

Spring Wheat after Crop Sequences



**Crop by crop residue
matrix with 100 crop
sequence treatments**

**Spring Wheat crop grown over 100
crop sequence treatments grown
the previous year**

Crop Sequence Project [USDA-ARS-NGPRL](#), Mandan, ND

Two Year Average Spring Wheat Yields (bu/a) (2004 & 2005)

Average spring wheat yields for 2 years, each after the 100 crop sequence treatments.
Example: Wheat-wheat-wheat, 32.8 bu/a; compared to proso millet-lentil-wheat, 43.3 bu/a.

Crop Residue (Second year)

		Buck wheat	Canola	Chickpea	Corn	Dry Pea	Grain Sorghum	Lentil	Proso Millet	Sun flower	Wheat
Crop Residue (First year)	Buckwheat	40.2	35.6	37.6	35.9	42.0	35.7	39.4	37.1	35.3	36.3
	Canola	35.5	38.7	38.5	32.7	43.1	32.4	40.4	37.0	35.5	30.2
	Chickpea	38.8	37.4	37.1	33.1	41.9	30.3	33.0	35.0	29.6	34.9
	Corn	35.9	36.5	38.6	37.7	42.1	32.3	38.6	35.9	34.0	33.3
	Dry Pea	36.0	40.8	39.3	34.9	43.5	30.8	38.7	36.9	32.4	31.6
	Grain Sorghum	36.3	36.5	39.1	35.6	44.0	33.3	45.2	34.7	34.1	34.4
	Lentil	39.5	36.8	37.5	32.9	39.8	30.5	35.6	40.1	31.6	35.0
	Proso Millet	34.8	40.3	40.4	37.2	46.5	31.3	43.3	37.9	32.8	33.4
	Sunflower	37.9	34.3	33.4	30.2	36.4	29.6	34.6	35.5	33.1	33.5
	Wheat	34.9	34.1	38.1	34.8	45.5	32.8	40.0	34.0	31.8	32.8

Two Year Average Spring Wheat Grain Protein (2004 & 2005)

Crop Residue (Second year)

	Crop Residue (Second year)										
	Buckwheat	Canola	Chickpea	Corn	Dry Pea	Grain Sorghum	Lentil	Proso Millet	Sunflower	Wheat	
	----- % crude protein -----										
Crop Residue (First year)	Buckwheat	17.9	17.4	17.7	18.2	17.3	17.7	17.4	16.7	17.8	17.9
	Canola	17.9	17.6	17.7	17.6	17.4	17.4	17.5	16.9	17.5	18.0
	Chickpea	17.4	16.8	17.5	17.7	17.4	17.2	17.4	16.2	17.6	17.5
	Corn	17.8	17.4	17.5	18.0	17.2	17.5	17.2	16.9	17.6	17.7
	Dry Pea	17.7	17.0	17.2	17.5	17.4	17.3	17.0	16.9	17.7	17.5
	Grain Sorghum	17.7	17.6	17.6	17.7	17.5	17.5	16.7	17.2	17.6	17.7
	Lentil	17.8	17.2	17.9	17.8	17.6	17.4	17.4	16.3	17.8	17.7
	Proso Millet	18.1	17.6	17.5	17.5	17.3	17.3	17.1	16.8	17.5	17.7
	Sunflower	17.7	17.0	17.5	18.0	17.8	17.8	17.1	17.2	17.7	17.9
	Wheat	17.7	17.8	18.1	17.6	17.6	17.6	17.7	17.2	17.9	17.6