

40-10 FORAGE PEA

DEVELOPED BY: SWS Germany

VARIETY DESCRIPTION:

40-10 is a full-leaved long vined forage pea that produces high quality, protein rich forage alone or in combination with a cereal. 40-10 has consistently yielded 20% greater than Trapper. 40-10's small seed size (141 g TKW) helps lower seeding rates and costs.

AREA OF ADAPTATION:

Field pea growing areas of Western Canada.

40-10 PERFORMANCE:

Treatment	Forage Yield DM % of AC Lacombe	CP	ADF	TDN	DE	RFV
40-10 Pea	70%	16.9	29	72	3.16	158
AC Lacombe Barley	100%	10.6	31	68	2.99	115
AC Ranger Barley	109%	10.8	27	74	3.27	125
40-10/AC Lacombe	89%	13.4	28	72	3.15	132
40-10/AC Ranger	88%	14.4	28	73	3.20	143

Source: CAS Internal Trials 2002

SEEDING RATES:

When seeding 40-10 alone a plant population of 7-9 plants per square foot (1.5 to 1.75 bu/ac) should be targeted. When seeding 40-10 in combination with a cereal the seeding rate will vary according to the blend being used. To maximize the quality of the 40-10 cereal blend a plant population of 7 plants per square foot (1.5 bu/ac) for the 40-10 and 7 to 8 plants per square foot (0.5 bu/ac) for the cereal should be targeted. As the seeding rate of the cereal is increased and the 40-10 decreased, higher forage yields may result while quality will decline.

FERTILITY:

02-26-03

When 40-10 is seeded alone, the crop can be treated similar to a standard field pea in regards to fertility. Similar to field peas, 40-10 will fix its own nitrogen when properly inoculated. When seeded in combination with a cereal it is recommended to follow a similar fertility program as you would for producing a cereal forage crop in conjunction with soil test recommendations. Typically an application of 60 lbs N, 30 lbs P, and 80 lbs K will provide maintenance fertility. Apply all fertilizer pre-plant.

HARVESTING:

When 40-10 is seeded alone it is recommended to harvest when flowering has finished and the top pods are beginning to fill to obtain the maximum combination of yield and quality.

When 40-10 is seeded in combination with a cereal it is recommended to harvest the mixture when the cereal is in the early soft dough stage to maximize yield and quality. The pea should be finished flowering with the bottom pods beginning to fill.

Similar to other forage crops, as harvest is delayed yield may increase but quality will decline resulting in lower protein and higher fibre levels.

For the producer who desires a high nutrient, high yielding forage. It is especially effective when used in conjunction with annual forage cereals.

- Small seed size
- Slightly longer vine length than Trapper or Grande
- High relative feed value
- High forage yields, 20% more than Trapper
- Late maturity
- Seed with cereal to provide best combination of volume and feed value



Nutritional Content of Silage Pea & Triticale Forage

Silage Peas	Dry Basis
Crude Protein (Dry)	15.00-20.00%
ADF	32.00-38.00%
NDF	52.00-58.00%
Crude Fibre	22.00-28.00%
TDN	56.00-62.00%
Calcium	0.40-0.80%
Phosphorus	0.32-0.42%
Magnesium	0.32-0.40%
Potassium	3.00-3.40%

2007 Saskatchewan Seed Guide Field Pea Comparison

Variety - Silage	Years Tested	Yield (% of Cultivar)			Leaf Type	Relative Maturity	Vine Length (cm)	Resistance to:					Seed Weight (g/1000)		
		1,2 & South 3		North 3 & 4				Inf.	Mycophthor. -relia Blight	Powdery Mildew	Seed Coat Breakage	Lodging		Seed Coat Dimpling	Green Seed Coat
		1,2 & South 3	1,2 & South 3	North 3 & 4											
Cultivar	7	100	100	100	SL	M	75	F	VG	F	G	F	G	220	
40-10	2	83	94	-	N	L	100	F	P	F	P	G	n/a	170	
Trapper	7	68	68	-	N	L	95	F	P	F	P	-	-	140	
Victoria	7	74	72	-	N	M	85	F	P	F	P	G	-	170	

Summary of Pea and Cereal Silage Mixtures - Barrhead 2001

Variety	Dry Matter (tonnes/ha)	Protein (%)	Protein (tonne/ha)	ADF (%)	NDF (%)	Ca (%)	P (%)
Swing Peas	5.85	17.12	1.00	28.92	38.97	1.98	0.23
40-10 Peas	6.31	21.66	1.37	32.66	41.59	1.94	0.31
Seebe Barley 2bu/ac	7.79	16.77	1.26	31.11	57.67	0.78	0.30
Triticale 2bu/ac	7.99	15.76	1.25	28.24	47.15	0.94	0.25
Seebe Barley 0.5 bu/ac & 40-10 Peas	7.06	19.72	1.40	30.71	43.30	1.92	0.29
Seebe Barley 1.0 bu/ac & 40-10 Peas	7.79	17.84	1.38	31.63	48.17	1.40	0.28
Seebe Barley 2.0 bu/ac & 40-10 Peas	8.02	17.19	1.38	30.03	50.58	1.12	0.28
Triticale 0.5 bu/ac & 40-10 Peas	7.12	17.64	1.26	32.91	45.80	1.61	0.26
Triticale 0.5 bu/ac & 40-10 Peas	7.60	17.63	1.33	29.72	45.05	1.49	0.26
Triticale 0.5 bu/ac & 40-10 Peas	7.70	16.58	1.26	31.25	49.21	1.05	0.26
AC Ranger Barley	5.50	16.18	0.88	32.05	59.87	0.96	0.28
AC Ranger Barley & 40-10 Peas	7.08	19.31	1.36	29.31	43.32	1.76	0.30
Oats	6.99	17.33	1.21	32.85	54.35	0.70	0.27
Oats & 40-10 Peas	5.89	18.89	1.11	34.80	48.34	1.65	0.28