

Cover Crop Study

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Cover Crop in our Rotation

Growing Crop during Summer

- WhtDbl X
- Wheat → DblBeans
- Corn ←
- Milo ←
- Soybeans
- WhtDbl X
- Wheat → DblBeans
- Corn ←
- Milo ←
- Soybeans

Airseeding Cover crop July 10, 2008

Soybeans 15.2 A. @ 40 #/A. Cowpeas 12.7 A. @ 25 #/A.



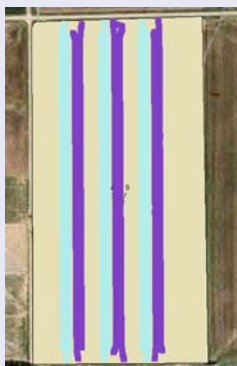
Sunflowers 5.5 A. @ 4.3#/A.

Average Wheat Yield by cover crop strip

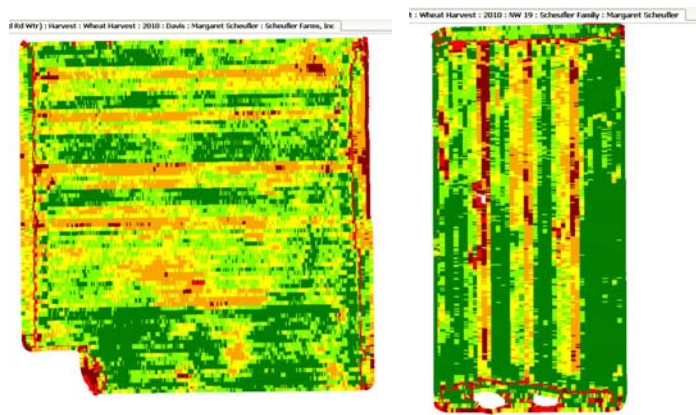
	Mean
Wheat Stub	40.6
Cowpeas	38.1
Soybeans	34.5

Repeat study for 2010

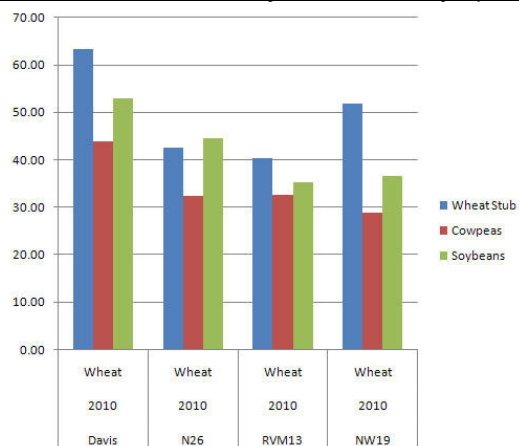
Cowpea & Soybean strips
July 2009 on 4 fields



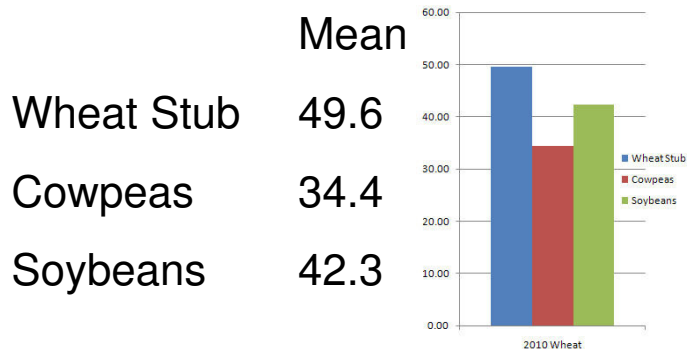
Wheat Harvest (2010)



