

# 'NIOBE'

## NEW FEED BARLEY VARIETY

August 2002 - Field Crop Development Centre

**Registered in 2002!** Niobe is a new 2-row feed barley with good yield, early maturity, and a good disease and lodging resistance package. It was developed at the Field Crop Development Centre in Lacombe and will be marketed by SeCan Association.

In the Western Cooperative 2Row Barley Trials, Niobe showed grain yield comparable to CDC Dolly and consistently showed higher grain yield than Harrington in all soil zones. Niobe was tested in the Coop Trials for 2 years as TR 651 and in advanced yield trials for 5 years (Field Crop Development Centre trial data).

Niobe is a 2-row, rough-awned, feed barley, with purple-colored auricles. The spikes are semi-compact, medium length, horizontal attitude, with a mid-long short-haired rachilla. The pedigree/parentage is AC Oxbow/CDC Guardian.

Niobe has mid-maturity (similar to Harrington and slightly earlier than CDC Dolly), and improved lodging resistance compared to Harrington and CDC Dolly. Niobe has a test weight equal to CDC Dolly, while kernel weight and % plump kernels are comparable to Harrington.

Niobe has good disease resistance, with an intermediate level of resistance to net blotch and resistance to both covered and false loose smuts. Niobe has seedling resistance to scald and intermediate adult plant resistance. Similar to the check varieties, Harrington and CDC Dolly, Niobe has low resistance to septoria and spot blotch. Niobe is not resistant to loose smut or common root rot.

Niobe has higher grain yields than CDC Dolly in the 6 t/ha or greater yield class. The Field Crop Development Centre yield data show that Niobe tends to yield 11% to 15% more grain than Harrington in the 4.0 t/ha to 8.0 t/ha grain yield class. Niobe is comparable to CDC Dolly in terms of grain yield, test weight and silage yield.

### FIELD CROP DEVELOPMENT CENTRE Yield Trial Data 1997-2001

Yield Class	< 4.0 t/ha		4.0-6.0 t/ha		6.0-8.0 t/ha		>8.0 t/ha		All	
	Dry		Dry	%	Dry	%	Dry	%	Dry	%
	Yield	%	Yield	CDC	Yield	CDC	Yield	CDC	Yield	CDC
	(kg/ha)	Check	(kg/ha)	Dolly	(kg/ha)	Dolly	(kg/ha)	Dolly	(kg/ha)	Dolly
CDC DOLLY	3674.6	100.0	5117.6	100.0	7198.8	100.0	8493.9	100.0	6500.3	100.0
<b>NIOBE</b>	<b>3373.3</b>	<b>91.8</b>	<b>5030.6</b>	<b>98.3</b>	<b>7321.2</b>	<b>101.7</b>	<b>8791.2</b>	<b>103.5</b>	<b>6506.8</b>	<b>100.1</b>
HARRINGTON	3118.2	87.2	4460.5	87.0	6252.6	86.7	7601.3	89.5	5679.3	87.2
Chk Yrs	3		22		30		9		64	

### FIELD CROP DEVELOPMENT CENTRE Agronomic Data 1997-2001

	Maturity		1000		Test		Anthesis		Height	
	(days)	%	KWT	%	Wt.	%	(days)	%	(cm)	%
		CDC	(gms)	CDC	(kg/ha)	CDC		CDC		CDC
		Dolly		Dolly		Dolly		Dolly		Dolly
CDC DOLLY	100.7	100.0	47.2	100.0	66.8	100.0	58.6	100.0	80.7	100.0
<b>NIOBE</b>	<b>100.1</b>	<b>99.4</b>	<b>42.3</b>	<b>89.6</b>	<b>66.0</b>	<b>98.8</b>	<b>59.8</b>	<b>102.1</b>	<b>87.7</b>	<b>108.7</b>
HARRINGTON	99.7	99.1	42.0	89.1	62.9	94.2	60.4	103.1	84.8	105.1
Chk Yrs	58		64		64		60		64	

Continued

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WESTERN COOPERATIVE 2-ROW BARLEY TRIAL									
Summary of Agronomic Data for all Stations, Averages for 2000 and 2001									
Entry #	Entry Name	Yield kg ha <sup>-1</sup> [32 sites]	Days to Head Maturity [26 sites]	Days to Maturity [29 sites]	Height cm [31 sites]	Lodging Score [7 sites]	Test Weight kg hL <sup>-1</sup> [30 sites]	Kernel Weight g/m [31 sites]	% Plump > 6/64 [19 sites]
1	Harrington	4684	64	95	76	5	64	43	88
2	CDC Dolly	5072	63	95	73	6	66	47	93
<b>12</b>	<b>NIOBE</b>	<b>5096</b>	<b>63</b>	<b>94</b>	<b>79</b>	<b>4</b>	<b>66</b>	<b>42</b>	<b>86</b>

WESTERN COOPERATIVE 2-ROW BARLEY TRIAL					
Means for Yield (kg ha <sup>-1</sup> ) Adjusted High RCBD cv out: 2000 & 2001 Zone Averages					
Entry #	Entry Name	<u>Black Soil Zone</u>	<u>Black and Grey Soil Zone</u>	<u>Brown Soil Zone</u>	Grand Mean [ 32 sites]
		Mean [7]	Mean [9]	Mean [16]	
1	Harrington	4373	5341	4464	4684
2	CDC Dolly	4513	5783	4870	5072
<b>12</b>	<b>NIOBE</b>	<b>4763</b>	<b>5944</b>	<b>4816</b>	<b>5096</b>