

Canola harvest management, Carrington, 2006. (Greg Endres and Paul Hendrickson)

Direct harvest or Biovital followed by (FB) direct harvest were compared to swathing FB harvest of canola. The trial had a randomized complete block design with four replicates. InVigor 4870 Liberty Link canola was planted in a conventional-till system at 600,000 pls/A on May 4 at the NDSU Carrington Research Extension Center. BioVital (Miller Chemical and Fertilizer Corp., Hanover, PA) was applied at 1 pt/A on July 25 with a CO₂ pressurized hand-held plot sprayer delivering 21 gal/A at 30 psi through 8002 TJ60 nozzles with 79 F, 66% RH, and 7.5 mph wind to canola nearing physiological maturity. Canola was swathed on Jul 28 (optimum timing), Aug 4 (targeted 7-day delay), Aug 15 (targeted 14-day delay), and Aug 21 (targeted 21-day delay). The trial was harvested with a plot combine on Aug 4 (optimum timing), 10 (targeted 7-day delay), 21 (targeted 14-day delay), and 28 (targeted 21-day delay).

Seed moisture at harvest generally was similar among treatments with each harvest date (Table). On Aug 24, 0.9 inches of rain resulted in elevated seed moisture with the Aug 28 harvest date. Seed yield was greatest with the optimum harvest timing (Aug 4). Direct harvest yield and test weight were similar to or exceeded swath FB harvest treatments with each harvest date. BioVital generally did not provide a seed yield or test weight advantage compared to the traditional and direct harvest methods. Test weight was reduced with the late harvest date (Aug 28) compared to earlier dates. Seed weight and oil content were similar among treatments.

Table. Canola harvest management, Carrington, 2006.								
Treatment	Timing	Seed						
		Harvest moisture			Yield	Test weight	200 seed weight	Oil
		%			lb/A	lb/bu	g	%
Swath/Harvest	28-Jul/4-Aug	na			1222.2	53.5	0.51	41.7
Swath/Harvest	4-Aug/10-Aug	9.5			803.6	53.5	0.50	40.7
Swath/Harvest	15-Aug/21-Aug		8.6		655.7	53.2	0.50	42.4
Swath/Harvest	21-Aug/28-Aug			20.1	632.3	51.8	0.50	42.0
Direct harvest	4-Aug	na			1299.3	53.0	0.50	43.0
Direct harvest	10-Aug	9.6			989.2	53.7	0.50	41.9
Direct harvest	21-Aug		9.2		825.9	53.4	0.50	41.9
Direct harvest	28-Aug			19.4	800.3	51.6	0.50	42.2
Biovital/Dir Harv	25-Jul/4-Aug	na			1261.5	53.4	0.50	41.9
Biovital/Dir Harv	25-Jul/10-Aug	10.0			1172.1	53.6	0.51	42.4
Biovital/Dir Harv	25-Jul/21-Aug		9.1		877.3	53.0	0.51	42.2
Biovital/Dir Harv	25-Jul/28-Aug			14.5	778.6	52.1	0.50	42.2
mean		9.7	9.0	18.0	946.7	53.0	0.50	42.0
C.V. (%)		7.1	2.0	31.9	16.1	0.6	2.7	2.3
LSD (0.05)		NS	0.3	NS	219.2	0.5	NS	NS