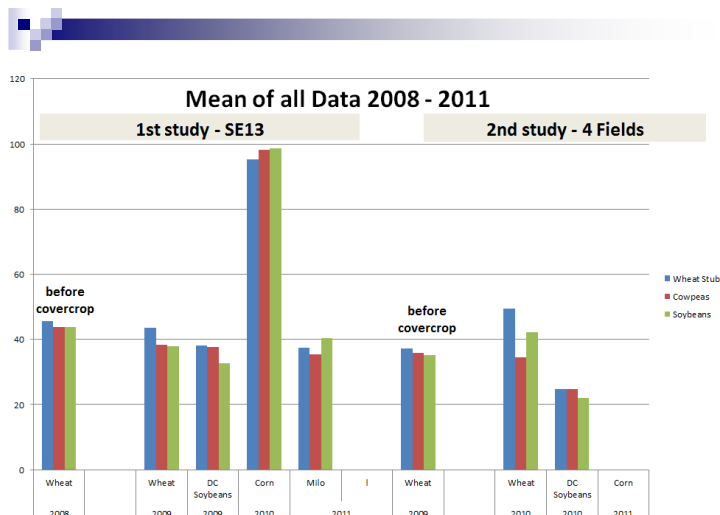
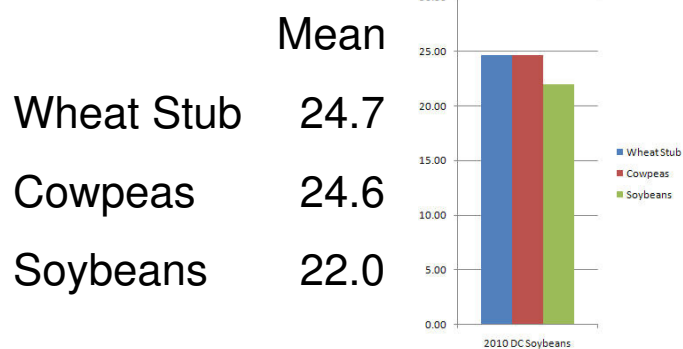
Mean Wheat Yields by Covercrop (2010)



Average Wheat Yields by Covercrop (2010)



Average DC Soybean Yields by Covercrop (2010)





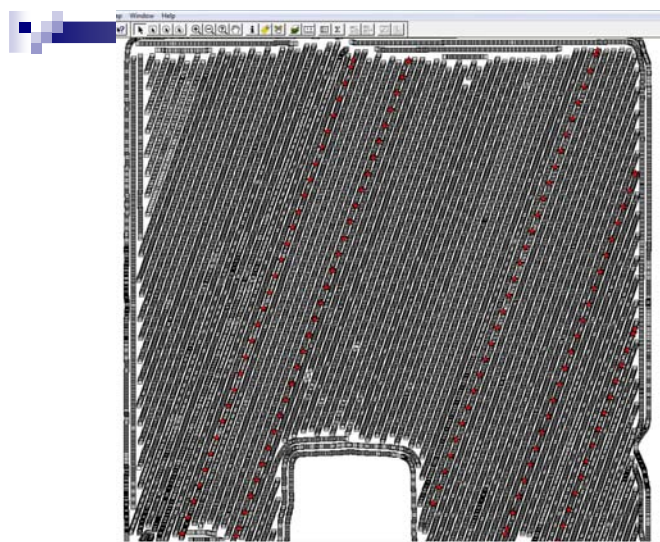
What next?

