Harvest Weed Seed Control and weed management for cover crops

Mike Ostlie – Director - CREC

Harvest Weed Seed Control

- •Destroy the weed seeds that travel through your harvester
- Mechanical method of weed control
 Can provide a much needed mode of action to no-till
- Profficient at destroying the glyphosate-resistant weeds in our region
- >90% of weed seeds destroyed that make it into the chaff
 Most weed seeds germinate the year after dropping
 It is similar to adding an extra weed control pass for the next year

Installed on our Case 8120 seed machine







Volunteer Barley

Without

With HWSC



Corn cover crop/herbicide combinations

Strategy:

Plant cover crops for soil health or animal utilization purposes

Planting cover crops into corn is one of the surest ways to establish a cover crop in ND

Plant around V5 (whenever a planter barely can get through) usually end of June using a drill or planter >>> than broadcast in ND Broadcast with a ground applicator > than aerial applicator

Spray herbicide 10-14 days before planting -1.5 growth stages earlier



Shade – Lentils – poor tolerance



Shade – Flax – poor tolerance



Shade – Rye – medium tolerant



Shade – Oats – medium or more tolerant



Shade – Crimson Clover – medium tolerant



Shade – Radish – medium tolerant



Shade– Turnip – medium or more tolerant



Benefits the following season



Risk of Cover Crop Injury from Corn Herbicides

Treatment	Turnip	Radish	Rye	Oat	Lentil	Crimson Clover	Flax	\checkmark
Atrazine	HR	HR	LR	LR	MR	HR	LR	
Dual II Magnum	LR	LR	LR	LR	LR	LR	LR	
Callisto	HR	MR	LR	LR	HR	LR	LR	
Atz + Dual +								
Callisto	HR	LR	LR	LR	HR	MR	LR	
Status	LR	MR	LR	LR	HR	LR	LR	~
Armezon	HR	LR	LR	LR	LR	LR	LR	
2,4-D	LR	LR	LR	LR	HR	LR	LR	
Widematch	LR	MR	LR	LR	HR	HR	LR	
Harness	LR	MR	LR	LR	MR	LR	LR	
Laudis	LR	LR	LR	LR	LR	LR	LR	
Partial Support from I	ND Corn U	tilization C	ouncil					

Wide-row corn?

า	Oak	tes		Carrington			
?	Row				Row		
	60" Row	Orientation		60" Row	Orientation		
	Population	N/S E/W		Population	N/S	E/W	
		%	%		%	%	
	Plants/a	yield	yield	Plants/a	yield	yield	
60"							
rows	16k	80.7	66.1	16k	74.0	80.8	
	24k	95.8	83.3	24k	85.0	91.9	
	32k	100.0	100.0	32k	100.0	100.0	
	60" vs 30" @			60" vs 30" @			
	32k	87.2	86.9	32k	95.0	93.4	

Check yield 216 bu/a

Check yield = 133.2 bu/a

Partial Support from ND Corn Utilization Council

Thank you! Questions?

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