sept 10 th	Sept 24 th	Oct 9 th
Yield	2,12,16, 21, 40	9,12,15,16, 26	8,14,18, 24, 33
Winter loss	13 – 36%	29 – 48%	N/A
%Oil	30 – 39%	TBA	TBA
%Protein	34 – 37%	TBA	TBA

Conclusions

- Many benefits to growing winter canola
- Agronomics fit well into winter wheat production
- Based on our data, Rubisco Seeds Edimax CL variety seems to be the best one that is currently available in the U.S. for our area and at the early planting date



Canola Meal and Biodiesel



Biodiesel production cost
(\$/gallon): \$5.92

Revenue from meal
production
(\$/gallon): \$3.03

Final cost: \$2.89

2 producers sharing equipment + USDA REAP grant = **\$1.76/gallon** (Illukpitiya and de Koff, 2014)

Acknowledgements

USDA funding

Research assistants: Chris Robbins, Richard Link

Graduate students: Priya Saini, Edmund Tetteh, Shivam Chawla

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