

2008 Grain & Forage Oats Spring Variety Performance Trial at Center¹.
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Variety	Grain Yield ^{2/}	Bushel Weight	Heading Date ^{3/}	Plant Lodging ^{5/}	Plant Height	Forage Yield	Plant Lodging ^{5/}
	bu/ac	lbs/bu	(June)	%	in.	tons/ac	%
Provena HL	131.1 a ^{4/}	41.4	42.5	0.0	55.2	---	---
Lamont HL	123.5 a	41.1	48.8	0.0	60.5	---	---
Triticale 2700	118.4 a	53.2	39.0	0.0	70.8	--- ^{6/}	0.0
Maverick	116.5 ab	35.8	41.3	0.0	52.4	6.0	0.0
Ab 10971	104.0 ab	35.3	42.3	7.5	56.2	6.9	0.5
Monida	98.6 abc	30.4	41.5	52.5	56.4	6.3	49.5
Ab 12770	92.0 abc	33.9	41.5	50.0	56.9	6.6	87.5
Ab 11136	79.6 abc	30.3	48.3	17.5	56.4	6.8	20.0
Monico	71.5 bc	32.9	38.3	33.8	57.6	6.1	77.5
Everleaf 126	55.1 c	28.4	63.3	0.0	61.2	6.9	0.0
Trial Average	99.4	37.0	44.7	11.1	58.9	6.3	29.4
LSD, ^{10%}	24.7	2.66	1.30	15.4	2.7	N.S.	15.4
CV, %	20.7	6.0	2.2	84.6	3.8	12.1	39.1

¹ San Luis Valley Research Center, Center, CO.

² Grain yield based on 38 lbs/bushel and 12 % moisture.

³ Days after June 1.

⁴ Tukey=s Test: yields followed by the same letters are not statistically different.

⁵ Plant lodging was rated in separate oat grain and oat forage trials; results are similar.

⁶ Forage triticale did not feed properly into the crimper and the weigh box; this yield does not accurately represent the forage yield of triticale

Site Information:

Date Planted: April 15

Irrigation: center pivot

Herbicide: Huskie 15oz + Wildcard@1pt/ac

Nitrogen: 80 lb/ac + 20 lb/ac fertigation

Previous Crop: Potatoes

Date Harvested: Forage: July 25; grain finish 9/25

Seed Rate: 120 lbs/acre

Row Spacing: 8-inch

Plot Size: 6 ft. x 35'; 9 rows planted 8 nches

Comments:

Because of an interest in varietal lodging resistance; approximately 25 lbs/acre more nitrogen was applied this year. This resulted in a very good test for comparing the varieties for lodging resistance. However, it made combine harvesting much more difficult and more variable, LSD = 24.5 bu/ac. Lodging shown above is ratings prior to maturity. Both late-season irrigation and rainfall after maturity made almost all varieties severely lodged at harvest. Grain harvest began in August but rainfall on lodged oats delayed drying and the harvest was not completed until September 25. By the time of harvest, shattering was excessive. This is especially unfair to early maturing varieties such as Monico. Excessively shattering reduced grain yield of all varieties.

Compared to last year, the trial was taller, headed later, and lodged more. There was potential to yield more than last year; but, because of lodging and shattering, the trial actually yielded 1/3 less grain than last year. Grain yields were also highly variable.

Lodging resistance is the primary agronomic characteristic reliably revealed by this field trial. Eight cultivars were planted in the separate forage yield trial. Lodging resistance was rated for this trial as well as the grain oat trial. Lodging resistance was very similar in the separate trials. Four cultivars showed zero lodging in both trials. These include Triticale 2700, Maverick, Ab 10971, and Everleaf 126. Monico and Monida each had more than 30% lodging in both trials.

Forage yields were harvested at a more proper stage than last year. Forage yields this year were higher; averaging 6.3 T/acre at 19% dry matter compared to last year when yield was 5.9 T/acre at 26% dry matter. Forage yield of Triticale 2700 is not shown because the triticale did not feed well into the weigh box and does not represent the real forage yield. All other forage yields are in the same statistical yield group and, therefore, are not statistically different.