

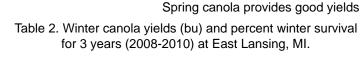
Canola Research in Michigan

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Opportunities

Canola (spring and winter) could be an important crop to help Michigan diversify its agriculture, complement its cropping systems, and maintain a profitable and vibrant rural sector. Canola has the potential to improve Michigan's economy, health, environment and agricultural systems:

- Hybrid varieties give high yield potential for farmers (over 3000 lbs/acre)
- Value-added products for rural economic activity (iobs)
- Excellent vegetable oil
- Environmentally friendly bio-based oils and fuels (carbon sequestration)
- Winter canola excellent cover crop



P	% Winter survival		Yield bu/acre			
Cultivar	2010	2009	2008	2010	2009	2008
SITRO	93	32	43	49	30	43
KRONOS		12	2		0	0
CWH 081	58			69		
KS 4022		53	77		32	73
WICHITA	95	40		42	34	
HORNET		57	10		41	36
Trial mean	91	34	22	41	29	21

\$ 4022		33	//		32	
'ICHITA	95	40		42	34	
ORNET		57	10		41	-
rial mean	91	34	22	41	29	2

Table 3. Spring canola yields (bu/acre) at two sites in 2009 and 2010.

Cultivar	Lake City, MI	Marion, MI	
	2010	2009	
INVIGOR 5440	45.9	48.0	
INVIGOR 8440	45.2	47.0	
DKL 30-42	46.9	42.0	
DKL 72-55	45.9	45.0	
TRIAL MEAN	41.5 (24 entries)	44.5 (36 entries)	
LSD 05	8.0	4.3	

Challenges

- -Infrastructure both at the farm level and in the market system are lacking
- No local markets for canola
- Producer education on agronomic aspects is lacking
- Economics, profitability and price stability of oil for the bio-diesel market are unknown
- -Varieties –High yielding winter-hardy varieties are limited very few plant breeders working on hybrid canola (spring and winter)
- Best production systems and practices for the region are unknown
- Production in tiled fields may cause root clogging of tile lines

Table 1. Canadian 5 year (1986-2009) canola yields.

years	Bushels/acre	Percent
		increase
2005-2009	32.0	26
2000-2004	25.3	
1995-1999	24.9	
1990-1994	23.2	
1986-1989	22.6	

In 2002 Canada planted 18% acreage as hybrids. In 2005 50% were hybrids Today over 90%.



Winter-hardiness is an issue for winter canola

Canola hybrids have potential for high yields (hybrid canola varieties are only several years old – like corn around 1960)

Hybrid Vigor in canola is key to high yields!

