

2018 Copperhead Ag Furrow Cruiser Grower Study

This study was done by a grower to compare the advantages or disadvantages of Copperhead Ag Furrow Cruiser closing wheels compared to using a Standard double rubber wheel closing system, so he could decide if it was beneficial to invest in using Furrow Cruisers on every row on both the corn and the soybean planter, or to leave the rubber wheels on or find a different style closing system.

Copperhead Ag Furrow Cruiser closing wheels are spiked closing wheels that fits into your existing closing wheels hubs on many planters. They allow young roots to penetrate sidewalls by eliminating sidewall compaction on BOTH sides of the furrow. They also improve seed to soil contact while preventing the furrow from reopening. These closing wheels work in virtually every soil condition, tillage practice, and are most effective in saturated soils. The angular design of the teeth prevent clogging problems that some other closing wheels may have.

Grower Homer Illinois, Zach W

2018 Growing Season

- JD 24 row planter 1770NT, 4 rows on outside of Copperhead Ag Furrow Cruisers, rest of the 20 rows were rubber wheels. Grower tracked them by putting hybrids as “Hybrid XXXX” and “Hybrid XXXX Furrow Cruisers” on some fields, and then tracked yield in some of his fields by harvesting those 8 rows with 8 row corn head together with Climate Corps Fieldview.
- Zach bought 4 rows at \$125 per row, a \$500 total investment in 2018.

- All fields in study were worked with a JD2310 Soil Finisher pulled by a JD 9530. Fall NH3, with a shot of 28% pre-plant, incorporated.



North Hume Field

Field Conditions at Planting:

- Planting conditions were good, planted during the day. The field is low black dirt in Edgar Co. Pattern tiled, but areas of the farm have pockets that hold water following large rainfalls. Furrow Cruiser test was in some of the water damaged areas.

Results:

- 3 bu/ac better on 8.8 furrow cruiser acres on \$3.50 corn = \$92.40 additional income just on the 4 rows
- 3 bu/ac better on all 50.4 acres at \$3.50 corn if furrow cruisers would have been on all rows= estimated \$529.20 additional income on 50.4 acres



South Hume Field

Field Conditions at Planting:

- Planted at night. Our soil finisher was ahead of me a few hours, but the dirt didn't have much time to lay in the sunshine and dry. Conditions were a little tacky due to the lack of Sun. This field also lays very low with pockets. Poorly drained.

Results:

- 7 bu better with \$3.50 corn on 20 acres= \$490.00 additional income just on the 4 rows
- 7 bu better on all 116.6 acres at \$3.50 corn if furrow cruisers would have been on all rows = \$2,856.7 additional income on 116.6 acres

HYBRID	YIELD (BU/AC)▼	MOISTURE	ACRES
● P1422AMXT - Furrow Cruiser	223	15.7%	20.0
● P1422AMXT	216	15.7%	96.6
● P1366AMXT	215	14.5%	44.4
Missing Hybrid / Variety	192	15.0%	0.14

Palmer Field

Field Conditions at Planting:

- This field was planted during the day, conditions were good. The farm is pattern tiled and has variable soils, a dramatic swing compared to growers other farms. It sits within a mile or so of the Salt Fork River in Champaign Co.

Results:

- 2 bu better with \$3.50 corn on 2.2 acres= \$14.21 additional income just on the 4 rows
- 2 bu better on all 34.13 acres at \$3.50 corn if furrow cruisers would have been on all rows = estimated \$238.91 additional income on 34.13 acres

