

Preliminary Evaluation of Oat Hays
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Samples for this experiment were obtained from Dr. McMullen's breeding nursery. Each entry was sampled at the beginning of the soft dough stage. Samples were ground to pass a 1-mm screen and submitted to the Animal and Range Sciences Department for forage quality determination by standard wet chemistry methods for each quality component (Table 1). Two replicates were used.

This preliminary experiment suggests that AC Ronald was the highest in forage quality in 2006 with lower acid-detergent fiber than Paul, which was similar in relative feed value to AC Ronald. AC Assiniboia, Dancer CDC, and Beach had a higher crude protein than AC Ronald, but they were higher in neutral-detergent fiber, which caused the relative feed value to be less. Souris was higher in quality than HiFi-9, but less in forage quality than Paul and AC Ronald. Maida was lower in forage quality than most varieties tested.

This is the first observation on forage quality of Beach, Dancer CDC, Maida, and Souris so evaluate these data with caution.

Table 1. Forage quality of oat hays at Fargo, ND in 2006.

Variety	Quality component [†]								
	Ash	CP	NDF	ADF	ADL	IVDMD	HEMI	CELL	RFV
	-----% of dry weight-----								
Assiniboia AC	12.1	13.1	54.8	31.4	4.2	60.7	23.4	27.2	109.6
Beach	11.1	13.7	55.2	32.4	4.3	59.6	22.8	28.1	107.2
Dancer CDC	10.9	13.0	54.8	31.9	4.6	60.8	23.0	27.2	108.6
HiFi-9	11.9	11.3	59.7	36.1	4.8	54.8	23.6	31.3	94.8
Maida	10.7	11.8	57.6	34.9	4.9	57.0	22.7	30.0	99.7
ND 021612	10.8	11.4	54.5	31.5	4.7	61.2	23.1	26.7	110.0
ND 041711	9.5	12.4	54.7	32.4	4.5	59.7	22.3	27.9	108.2
Souris	11.2	12.1	56.6	33.1	5.0	56.3	23.4	28.1	103.7
Paul	8.9	11.4	51.1	30.5	4.6	58.7	20.6	25.9	118.7
Ronald AC	11.3	10.6	52.1	30.2	4.1	59.5	21.9	26.1	116.7
Mean	10.8	12.0	55.1	32.4	4.6	58.8	22.7	27.8	107.8
LSD 0.05	0.6	2.5 [‡]	3.7	3.5	0.7 [‡]	2.9	1.9 [‡]	2.8	11.3
CV, %	2.4	9.2	2.9	4.6	6.7	2.2	4.1	4.4	4.6

[†] CP = crude protein; NDF = neutral-detergent fiber; ADF = acid-detergent fiber; ADL = acid-detergent lignin; IVDMD = in vitro dry matter digestibility; HEMI = hemicellulose (NDF-ADF); CELL = cellulose (ADF-ADL); RFV = relative feed value.

[‡] F-test is non significant.