

**NDSU North Central Research Extension Center, Minot  
2017 Barley Cover Crop Trial at Minot**

Cover Crop Treatment	Cover Planting Date	Days to Head DAP <sup>1</sup>	Plant Height inches	Lodging 0-9 <sup>2</sup>	% Plump >6/64	% Thin <5/64	1000 KWT g	Test Weight lbs/bu	Protein %	Grain Yield bu/A	Cover Crop Biomass <sup>3</sup> 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

<sup>1</sup> DAP = Days after planting.

<sup>2</sup> Lodging: 0 = none, 9 = lying flat on the ground.

<sup>3</sup> Cover 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.

Barley Variety: Tradition

Planting Date: May 10

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.