

Effect of Row Spacing and Seeding Rate on Canola
NDSU Carrington Research Extension Center
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2005, 2006, and 2008

Materials and Methods

Trials were established at the NDSU Carrington Research Extension Center on dryland sites in 2005, 2006, and 2008, and an irrigated site in 2008 to evaluate row spacing and seeding rate for two canola hybrids with contrasting plant types. The canola hybrids with contrasting plant types evaluated were Invigor 4870 and Hyola 357 Magnum in 2005 and 2006, and Invigor 5550 and Hyola 357 Magnum in 2008. The Invigor hybrids are a larger plant type when compared to Hyola 357 Magnum. The hybrids were sown in 7- and 14-inch rows at 7 and 14 live seeds/ft².

Results

There was no statistically significant hybrid or row spacing interaction with seeding rate. Seed yields for the two seeding rates are averaged over hybrid and row spacing. Seed yield increased as the seeding rate increased from 7- to 14-live seeds/ft² under dryland conditions. Seed yields were similar in 2008 at the irrigated site (Table 1).

Seeding rate	2005	2006	2008	
			Dryland	Irrigated
seeds/ft ²	Seed yield (lb/acre)			
7 live seeds	1799	1442	2125	3369
14 live seeds	1952	1673	2601	3567
LSD (P=0.05)	99	210	286	NS

A hybrid by row spacing interaction occurred for seed yield in 2005 and 2006. Seed yields were similar in each year for Invigor 4870 planted in 7- and 14-inch rows and Hyola 357 Magnum planted in 7 inch rows (Table 2). A reduction in seed yield occurred when Hyola 357 Magnum was planted in 14-inch rows.

Hybrid	2005		2006	
	Row spacing			
	7-inch	14-inch	7-inch	14-inch
	Seed yield (lb/acre)			
Invigor 4870	2010	1958	1614	1681
Hyola 357 Magnum	1934	1601	1651	1284
LSD (P=0.05)	140		298	

In 2008, the hybrid by row spacing interaction was not observed. Seed yields were greater for Hyola 357 Magnum at both the irrigated and dryland site when averaged over row spacing and seeding rate (Table 3). Seed yields were similar for both the 7- and 14-row spacing when averaged over hybrid and seeding rate (Table 4).

Hybrid	Dryland	Irrigated
	Seed yield (lb/acre)	
Invigor 5550	2001	3303
Hyola 357 Magnum	2725	3633
LSD (P=0.05)	386	290

Row Spacing	Dryland	Irrigated
	Seed yield (lb/acre)	
7 inches	2223	3551
14 inches	2504	3385
LSD (P=0.05)	NS	NS