

Brassica Cover Crops: Considerations from a Recent Mild Winter

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BRASSICA PLOT MANAGEMENT

4 Replicates in RCB Design	
23 August 2010 brassica planting date	2 September 2011 brassica planting date
Oilseed radish @ 10 lbs/acre	
Mustard @ 8 lbs/acre	
Rapeseed @ 5 lbs/acre	
Forage turnip @ 2 lbs/acre	
Irrigation for brassica germination and emergence	
Oats drilled into brassicas in following spring	
Oats harvested in summer for yield determination	



COMPARISON OF TWO MOST RECENT WINTERS

Accumulated GDDs @ Base 32°F	
Winter 2010-11	Winter 2011-12
144	432

BRASSICA PLANT POPULATION IN APRIL FOLLOWING FALL PLANTING

Cover Crop	Live Plants/ft ²	
	April 2011	April 2012
Oilseed radish	0.0	0.1
Mustard	0.0	0.1
Rapeseed	0.2	4.0
Forage turnip	0.0	3.6

SPRING 2012 OAT PLOT MANAGEMENT

22 March	oats drilled @ 80 lbs/a
13 April	Clarity® (dicamba) sprayed @ 4 oz/a
3 May	2,4-D sprayed @ 0.75 pt/a
14 May	N fertilizer sprayed @ 30 lbs/a

Note: brassicas persisted throughout season even after application of above herbicides at rates labeled for oats



OAT YIELD FOLLOWING OVERWINTERED BRASSICA COVER CROP

Cover Crop	Oat Grain Yield (% of control)	
	Summer 2011	Summer 2012
Oilseed radish	No significant difference among cover crops. Control not available.	426
Mustard		292
Rapeseed		134
Forage turnip		306
Control (w/o brassica)		100

CONSIDERATIONS FROM MILD WINTER OF 2011-12

Fall-sown brassicas competed with weeds but they also competed with spring-sown oats.



More complete data and analysis will be included in forthcoming doctoral dissertation by Victoria Ackroyd.