

Vivar Semi-Dwarf 6 Row Feed and Silage Barley



Vivar is a 6 row, semi-dwarf, rough awned feed barley. It has larger seed size, higher test weight and greater % plump kernels than other semi-dwarf varieties like CDC Earl, Tukwa and Kasota

Strengths:

- Large, plump kernels with higher test weight than other 6 row varieties
- 8% higher grain yield than AC Lacombe, 15% higher yield than Kasota (1998-99 Coop Trials all sites)
- 10% higher grain yield than AC Lacombe in the black soils of Central Alberta (1998-99 Coop Trials)
- Maturity similar to AC Lacombe
- Moderate resistance to net blotch and common root rot
- 10% higher forage yield than CDC Earl, 4% higher forage yield than Kasota (1997-99 Silage trials: AAFRD)

Neutral Traits:

- Scald resistance similar to Tukwa and AC Lacombe but better than CDC Earl
- 10 cm shorter than AC Lacombe, 3 cm taller than CDC Earl

Weaknesses:

- Lodging resistance similar to Tukwa, Kasota and CDC Earl

Breeder:

Jim Helm
Field Crop Development Centre
Lacombe, Alberta

1998-99 Western Cooperative Semi-dwarf Barley Registration Trials

Entry	Yield (% AC Lacombe)	Maturity (days)	Height (cm)	Lodging 1 = erect 9 = flat	Test Weight (kg/hL)	Kernel Weight (mg)	% Plump	Scald Rating	Net Blotch Rating	Loose Smut	Other Smuts	Common Root Rot
AC Lacombe	100	95.5	93.8	4	60.9	40.1	64	I	I	S	R	I
Kasota	94	92.7	82.8	3	61.4	32.6	47	R	I	S	R	I
CDC Earl	97	96.1	82.6	3	59.8	35.1	57	S	I	S	R	I
Tukwa	99	94.3	83.9	3	62.3	33.4	67	I	S	S	R	I
Vivar	108	95.9	85.3	3	61.8	40.8	77	I	I	S	R	I

S=Susceptible; I=Intermediate; R=Resistance

Manny 6 Row Feed and Silage Barley



Manny is a 6 row, rough awned, dual purpose feed and silage barley with high silage and grain yield. Manny is a strong-strawed variety with maturity one day earlier than AC Lacombe. Manny is the first 6 row variety to have multiple gene resistance to scald and intermediate resistance to Net Blotch, loose smut and surface borne smuts. The disease resistance package of Manny makes it well adapted to Central Alberta growing conditions.

Strengths:

- 11% higher grain yield than AC Lacombe in the black soils of Central Alberta in the 2001-02 Coop Trials
- 80% plump kernels compared to AC Lacombe at 73% plump in the 2001-02 Coop trials
- 7% higher silage yield than AC Lacombe in Central Alberta (FCDC 1998-02 silage trials)
- One day earlier maturity than AC Lacombe
- Better lodging resistance than AC Lacombe
- Multiple gene resistance to Scald

Neutral Traits:

- Test weight similar to AC Lacombe
- Straw height similar to AC Lacombe
- Intermediate resistance to loose smut and surface borne smut
- Intermediate resistance to net blotch and spot blotch
- Intermediate resistance to root rot

Weaknesses:

- Kernel size smaller than AC Lacombe

Breeder:

Field Crop Development Centre
Lacombe, Alberta

2001 and 2002 Western Cooperative 6 Row Barley Registration Trials

Entry	Yield (% AC Lacombe) Central Alberta	Maturity (days)	Height (cm)	Lodging 1 = erect 9 = flat	Test Weight (kg/hL)	Kernel Weight (mg)	% Plump	Scald Rating	Net Blotch Rating	Loose Smut	Other Smuts	Common Root Rot
AC Lacombe	100	91.6	71.8	2.6	59.3	42.5	73.5	I	I	S	R	S
AC Rosser	111	93.6	68.5	2.8	61.0	42.3	83.9	S	I	S	R	I
Manny	111	90.3	72.2	2.3	60.1	38.0	80.3	R	I	I	R	I

S=Susceptible; I=Intermediate; R=Resistance

Ponoka

2 Row Feed and Silage Barley



Ponoka is a 2 row, rough awned, dual purpose feed and silage barley with high silage and grain yield potential. Ponoka has excellent disease resistance for the Western Prairies. Ponoka has similar silage yield and 10% higher grain yield than Seebe.