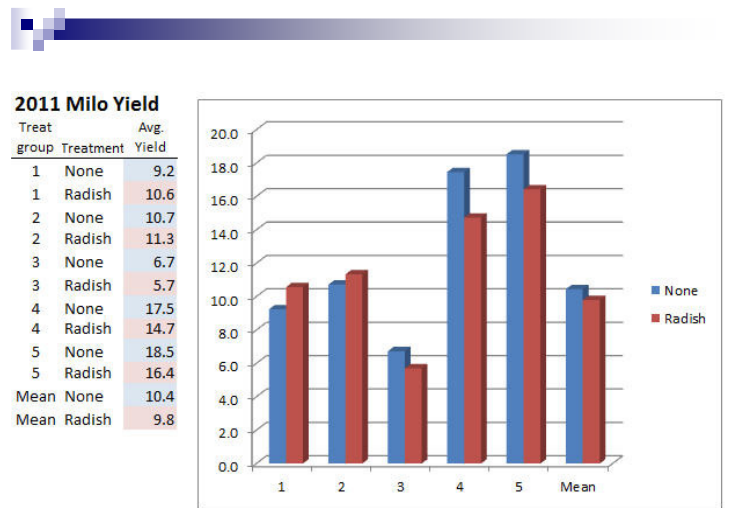
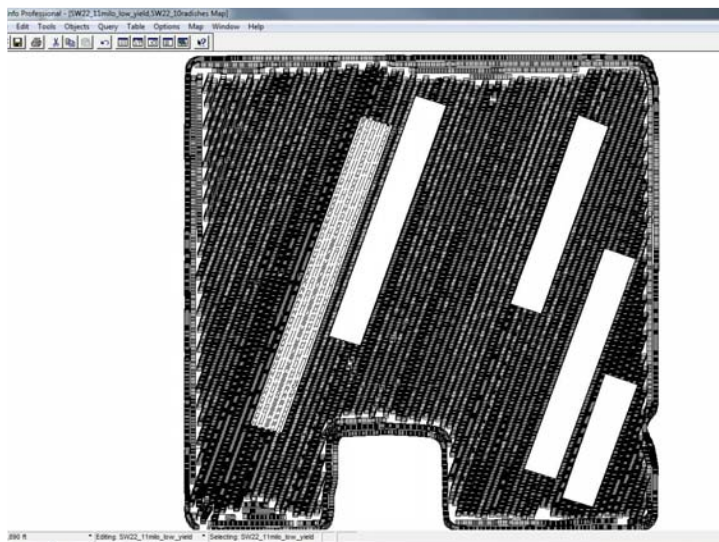
Repeat summer covercrop study using a mix this time

Begin a study with a fall covercrop such as tillage radish following harvest of dryland corn



Tillage Radish in Corn Stalks





What next?

Repeat summer covercrop study using a mix this time

Begin a study with a fall covercrop such as tillage radish following harvest of dryland corn

GREEN COVER SEED SmartMix Calculator

High Residue Cover Mix

	C/N Ratio (nutrient growth estimate)	N Fixing Potential (scale of 1-10)	Diversity Rating (scale of 1-10)	Frost Tolerance (scale of 1-10)
	8.0	6.0	8.5	2.0

	* Full Rate	lb per acre	Season	% by weight	% by N	% by seed	lb per seed	seeds/lb	seeds per acre	Cost per pound	Cost 1K seed	Cost per acre
TOTALS		25		65%	12%	48%			900,000			\$92.51
Legumes												
Cowpeas	info	30-50	10	W5-8	41%	5%	20%	4,100	41,000	\$0.45	\$0.19	\$4.50
Soybean	info	24-28	3	W5-8	12%	5%	21%	15,000	45,000	\$0.25	\$0.10	\$2.75
Mung Beans	info	25-25	3	W5-8	12%	5%	8%	8,000	24,000	\$0.85	\$0.10	\$2.40
Grasses				20%	68%	10%						\$3.38
German Millet	info	20-24	2.5	W5-5	10%	50%	4%	180,000	450,000	\$0.55	\$0.003	\$1.58
Pearl Millet	info	20-24	2.5	W5-5	10%	50%	6%	70,000	175,000	\$0.80	\$0.013	\$2.00
Brodiaeas				14%	18%	45%						\$10.98
Tillage Radish	info	8-12	3	C5-8	12%	8%	37%	25,000	75,000	\$1.00	\$0.10	\$9.00
Ethiopian Cabbage	info	4-6	0.5	C5-8	2%	27%	8%	180,000	90,000	\$3.95	\$0.022	\$1.88
Other Broadleaves				0%	0%	0%						\$0.00
Green Cover SmartMix total:												\$90.06

Price based on seed bags. Add \$0.02/lb for 100 bags.

	lb per acre	Season	% by weight	% by N	% by seed	lb per seed	seeds/lb	seeds per acre	Cost per pound	Cost 1K seed	Cost per acre
Farmer Added											
Corn (bin run new 86)	0	W5-5	0%	0%	0%	1,500	0	0	\$0.00	\$0.00	\$0.00
Total Pounds of Green Cover SmartMix Needed:											245
Total Cost of Green Cover SmartMix:											\$900.60

Name: _____ City, State, Zip: _____
Address: _____ Acres to plant: 10.00
Phone: _____ E-mail: _____



GREEN COVER SEED SmartMix Calculator

Use the yellow area to select your seed and your seeding rate per acre. Use the drop down boxes to select the species you want to include.

