

2018 Spring Wheat Plantback onto Barley + Cover Crop Stubble
NDSU North Central Research Extension Center

2017 Cover Crop Treatments	Days to Head	21-NDVI	Plant Height	Test Weight	Protein	Grain Yield
	DAP ¹	0 - 1	inches	lbs/bu	%	bu/A
No cover crop	48	0.58	29	61.4	12.9	40.1
CC planted with barley	48	0.57	28	61.5	11.4	35.1
CC broadcast over 4 leaf barley	48	0.58	29	61.9	12.1	36.9
CC broadcast over early headed barley	48	0.59	28	61.8	11.9	37.7
CC planted after barley harvest	48	0.62	29	62.3	11.8	41.9
CC planted with barley + flax post-harvest	48	0.59	28	61.6	12.0	44.2
Trial Mean	48	0.59	28	61.7	12.0	39.3
C.V.%	1.8	8.4	4.6	0.7	5.5	16.2
LSD 5%	NS	NS	NS	NS	NS	NS

¹DAP = Days after planting.

NS = no statistical difference between cover crop treatments.

Planting Date: May 3

Variety: Barlow

Harvest Date: August 13

Notes: The trial did not receive any applied fertilizer.

2017 Barley Cover Crop Trial at Minot

Cover Crop Treatment	Cover Crop Planting Date	Days to Head	Plant Height	Lodging	% Plump	% Thin	1000 KWT	Test Weight	Protein	Grain Yield	Cover Crop Biomass ³
		DAP ¹	inches	0-9 ²	>6/64	<5/64	g	lbs/bu	%	bu/A	lbs/A
No cover crop	--	54	26	0	97	3	52	47.6	10.9	77.0	68
CC planted with barley	May 10	54	24	0	97	3	54	46.6	11.0	67.5	1483
CC broadcast over 4 leaf barley	May 30	54	24	0	98	2	55	48.3	11.1	70.1	562
CC broadcast over early headed barley	July 5	54	24	0	98	2	53	47.9	11.0	69.0	439
CC planted after barley harvest	Aug. 15	54	25	0	97	2	52	47.6	10.8	70.1	216
CC planted with barley + flax post-harvest	5/10 + 8/15	54	26	0	97	3	53	47.9	10.8	68.1	850
Trial Mean		54	25	0	97	2	53	47.6	10.9	70.3	1078
C.V.%		0.0	4.9	0	0.9	27	42.0	2.9	4.1	8.5	66.0
LSD 0.05		NS	NS	NS	NS	NS	NS	NS	NS	NS	1073

¹DAP = Days after planting.

²Lodging: 0 = none, 9 = lying flat on the ground.

³Cover crop biomass includes all green plant material (cover crop + volunteer barley) at the end of the growing season. Data was collected on Oct. 13 and reported on a dry weight basis.

NS = no statistical difference between cover crop treatments.

Planting Date: May 10

Barley Variety: Tradition

Harvest Date: August 14

Cover Crop Mix: turnip, radish, lentil and flax

Previous Crop: soy

Tillage System: No-till

Soil Type: Williams Loam

Note: Excellent sub-soil moisture but little in-season rainfall hindered germination of broadcast cover crops.