

Alfalfa Variety Performance Test at Rocky Ford—2014

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Summary

The 2014 results of Colorado State University's alfalfa variety test at Rocky Ford are presented in Table 1 below. This is the first year of a three-year testing period. The plots were furrow irrigated and efforts were taken to maintain a pest-free environment. During the 2014 growing season, five total cuttings were taken off the plots.

Table 1. Forage yields of 18 alfalfa varieties at the Arkansas Valley Research Center in Rocky Ford in 2014.

Variety ^a	Source/Brand	1st Cutting 19-May-14	2nd Cutting 19-Jun-14	3rd Cutting 21-Jul-14	4th Cutting 28-Aug-14	5th Cutting 17-Oct-14	2014 Total Yield
		tons/acre ^b					
FSG 403LR	Allied	2.10	1.77	2.18	2.49	1.04	9.58
HybriForce 2400	Dairyland	2.22	1.77	2.22	2.44	0.79	9.44
Ameristand 445NT	America's Alfalfa	2.03	1.74	2.18	2.16	1.33	9.44
DG 4210	CPS	1.77	1.83	2.32	2.44	1.04	9.39
WL 363HQ ^c	WL Research	1.86	1.9	2.31	2.26	1.01	9.34
48W214	FGI	1.93	1.89	2.19	2.45	0.73	9.20
FSG 524	Allied	1.55	1.75	2.26	2.32	1.32	9.20
Gunner	Croplan Genetics	1.73	1.91	2.24	2.50	0.78	9.15
59W205	FGI	1.63	1.72	2.17	2.63	1.00	9.15
6585Q	Nexgrow	1.65	1.89	2.25	2.13	1.19	9.11
HybriForce 2600	Dairyland	2.06	1.69	2.08	2.28	0.97	9.08
FSG 423ST	Allied	1.90	1.71	2.12	2.33	0.96	9.02
WL 363HQ	WL Research	1.63	1.79	2.06	2.31	1.04	8.82
Integra 8420	Wilbur-Ellis	1.52	1.76	2.15	2.62	0.77	8.82
FSG 424	Allied	1.66	1.78	2.06	2.16	1.09	8.75
6422Q	Nexgrow	1.70	1.71	2.20	2.38	0.69	8.69
Nimbus	Croplan Genetics	1.58	1.66	2.06	2.17	0.97	8.43
6401N	Nexgrow	1.45	1.65	2.11	2.33	0.79	8.33
	Average	1.78	1.77	2.17	2.36	0.97	9.05
	CV (%)	9.8	7.6	6.6	11.4	34.7	5.4
	LSD _(0.05)	0.25	0.19	0.20	0.38	0.48	0.70

^aVarieties are ranked highest to lowest by 2014 total yield.

^bYields were calculated on an air-dry basis.

^cWL 363HQ was entered in the trial twice.

Site Information:

Plots were seeded August 29, 2013 at 20 lb/ac

Elevation: 4178 ft.

Soil: Rocky Ford Silty Clay Loam

Precipitation: March 1, 2014 to July 21, 2014 = 7.59 inches

Last Spring Frost: May 2, 2014 (27.4°F)

First Fall Frost:

Fertilizer: 100 lbs. /ac 18-46-0 applied March 13, 2014

Herbicide: Thunder 5 oz. /acre and Volunteer 16 oz. /acre applied on March 25, 2014 to control broadleaves and grasses in the plots

Insecticide: Warhawk 16 oz. /acre and Lambda-Cy EC 3.84 oz. /ac applied on June 5, 2014 to control alfalfa weevil

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Western Colorado Alfalfa Variety Performance Test at Fruita 2014

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Summary

This is the 2014 results in the Colorado State University=s alfalfa variety performance test at Fruita (Table 1). Plots were planted on August 30, 2011 and data for 2014 are for the third year of the 3-year testing period. Forage yields in the first, second, and third cuttings for 2014 were excellent. Alfalfa stands are excellent and the field is weed-free. The field is furrow-irrigated using gated pipe.

Table 1. Forage yields of 18 alfalfa varieties at the Western Colorado Research Center at Fruita in 2012-14.¹

Variety	Source/Brand	1 st cut May 20	2 nd cut	3 rd cut	4 th cut	2014 total	3-yr total
					tons/acre ²		
Archer III	America's Alfalfa	3.17	2.45	1.94			
Ameristand 407TQ	America's Alfalfa	3.29	2.30	1.96			
Ameristand 445NT	America's Alfalfa	3.56	2.88	2.32			
DKA43-13	Monsanto	3.14	2.35	2.10			
DKA50-18	Monsanto	3.36	2.66	2.22			
Gunner	Croplan Genetics	3.33	2.66	2.15			
FGI 48A179	Forage Genetics	3.21	2.59	2.01			
FGI 48W201	Forage Genetics	2.86	2.21	1.93			
FGI 48W202	Forage Genetics	3.18	2.69	2.10			
FGI 48W203	Forage Genetics	3.00	2.63	2.10			
FSG 429SN	Allied Seed	3.24	2.53	1.99			
FSG 639ST	Allied Seed	3.24	2.49	1.98			
Rebound 6.0	Croplan Genetics	3.47	2.62	2.11			
6305Q	Nexgrow	3.28	2.44	2.10			
6422Q	Nexgrow	3.13	2.64	2.11			
6431	Nexgrow	3.35	2.32	1.88			
WL354HQ	W-L Research	3.21	2.50	2.19			
WL363HQ	W-L Research	3.46	2.72	2.21			
Ave.		3.25	2.54	2.08			
CV (%)		7.6	11.5	7.2			
LSD (0.05)		0.35	NS	0.21			

¹Seeded 30 August 2011 at 15 lbs/acre.

²Yields were calculated on an air-dry basis from samples that were air-dried for approximately one week inside on a drying rack. The cut forage was green chopped and within 2-3 days after harvest the alfalfa was irrigated.

Fertilizer: 300 lbs P₂O₅/acre and 63 lbs N/acre broadcast as 11-52-0 on August 10, 2011. No herbicides were applied in spring 2014. Applied Warrior at 3.84 oz/acre plus Lorsban 4E at 1 pint/acre in 22 gallons/acre of water at 25 psi on May 8, 2014 to control alfalfa weevil.

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