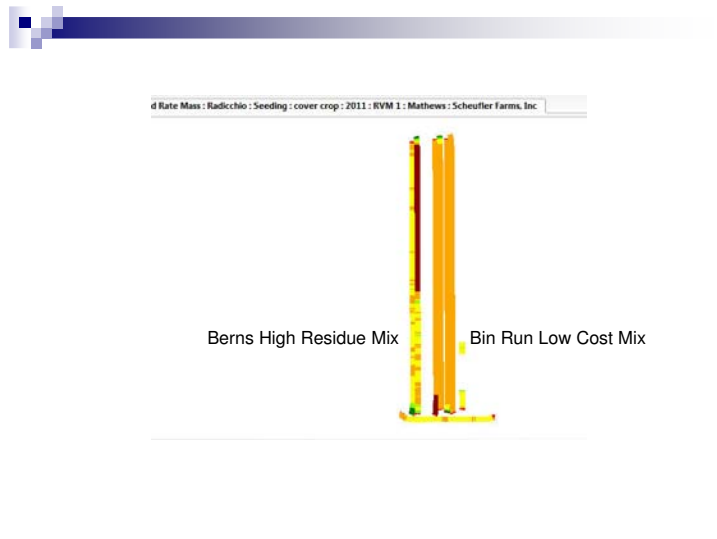
	Full Rate	C:N Ratio		N Fixing Potential		Diversity Rating		Frost Tolerance	
		lb per acre	lb per acre	% by weight	% by seed	lb per acre	lb per acre	lb per acre	lb per acre
TOTALS	33			0%	0%	0%		113,000	\$3.00
Legumes				0%	0%	0%			\$0.00
• info	0								
• info									
• info									
• info									
Grasses				0%	0%	0%			\$0.00
• info	0								
• info									
• info									
Brassicas				3%	22%	9%			\$3.00
Tillage Radish	8-12	1	C3-8	3%	22%	9%	25,000	25,000	\$3.00 \$0.120
• info									
• info									
Other Broadleaves				0%	0%	0%			\$0.00
• info									
• info									
Add your own seed and seed cost in the section below. Totals will be reflected in grand totals at top but not in the Green Cover Seed cost total.									
Green Cover SmartMix total:									\$3.00
Price based on total bags. Add \$0.05/lb for 500 bags.									
Insolvent and mixing:									\$0.00
Farmer Added:									
Corn (this run not)	20	W5-G	61%	27%	0%	1,500	30,000	\$0.000	\$0.00
Milo (this run not)	2	W5-G	6%	25%	0%	14,000	28,000	\$0.000	\$0.00
Soybeans (this run not)	10	W5-B	30%	27%	0%	3,000	30,000	\$0.000	\$0.00
Name:									
Address:									
Phone:									
City, State, Zip:									
Acreage to plant:									10.00
Total Pounds of Green Cover SmartMix Needed:									10
Total Cost of Green Cover SmartMix:									\$30.00

7/5/11



2009 Milo
2010 Soybeans
2011 Wheat

7/5/11



7/12/11



7/12/11



7/12/11



7/12/11



8/6/11



8/6/11



8/6/11

Locked flex header used for harvesting instead of stripper header

8/6/11





8/10/11



8/10/11



8/10/11




8/10/11



8/10/11



Thanks to Lee & Dan for their help!
Thanks to KARA for funding this research.



**“Is it beneficial to use cover crops
in our rotation?”**

We’re still pursuing the answer...

Yield?

Water infiltration?

Other soil enhancements?

**Thanks to KARA for funding this research.
Margaret Scheufler – Scheufler Farms, Inc.**