

2009
Headline fungicide treatment

Corn & Soybeans

Equipment

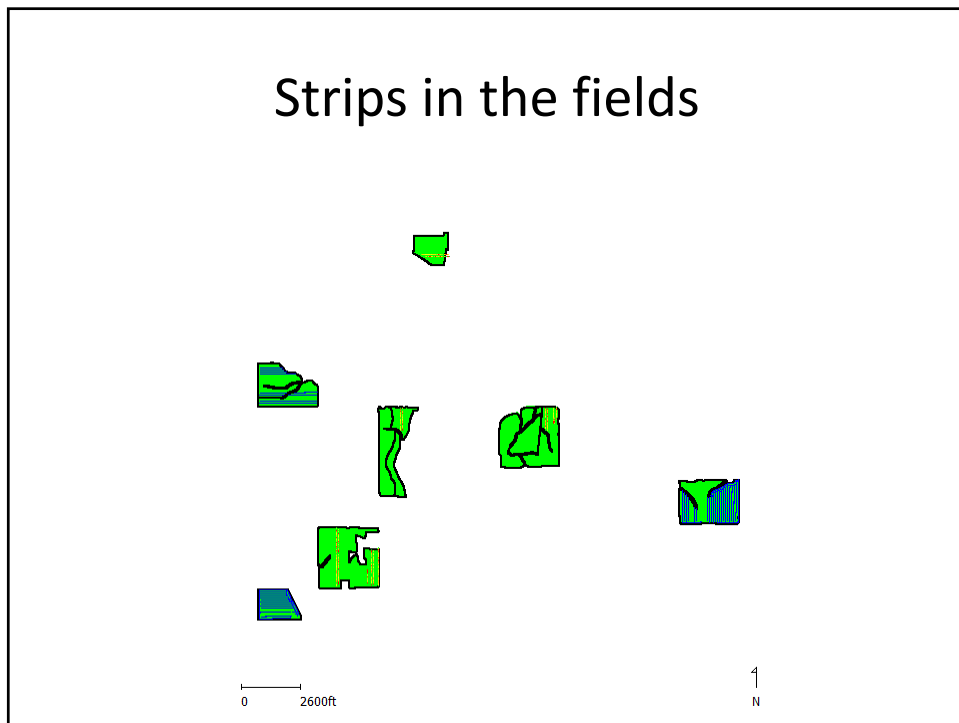
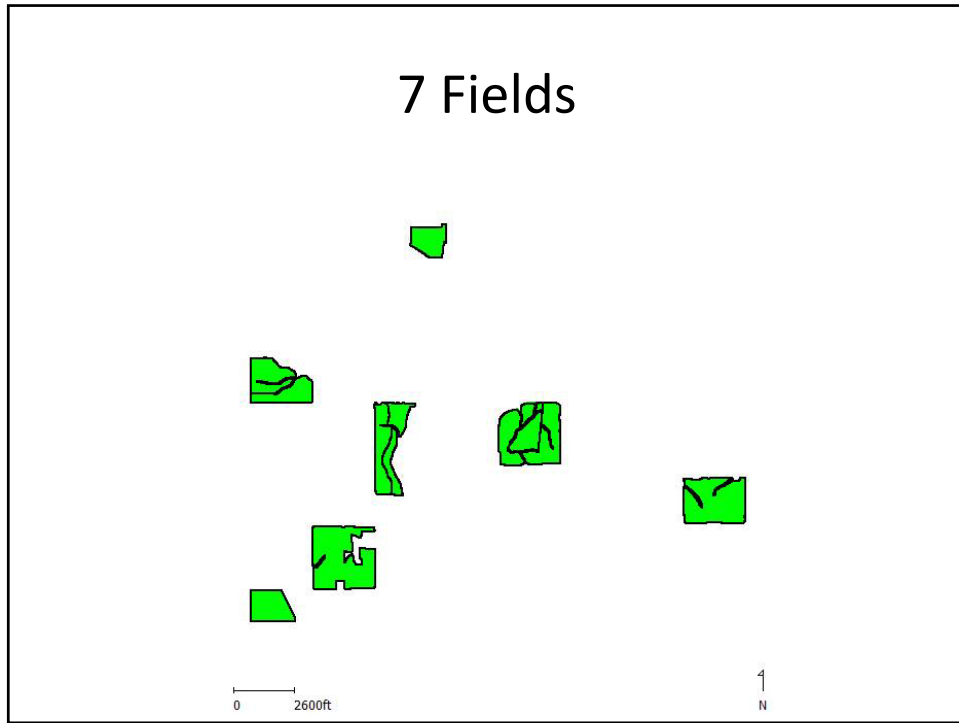
- Walker self propelled 90 ft front boom sprayer
- Agleader Insight to log planter & sprayer data
- RTK auto steer
- Agco R76 with 30ft header or 12x30 corn head
- Agco fieldstar to log yield data
- Agleader SMS to analysis data
- Excel to tabulate data

Application Method

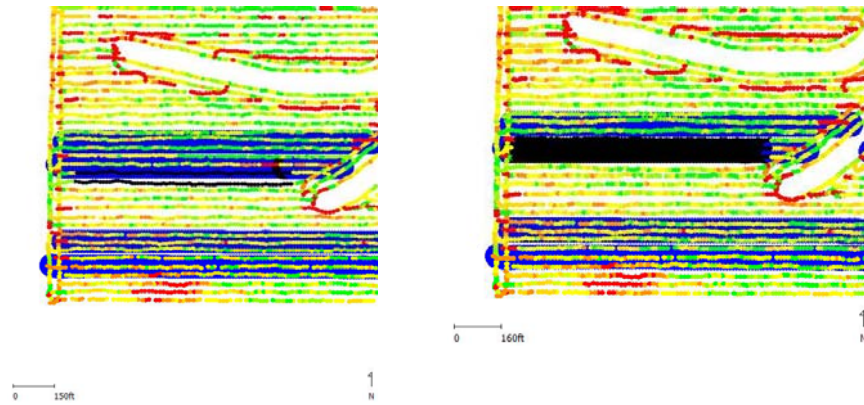
- Strips of headline were either applied or left unapplied on several fields with a ground sprayer

Soybeans

- 6 oz of headline with 5oz of liberate (surfactant) was sprayed with a front boomed self propelled sprayer with insight auto swath the first week of Aug.