Strengths:

- 8% higher grain yield than CDC Dolly over all sites in the 2001–02 Coop trials
- Similar % plump and higher test weight than CDC Dolly
- Much stronger straw than CDC Dolly
- Resistant to loose smut, false loose and covered smut

Neutral Traits:

- 3 cm taller than CDC Dolly, similar to Harrington in height
- Intermediate resistance to scald, net blotch, common root rot

Weaknesses:

- Maturity 3 days later than CDC Dolly and Harrington

Breeder:

Field Crop Development Centre
Lacombe, Alberta

2001-2002 Western Cooperative 2 Row Barley Registration Trials

Entry	Yield (% CDC Dolly)	Maturity (days)	Height (cm)	Lodging 1 = erect 9 = flat	Test Weight (lb/bu)	% Plump	Scald Rating	Net Blotch Rating	Loose Smut	Other Smuts	Common Root Rot
CDC Dolly	100	91.6	63.8	6.8	65.8	93.0	I	S	S	R	I
Harrington	96	91.6	66.3	6.7	64.3	88.0	S	S	S	S	I
Ponoka	108	94.6	66.7	4.7	66.0	87.0	I	I	R	R	I

S=Susceptible; I=Intermediate; R=Resistance

Niobe

2 Row Feed Barley



2 row rough awned, feed barley. It has grain yield, test weight and silage yield comparable to CDC Dolly. However, it is earlier maturing and stronger strawed than CDC Dolly.

Strengths:

- Stronger straw than CDC Dolly
- Intermediate Scald resistance
- Very high test weight
- One day earlier than CDC Dolly
- Improved net blotch resistance

Weaknesses:

- Susceptible to spot blotch, loose smut and root rot

Breeder:

Field Crop Development Centre
Lacombe, Alberta

2000-01 Western Cooperative Two Row Barley Registration Trial

Entry	Average Yield (% Harrington)	Maturity (days)	Height (cm)	Lodging 1=erect	Test weight (kg/hL)	1000 Kernel weight (mg)	% Plump	Scald Rating	Net Blotch Rating
Harrington	100	94	77	6	64	43	89	S	HS
CDC Dolly	108	95	73	6	66	47	93	I	S
Niobe	109	95	80	6	66	43	86	I	I

HS=Highly Susceptible, S=Susceptible, I=Intermediate, R=Resistant

Seed Manitoba 2006 - Barley Comparison

Variety	Site Years	2 or 6 Row	Long Term Average Yield (% of Robust)	Days to Maturity (+/- Robust)	Height Inches	Test Wt (lb/bu)	Awn Type	Resistance to:							
								Lodging	Stem Rust	Loose Smut	Surface borne Smut	Root Rot	Net Blotch	Spot Blotch	FHB
Robust		6	100	0	0	0	S	G	G	F	F	F	P	G	P
Excel	43	6	110	-2	0	-1	S	F	G	F	F	G	P	G	VP
AC Lacombe	26	6	115	-1	-5	1	S	G	G	P	G	P	F	F	VP
AC Rosser	35	6	115	2	-6	-1	S	F	G	P	G	G	F	G	VP
AC Metcalfe	63	2	103	-1	-4	0.7	R	F	G	VG	F	F	F	F	F
CDC Dolly	35	2	101	-2	-5	1.5	R	P	P	F	F	F	P	VP	F
CDC Helgason	34	2	108	-2	-4	2	R	G	F	VG	G	F	G	F	P
Vivar	26	6	108	-1	-8	2	R	VG	G	F	VG	G	G	F	VP

