

# Alfalfa Irrigated Variety Performance Test at Rocky Ford—2016

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## Summary

The 2016 results of Colorado State University's alfalfa variety test at Rocky Ford are presented in Table 1 below. This is the third year of a three-year testing period. During the 2016 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 2016.

Variety <sup>a</sup>	Source/Brand	1st Cutting 30-May-16	2nd Cutting 29-Jun-16	3rd Cutting 3-Aug-16	4th Cutting 19-Sep-16	5th Cutting 31-Oct-16	2016 Total Yield
		tons/acre <sup>b</sup>					
Ameristand 445NT	America's Alfalfa	2.25	1.88	1.95	1.61	0.87	8.56
WL 363HQ <sup>c</sup>	WL Research	2.35	1.92	1.98	1.54	0.70	8.49
48W214	FGI	2.24	1.77	2.04	1.52	0.76	8.33
HybriForce 2400	Dairyland	2.31	1.76	1.92	1.61	0.71	8.30
59W205	FGI	2.23	1.84	2.00	1.49	0.71	8.27
Gunner	Croplan Genetics	2.23	1.75	2.05	1.55	0.61	8.19
6585Q	Nexgrow	1.99	1.77	2.08	1.51	0.82	8.18
HybriForce 2600	Dairyland	2.21	1.73	1.95	1.54	0.64	8.07
FSG 423ST	Allied	2.20	1.74	1.89	1.57	0.62	8.02
DG 4210	CPS	2.13	1.79	1.89	1.50	0.66	7.96
FSG 403LR	Allied	2.12	1.81	1.79	1.55	0.62	7.89
WL 363HQ	WL Research	2.10	1.76	1.81	1.47	0.70	7.85
Nimbus	Croplan Genetics	1.98	1.74	1.84	1.47	0.78	7.81
6401N	Nexgrow	2.13	1.64	1.78	1.42	0.82	7.79
Integra 8420	Wilbur-Ellis	2.05	1.76	1.88	1.37	0.64	7.70
FSG 524	Allied	1.96	1.70	1.75	1.29	0.92	7.62
FSG 424	Allied	1.93	1.74	1.88	1.45	0.59	7.58
6422Q	Nexgrow	1.97	1.73	1.76	1.45	0.53	7.44
	Average	2.13	1.77	1.90	1.49	0.71	8.00
	LSD <sub>(0.05)</sub>	0.24	NS	0.31	NS	0.13	0.57

<sup>a</sup>Varieties are ranked highest to lowest by 2016 total yield.

<sup>b</sup>Yields were calculated on a dry basis.

<sup>c</sup>WL 363HQ was entered in the trial twice.

The trial was statistically analyzed using repeated measures in proc mixed in the SAS statistical Program.

### Site Information:

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

Irrigation Type: Furrow

Elevation: 4178 ft.

Soil: Rocky Ford Silty Clay Loam

Precipitation: March 1, 2015 To November 30, 2015 = 12.4 inches

Last Spring Frost: May 2, 2016 (29.6°F)

First Fall Frost: October 4, 2016 (31.3°F)

Fertilizer: 100 lb/ac 18-46-0 applied March 13, 2014, none in 2015, 150 lb/ac 18-46-0 applied March 25, 2016

Herbicide: Thunder 5 oz/acre and Volunteer 16 oz/acre applied on March 25, 2014 to control broadleaves and grasses in the plots, Thunder 6 oz/ac applied on March 21, 2016 to control broadleaves

Insecticide: Warhawk 16 oz/acre and Lambda-Cy EC 3.84 oz/acre applied on April 20, 2015 to control alfalfa weevil, Warhawk at 32 oz/ac and LamCap at 3 oz/ac applied May 5, 2016 to control alfalfa weevil

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