Pass or Block Comparison



Comparing the 9 90ft wide Blocks

	Averaged			
Headline	57.7			
None	56.5			

Headline	69.3	56.8	59.6	52.7	53.6	53.2	54.4	56.1	63.6
None	66.3	57.0	57.0	52.8	54.0	54.1	53.8	53.2	60.4
Difference	3.0	-0.2	2.6	-0.1	-0.4	-0.9	0.6	2.9	3.2

Comparing 18 side by side 30ft strips

	Average	
Headline Sprayer tracks	59.2	
Headline	59.5	+1.6
None	57.9	
None adjacent 30 ft	57.9	

- Range of +7.6 to -5..3
- 5 comparisons Headline lost
- 2 where below 1bu. difference
- 9 where above 2 bu. difference
- 5 different varieties
- Sprayer tracks or drift didn't make much difference

Conclusion

- Headline at \$280 & Liberate at \$30
- Soybeans at \$9.50
- Cost of headline at 6oz is \$13.12 & liberate at 5oz is \$1.17 for a total \$14.29 per acre
- It takes 1 ½ bu.
- **Headline on soybeans pays ?**
- The timing was on the late side so a slightly earlier application might of changed things

2 year Test

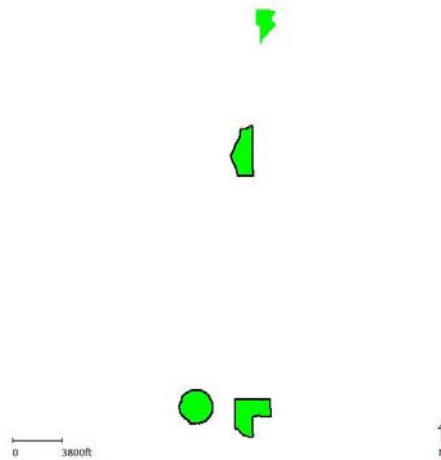
- 2008 test 2 Bu. Gain
- 2009 test 1.2 to 1.6 Bu. Gain
- Headline cost (2008 \$11.55 , 2009 \$14.29)
- Soybean price (2008 \$9.00 , 2009 \$9.50)

- It does increase Bu. / Acre but not a huge increase over costs

Corn

- 6 oz of headline with 5oz of liberate (surfactant) was sprayed with a front boomed self propelled sprayer with insight auto swath after tassel (middle of July)
- We used the AB lines imported from the planting tractor insight (both RTK)

4 Fields top 2 dryland
bottom 2 are Irrigated



SMS analysis

- Side by side 12 rows
- I tried to query each 12 row strip (2) of the headline plus the two 12 row strips to the side of the application
- reason I wanted to see if the middle pass where the sprayer drove had a yield drag and the 2nd 12 rows out side of the sprayed pass to see if the first 12 rows had any affects from drift

Comparison

	31N30	35F38	32N73	61-69	61-69	50-44	Average	
Headline Spray track	184.8	176.9	181	151.5	196.8	162.3	175.6	
Headline	193.1	179.2	168.1	158.2	195.7	156.9	175.2	+4.4
None	195.6	178.7	156.1	148.8	188.1	157.7	170.8	
None Next 12 row	199	175.6	161.4	140.8	188.5	143.9	168.2	

- Varsity seems to make a difference
- Drift might have an effect
- Sprayer track can makes a slight lose

Conclusion

- Cost of headline at 6oz is \$13.12 & liberate at 5oz is \$1.17 for a total \$14.29 per acre
- Corn at \$3.70
- **With a average gain of 4.4 bu. Pays ?**
- Some varieties might have a bigger increase than others

2 year test

- 2008 test 6.8 Bu. Gain
- 2009 test 4.4 Bu. Gain
- Headline cost (2008 \$11.55 , 2009 \$14.29)
- Soybean price (2008 \$3.48 , 2009 \$3.70)

- It does increase Bu. / Acre but not a huge increase over costs

Questions

Things to watch for when doing tests

- Doing test on top of other tests (population, variety, chemicals, fertilizer, equipment malfunction, LAST YEAR test)
- Multiple product (did both cause results)
- Harvesting direction different than test direction
- Field conditions (water holes, terraces, edges)
- Ability to do replicated trial
- **PLAN AHEAD**
- **If a spontaneous trail is created remember its location but take advantage of it.**

Other tests we did on our farm

2009 tests

- corn varieties
- soybean varieties
- milo varieties
- population in soybeans (80,000 to 200,000)
- population in corn
- fertilizer test strips
- grain cart compaction
- OptRx crop sensor

Multiple year test

- corn varieties
- soybean varieties
- population in corn
- fertilizer test strips
- grain cart compaction
- Chemical tests
- **2010 tests**
- **Fertilizer treatments**
- **Seed treatments**