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Is it possible to plant winter canola with a row crop planter on 30 inch centers?

By Chad Godsey

Last year prior to winter canola seeding we had several producers ask about planting canola on 30 inch rows with a row crop planter. A review of past studies conducted outside of Oklahoma resulted in mixed results, so we established a few locations to investigate the yield potential of canola planted on 30 inch rows. The purpose of wanting to plant on 30 inch rows is to increase the ability to manage residue in no-till systems with the use of row cleaners. We compared 30 inch versus 15 inch and seeding rates from 2 to 5 lb per acre with row spacing of 30 inches. Seven and half inch rows were not included because in previous studies we have concluded that yield of 15 inch rows are equal to 7.5 inch rows.

Plots were established and planted on Sept. 17 to DKW 46-15. Both locations were planted following an average yielding wheat crop harvested in 2009. A Great Plains NT drill was used for the 15 inch row spacing treatments. The coulter used was a turbo-till fluted coulter. All 30 inch treatments were planted with a Monosem vacuum planter equipped with Yetter row cleaners. All treatments were planted at 5 mph.

Stand counts were taken in each plot 5, 7, 9, 13, and 55 days after planting to get a rate of emergence and final fall stand count. A winter survival stand count was taken on March 16, 2010.

Results - Below are some key points that we observed.

Emergence

- Overall, the planter treatments emerged quicker and more evenly. This was probably due to more uniform seeding depth in the planter treatments.
- A greater percent emergence was observed with planted plots when compared to drilled plots. This was especially true at the lower seeding rates (2 and 3 lb/ac).
- Two to three lb/ac seems to be adequate for 30 inch row spacing. With the higher seeding rates (4 and 5 lb/ac on 30 inch rows) a large portion of those plants died off because the in-row population was too high.

Winter Survival

- A greater percent of plants died in

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Treatment No.	Seeder	Spacing (in)	Residue Management	Tillage	Seeding Rate (lb/ac)
1	Planter	30	Yes	no till	2
2	Planter	30	Yes	no till	3
3	Planter	30	Yes	no till	4
4	Planter	30	Yes	no till	5
5	Drill	15	No	no till	5
6	Drill	15	No	Conv.-till	5
7	Drill	15	Coulter	no till	5

Planting winter canola (cont.)

the 30 in row spacing. All 30 in treatments ended up having a stand count in the 2.5 to 3 plants/ft2 regardless of seeding rate.

• The 15 in row spacing had more plants per square foot than the 30 in row spacing.

Yield

• No differences were observed between treatments. Overall, yields were lower than expected. At Covington, soil pH ranged from 4.5 to 5.1 between reps, so this may have limited yield. At Red Rock insect and weed pressure limited yield.

• Under high yielding environments I think we may see a 10% reduction in yield when planting on 30 in rows. Choosing a cultivar that branches profusely appears to be important as we did not observe complete row closure on the 30 in row spacing.

In summary, if you are in a no-till systems with heavy residue and do not want to burn or destroy residue a row crop planter on 30 inch rows can be used to manage residue. Seeding rate can be reduced from the typical 5 lb/ac to a range of 2-3 lb/ac if planted on 30 inch rows. Also, select a variety/hybrid that branches a lot and also that has a low crown height. Most seed dealers should have this information. Another thing that may be important to some producers is that winter canola grown on 30 inch rows is now insurable.

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