# Technical Bulletin

Genes that fit your farm.



## **AC**<sup>®</sup> Murphy

### **Forage Oat**



AC® Murphy forage oat is an excellent forage oat which is well adapted to Alberta and Saskatchewan. This variety provides high silage yield and quality along with improved lodging resistance. AC® Murphy is suitable for applications such as silage, swath grazing and green feed.

Parentage: Waldern X IH-1863-551

#### Features:

- Foothill forage oat replacement
- 7% more grain yield, 7% more silage yield, improved protein and digestibility
- Improved lodging resistance over Foothill
- Improved grain quality over Foothill
- Suitable for silage, swath grazing, and green feed

#### Strengths:

Forage yield: 107% of Foothill

- Grain yield: 107% of Foothill
- Forage protein: 0.2% higher than Foothill
- Stronger straw, plumper kernel and lower hull % than Foothill forage oat
- Lodging resistance: better than Foothill

#### **Neutral Traits:**

One day later than Foothill forage oat

#### Weaknesses:

- Forage digestibility: 1% lower than Foothill
- Test weight slightly lower than Foothill forage oat
- Rust susceptible

#### Breeder:

Agriculture and Agri-Food Canada Lacombe, AB

Table 1: Summary of agronomic, grain yield and grain quality data of Murphy forage oat and check cultivars (based on 8 site-years of data collected in Alberta and Saskatchewan in 2000)

Variety	Days to Head	Days to Mature	Height	Lodging score (1-9)	Grain yield (%)	Test Weight (kg/hl)	Kernel Weight (mg)	Hull %	Plump %	Thin %
Foothill	69.8	108.0	124.4	3.3	100	49.9	32.9	25.1	34.7	6.8
CDC Dancer	65.1	103.8	113.7	1.1	109	50.5	36.0	18.8	76.8	2.5
AC® Murphy	70.1	109.0	127.1	2.7	107	48.4	35.5	23.3	52.6	5.9

Table 2: Silage yield and silage quality of AC® Murphy and check cultivars based on data collected at a minimum of three sites in central and northern Alberta in 1996, 1997 and 1998.

Cultivar	Silage Yield (%)	Protein (%)	Digestibility (%)	Stem Diameter	Lodging (%)	Days To Flower
AC Lacombe	100	11.2	60.8	6.5	1.2	56.8
AC Mustang	102	11.5	61.3	7.7	1.4	62.3
Foothill	111	10.6	60.3	6.6	2.3	63.2
AC <sup>®</sup> Murphy	118	11.0	61.1	7.1	1.6	63.8

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