

2017 Roundup Ready Alfalfa Variety Trial at Minot

North Central Research Extension Center

Company	Variety	Fall	Winter	Plant	Plant	Harvest	Total Yield				
		Dormancy	Hardiness	Stand ³	Height	Moisture	2017	2016	2015	Average	% Vernal
		1 - 11 ¹	1 - 6 ²	%		%	Tons / acre ⁴				%
Common	Vernal	2	1	99	21	61	1.31	1.96	0.56	1.28	100
Pioneer	54QR04	4	2	99	22	64	1.15	2.03	0.59	1.26	98
Legend	MegaMaxx	4	2	96	18	61	1.10	1.97	0.51	1.19	93
Monsanto	DKA 44-16	4	2	99	20	63	0.94	2.11	0.46	1.17	91
Monsanto	DKA 40-51	4	2	92	19	63	0.85	2.00	0.45	1.10	86
Croplan	Stratica	4	2	99	19	60	0.87	1.78	0.57	1.07	84
Croplan	Presteez	3	1	99	19	63	0.93	1.83	0.41	1.06	83
Allied	428	4	1	87	19	61	0.88	1.78	0.43	1.03	80
Integra	8444	4	--	99	16	63	0.77	1.78	0.54	1.03	80
Trial Mean				96	19	62	0.98	1.91	0.50	--	--
C.V.%				9.2	13.7	6.2	17.3	9.3	17.6	--	--
LSD 0.05				NS	NS	NS	0.25	NS	0.13	--	--

2017 Alfalfa Variety Trial at Minot

North Central Research Extension Center

Company	Variety	Fall	Winter	Plant	Plant	Harvest	Total Yield				
		Dormancy	Hardiness	Stand ³	Height	Moisture	2017	2016	2015	Average	% Vernal
		1 - 11 ¹	1 - 6 ²	%		%	Tons / acre ⁴				%
Allied	Ladak II	2	2	99	24	62	1.49	2.17	0.56	1.41	106
Millborn	Persist III	4	2	99	21	62	1.45	2.09	0.65	1.40	105
Dow	AFX 457	4	2	99	25	64	1.17	2.33	0.67	1.39	105
Allied	FSG 329	3	2	98	23	64	1.21	2.24	0.71	1.39	104
Pioneer	54B66	4	--	98	26	64	1.27	2.11	0.68	1.35	102
Common	Vernal	2	1	99	24	63	1.30	2.06	0.63	1.33	100
Millborn	Phirst Extra Hyb	4	2	96	20	61	1.16	2.10	0.66	1.31	98
Dow	HybriForce-3400	4	2	93	20	63	1.22	2.00	0.55	1.26	95
Dyna-Gro	DG4210	4	1	97	23	63	1.20	1.98	0.59	1.26	94
Croplan	LegenDairy	3	1	99	18	62	1.32	1.87	0.52	1.24	93
Pioneer	55V50	5	--	95	22	63	1.17	1.96	0.56	1.23	92
Integra	8420	4	--	98	19	62	1.00	2.04	0.52	1.19	89
Dow	AFX 469	4	2	99	22	61	1.01	1.91	0.60	1.17	88
Legend	Crave	4	2	99	21	61	0.99	1.94	0.57	1.17	88
Pioneer	55Q27	5	--	94	21	62	1.07	1.77	0.54	1.13	85
Dow	AFX 429	4	2	98	19	61	1.01	1.80	0.52	1.11	83
Dow	4A420	4	2	99	18	61	0.83	1.92	0.55	1.10	83
Trial Mean				98	22	62	1.17	2.02	0.59	--	--
C.V.%				3.6	36.0	5.7	29.4	20.4	10.1	--	--
LSD 0.05				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: June 28

Soil Type: Williams Loam

Note: The 2017 trial 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.