

**Table 4.** 2013-2016 yields ( $\text{Mg ha}^{-1}$ , dry matter) are presented for the reduced herbicide (RH) versus standard herbicide (RH) treatments in the PEST ROTATION.

Crop	Year	Yields		SE	P-value
		RH	SH		
$(\text{Mg ha}^{-1})$					
Alf+Grass+Trit (RH)Yr1	2013	3.46	4.95	0.42	0.02
Alfalfa (SH) - Yr. 1	2014	10.57	12.66	0.77	0.22
	2015	11.71	12.17	0.37	0.25
	2016	7.89	8.12	0.46	0.36
Alf+Grass (RH) - Yr. 2	2013	12.83	13.22	0.42	0.44
Alfalfa (SH) - Yr. 2	2014	17.76	17.99	0.77	0.22
	2015	15.27	16.43	0.37	0.25
	2016	16.64	18.32	0.79	0.23
Alf+Grass (RH) - Yr. 3	2013	10.43	11.32	0.42	0.11
Alfalfa (SH) - Yr. 3	2014	15.39	15.03	0.77	0.22
	2015	12.17	12.22	0.37	0.25
	2016	11.25	15.21	0.51	0.01
Canola (winter) <sup>#</sup>	2013	1.83	1.77	0.04	0.41
	2015	2.20	1.98	0.26	0.20
	2016	2.30	2.30	0.09	0.82
SS grass <sup>#</sup>	2014	10.41	10.67	0.29	0.36
Corn Silage <sup>§</sup>	2013	13.36	15.28	1.28	0.37
	2014	16.27	15.47	0.37	0.23
	2015	16.50	17.40	0.99	0.47
	2016	14.30	14.80	0.71	0.50
Soybean <sup>^</sup>	2013	3.08	3.31	0.24	0.11
	2014	3.35	3.41	0.11	0.31
	2015	3.49	3.86	0.08	0.05
	2016	3.85	4.31	0.2	0.1

  

Pest Management Comparison		2013	2014	2015	2016
Sources of Variation	df	p-value			
Crop	3	<0.001	<0.001	<0.001	<0.001
Pest Management	1	0.04	0.351	0.007	0.06
MainMgt*Crop	3	0.004	0.014	0.03	0.01

<sup>#</sup> Canola yields were examined in a nested split-split plot model that included canola from the Pest Rotation in 2013, while in 2014, sorghum sudangrass was planted as a rescue crop when canola winterkilled.

<sup>§</sup> Corn silage yields were compared for RH-high residue cultivation and for SH.

<sup>^</sup> Soybean yields were compared for RH with high residue cultivation and for SH in 37.5 cm rows and were examined in a nested split-split plot model that included soybeans from the Control Rotation.