FHB=Fusarium Head Blight; R=Resistant; S=Susceptible; VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very Poor

2006 Saskatchewan Varieties of Grain - Barley Comparison

Variety	# Rows	Awn Type	Yield as % of AC Metcalfe				Relative Maturity	Resistance to:							
			Area 1	Area 2	Area 3	Area 4		Lodging	Net Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	FHB
Harrington	2	R	99	92	89	88	M	F	VP	P	P	P	F	P	G
CDC Dolly	2	R	103	103	104	102	M	G	P	G	P	G	F	G	F
CDC Helgason	2	R	107	104	105	102	M	G	G	P	VG	G	F	F	P
Niobe	2	R	--	100	104	108	M	F	F	P	P	G	P	G	P
CDC Earl	6	R	99	111	110	120	L	VG	G	F	P	G	G	G	VP
Kasota	6	S	97	106	109	108	E	G	F	G	P	G	P	G	VP
Vivar	6	R	114	117	112	131	L	G	F	P	F	G	F	G	VP
AC Harper	6	S	104	104	106	101	M	G	F	G	P	F	F	F	VP
AC Lacombe	6	S	98	110	110	102	M	G	F	F	P	VG	F	G	VP
AC Rosser	6	S	112	116	115	115	M	G	F	VP	P	VG	G	G	VP
Trochu	6	S	104	105	107	117	M	F	P	F	P	G	G	G	P
Ponoka	2	R	--	112	127	--	L	G	F	G	VG	VG	F	P	F
Manny	6	S	--	114	111	--	M	F	F	VG	P	VG	P	P	VP

E=Early; M=Medium; L=Late; VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very Poor; Awn Type: S=Smooth; R=Rough

2006 Alberta Seed Guide - Barley Comparison

Variety	Yield as % of Harrington						# of Row	Awn Type	Comp Mat. (days)	Test Wt. lb/bu	Kn. Wt. mg	Ht. cm	Resistance to:						Toler. FHB
	Irr.	Area 1	Area 2	Area 3	Area 4	Area 5&6							Lodging	Loose Smut	FL + Cov. Smut	Common Root Rot	Scald	Net Blotch	
Harrington	100	100	100	100	100	100	2	R	98	50	44	78	F	S	S	I	S	S	G
CDC Dolly	104	102	112	112	112	107	2	R	1	53	49	75	F	S	R	I	I	S	F
CDC Helgason	104	96	111	119	115	117	2	R	-1	52	46	76	G	R	R	I	S	I	P
Niobe	111	101	122	125	118	109	2	R	-1	50	46	76	G	I	R	I	I	I	P
CDC Earl	106	102	111	106	125	103	6	R	0	47	36	73	EX	S	R	I	S	I	VP
Kasota	106	98	109	113	118	104	6	R	-4	49	36	72	EX	S	R	I	R	I	VP
Vivar	121	98	109	129	127	124	6	R	0	49	44	74	VG	I	R	R	I	I	VP
AC Harper	111	106	110	121	122	109	6	SS	0	48	40	80	G	S	I	I	I	I	P
AC Lacombe	111	110	113	123	124	111	6	S	-1	48	42	85	G	S	R	S	I	I	VP
AC Rosser	121	115	113	123	123	116	6	S	1	48	41	82	F	S	R	I	S	I	VP
Trochu	121	110	123	126	124	119	6	S	0	49	41	79	G	S	R	R	I	I	P
Ponoka	120	112	127	120	122	128	2	R	2	50	48	80	G	R	R	I	I	I	F
Manny	126	102	126	124	131	120	6	R	0	47	40	87	G	I	R	S	R	I	p

Awn: S=Smooth; R=Rough; VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very Poor; G; S=Susceptible; R=Resistant; I=Intermediate; EX=Excellent
Comp Mat.=Comparative Maturity Kn. Wt.=Kernel Weight Ht.=Height