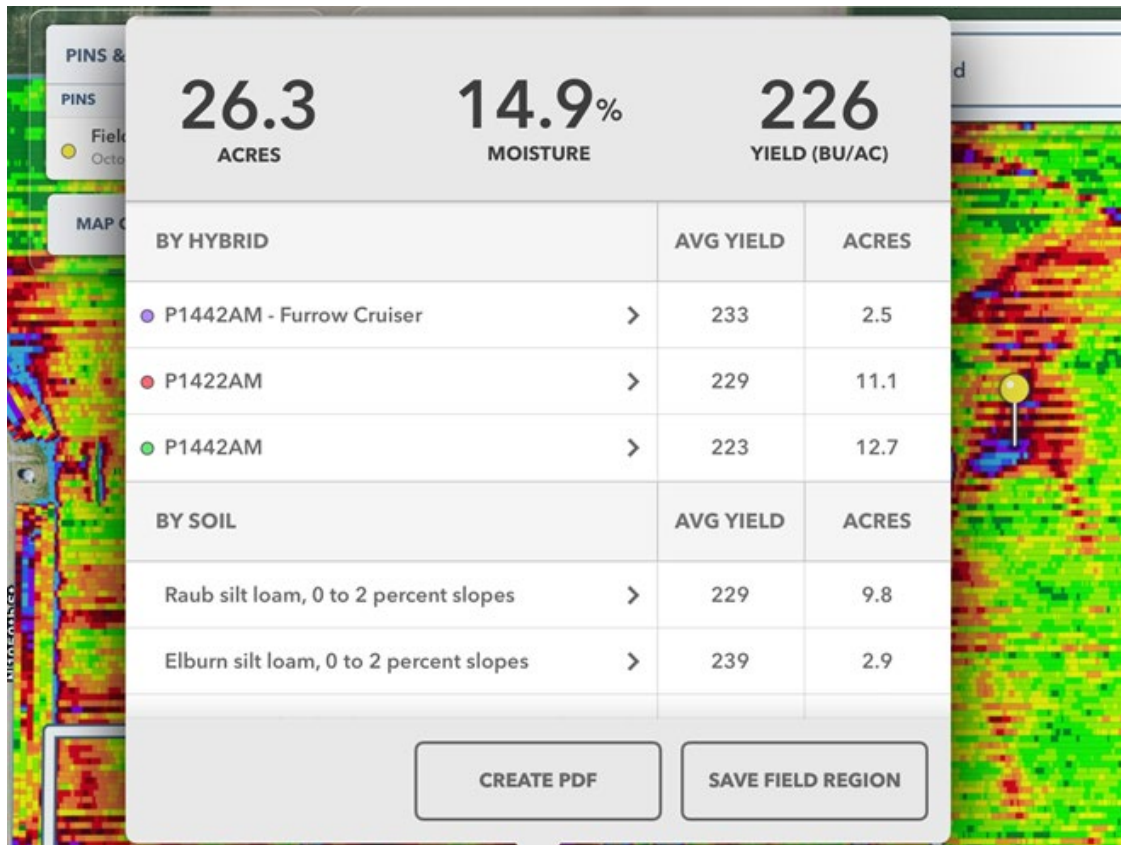
HYBRID		SEED TREATMENT		
HYBRID	YIELD (BU/AC)▼	MOISTURE	ACRES	
[REDACTED]	267	15.9%	0.50	> 270 bu/ac
[REDACTED]	263	16.3%	0.99	260 - 270 bu/ac
[REDACTED]	253	18.4%	0.99	249 - 260 bu/ac
[REDACTED]	253	17.3%	0.99	238 - 249 bu/ac
[REDACTED]	251	16.2%	0.99	228 - 238 bu/ac
● P1055AM - Furrow Cruiser	243	15.9%	2.03	218 - 228 bu/ac
[REDACTED]	243	16.8%	0.99	207 - 218 bu/ac
● P1055AM	241	15.3%	32.1	196 - 207 bu/ac
Missing Hybrid / Variety	246	15.7%	0.55	186 - 196 bu/ac
TOTALS				171 - 184 bu/ac
	243	15.6%	40.1	

Sidell Field

Results:

10 bu better with \$3.50 corn on 2.5 acres = \$87.50 additional income just on the 4 rows

10 bu better on all 31.75 acres at \$3.50 corn if furrow cruisers would have been on all rows = \$1,111.25 additional income on 31.75 acres



Overall Results 2018 Results

- Grower bought 4 rows at \$500 total investment. On just one field (South Hume he paid for all but \$10 of the initial \$500 investment. On all the 4 fields and the minimal 33.5 acres of data collected on these studies, grower made an additional \$684.11 in income.

Setting up a 24 Row Planter with Furrow Cruisers on both sides would be \$3,000

- At 2 bu/ac better furrow cruisers would take 445.7 corn acres to pay for themselves on a 24 row planter on \$3.50 corn
- At 3 bu/ac better furrow cruisers would take 297.14 corn acres to pay for themselves on a 24 row planter on \$3.50 corn
- At 7 bu/ac better furrow cruisers would take 127.35 corn acres to pay for themselves on a 24 row planter on \$3.50 corn

- At 10 bu/ac better furrow cruisers would take 89.14 corn acres to pay for themselves on a 24 row planter on \$3.50 corn

2019 Growing Season

For 2019 growing season, the growers 24 Row Planter will be 100% Copperhead Ag Furrow Cruisers both sides, and so will the 32 row Soybean Planter.