

Alfalfa Variety Trial at Minot

Variety	Company	Fall	Winter	Plant	Plant	Yield	Yield	Total Yield					
		Dormancy	Hardiness	Stand ³	Height	1st cut	2nd cut	2018	2017	2016	2015	Average	% Vernal
		1 - 11 ¹	1 - 6 ²	%	inches	Tons / acre ⁴							%
Ladak II	Allied	2	2	99	24	1.34	0.80	2.14	1.49	2.17	0.56	1.59	108
FSG 329	Allied	3	2	98	23	1.14	0.69	1.83	1.21	2.24	0.71	1.50	102
54B66	Pioneer	4	--	97	26	1.23	0.69	1.92	1.27	2.11	0.68	1.50	102
Persist III	Millborn	4	2	99	21	1.10	0.69	1.79	1.45	2.09	0.65	1.50	102
AFX 457	Dow	4	2	98	23	1.10	0.65	1.74	1.17	2.33	0.67	1.48	101
Vernal	Common	2	1	99	24	1.19	0.71	1.90	1.30	2.06	0.63	1.47	100
Phirst Extra Hyb	Millborn	4	2	96	21	1.07	0.64	1.70	1.16	2.10	0.66	1.41	96
HybriForce-3400	Dow	4	2	97	24	1.12	0.66	1.78	1.22	2.00	0.55	1.39	94
LegenDairy	Croplan	3	1	99	23	1.14	0.63	1.76	1.32	1.87	0.52	1.37	93
DG4210	Dyna-Gro	4	1	95	22	1.10	0.58	1.68	1.20	1.98	0.59	1.36	93
55V50	Pioneer	5	--	98	22	1.04	0.61	1.65	1.17	1.96	0.56	1.33	91
Crave	Legend	4	2	97	20	1.11	0.71	1.81	0.99	1.94	0.57	1.33	90
8420	Integra	4	--	98	19	1.00	0.61	1.62	1.00	2.04	0.52	1.29	88
AFX 469	Dow	4	2	99	21	1.04	0.58	1.62	1.01	1.91	0.60	1.29	87
55Q27	Pioneer	5	--	98	21	1.01	0.63	1.63	1.07	1.77	0.54	1.25	85
AFX 429	Dow	4	2	96	18	0.94	0.62	1.56	1.01	1.80	0.52	1.22	83
4A420	Dow	4	2	98	19	1.02	0.52	1.54	0.83	1.92	0.55	1.21	82
Trial Mean				98	22	1.10	0.65	1.74	1.17	2.02	0.59	--	--
C.V.%					2.5	26.8	20.3	22.3	18.3	29.4	20.4	10.1	--
LSD 0.05					NS	NS	NS	NS	NS	NS	0.17	0.29	--

¹Fall Dormancy: 1 = very dormant, 11 = very non dormant (see description below).²Winter Hardiness: 1 = extremely winterhardy, 6 = non-winterhardy.³Plant Stand: Visual estimation of winter survival.⁴Yields are stated on a 0% moisture basis.

NS = no statistical difference between varieties.

Planting Date: May 28, 2015

Harvest Date: 1st cutting = June 20, 2nd cutting = July 24

Soil Type: Williams Loam

Note: The 2017 and 2018 trials sustained severe drought.

Fall dormancy is the ability of alfalfa to grow tall in the fall. It is measured by determining plant height about 25 days after a fall cutting is taken following a spring planting. The advantage of growing less fall dormant varieties is higher yields.