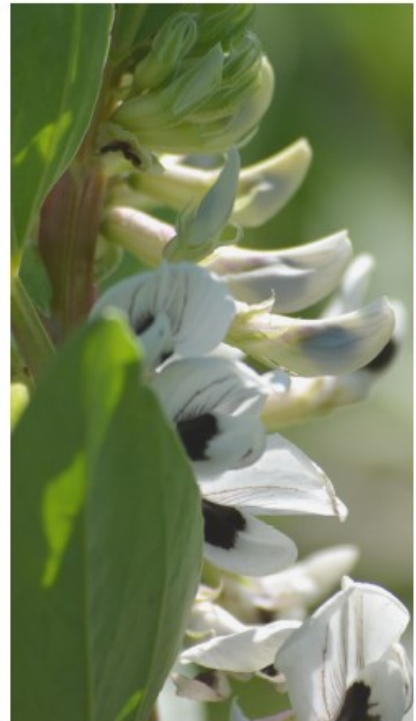
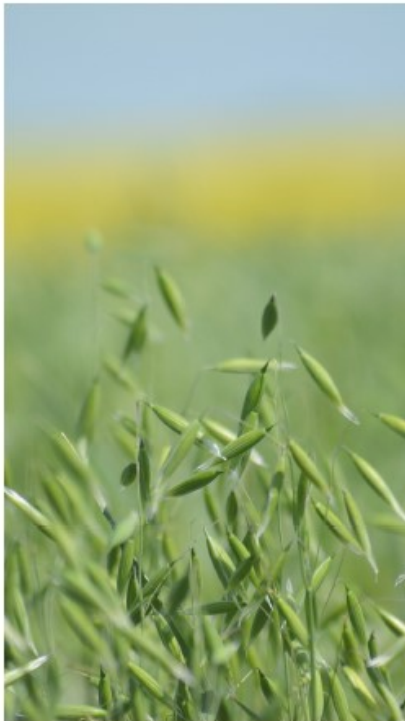




NE 16-28-03 W4

*Smigelski Site

For any questions please
contact the CARA office
at 403-664-3777



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REGIONAL VARIETY TRIAL PROGRAM (RVT)

The RVT program is responsible for generating unbiased post-registration information for varieties of wheat, barley, oat, rye, triticale, flax, field pea, chickpea, lentil, dry bean and faba bean

The Alberta Regional Variety Trial program (RVT) is the most trusted source of various information for producers in Alberta. Farmers need accurate, regional and the most current variety information to stay competitive.

The goal of the RVT trials are to provide cereal, flax and pulse crop growers, and industry and extensions specialists with scientifically valid crop variety performance information under different agro-climatic conditions. Data is published in the Alberta Seed Guide and in Alberta Agriculture Varieties of Cereal and Oilseed crops for Alberta pamphlet

This site includes yellow & green peas, lentils, flax, wheat, durum, triticale & faba beans

Thank you to our Contributors & Sponsors



Alberta Barley



Agriculture and Forestry



For any questions please contact the CARA office at 403-664-3777



AWC WHEAT FERTILITY TRIAL

Evaluation of Various Nitrogen Sources on Wheat Yield & Quality

This trial evaluates the effect of different nitrogen rates and sources (urea and ammonium sulphate) applied with the seed, at flag leaf and flowering. Yield and protein are monitored.

This trial is replicated 4 times with the 18 treatments randomized in each replication. The outside are guards that are consistent through all the replications.

This trial is funded by

Alberta Wheat



For any questions please contact the CARA office at 403-664-3777



Alberta Wheat Fertility Trial

Based on Soil analysis from the site with VERY Low N and P

Guard		Guard		Guard		Guard	
101	TRT-5	201	TRT-4	301	TRT-18	401	TRT-8
102	TRT-7	202	TRT-2	302	TRT-2	402	TRT-2
103	TRT-14	203	TRT-5	303	TRT-5	403	TRT-8
104	TRT5	204	TRT-15	304	TRT-8	404	TRT-18
105	TRT-1	205	TRT-7	305	TRT-9	405	TRT-14
106	TRT-12	206	TRT-12	306	TRT-17	406	TRT-18
107	TRT-15	207	TRT-9	307	TRT-1	407	TRT-11
108	TRT-13	208	TRT-8	308	TRT-11	408	TRT-9
109	TRT-16	209	TRT-13	309	TRT-15	409	TRT-10
110	TRT-18	210	TRT 5	310	TRT-12	410	TRT 1
111	TRT-11	211	TRT-8	311	TRT-8R	411	TRT 17
112	TRT-4	212	TRT-17	312	TRT-16	412	TRT-7
113	TRT14	213	TRT-14	313	TRT5	413	TRT5
114	TRT-2	214	TRT-16	314	TRT17	414	TRT-5
115	TRT5	215	TRT1	315	TRT17	415	TRT-12
116	TRT-9	216	TRT-18	316	TRT-3	416	TRT-13
117	TRT-17	217	TRT17	317	TRT-4	417	TRT-15
118	TRT-8	218	TRT-10	318	TRT-14	418	TRT-4
Guard		Guard		Guard		Guard	

seeding depth 1.5"

Fert depth 3"

Seeding Date: May 13, 2020

Treatments

- TRT-1 Control P-K
- TRT-2 0.5 N Rec N mix
- TRT-3 0.5 N Rec Ammonium Sulfate
- TRT-4 0.5 N Rec + 20lb/a liquid UAN at flag leaf
- TRT-5 0.5 N Rec + 20lb/a liqN N NH4(SO4) at flag leaf
- TRT-6 0.5 N Rec + 20lb/a Broadcast N Mix at Post Flowering
- TRT-7 0.5 N Rec + 20lb/a Broadcast NH4(SO4)2 at post Flowering
- TRT-8 0.5 N Rec + 20lb/a Broadcast NH4(SO4)2 at flag stage
- TRT-9 Rec N Rate Mix N
- TRT-10 Rec N Ammonium Sulfate
- TRT-11 N Rec + 20 broadcast lb NH4(SO4)2 at flag stage
- TRT-12 Rec N + 20lb/a Broadcast NH4(SO4)2 at post flowering
- TRT-13 N Rec + 20 liquid lb NH4(SO4)2 at flag stage
- TRT-14 Rec N + 20lb/a liquid NH4(SO4)2 at flag leaf and post flowering

Rec rate 2020 soil analysis Fert Rate

N: 80 for 40 bu

P: 40

	Flag	Flower
Application dates:	July 9-10	

- TRT-15 Rec N+ 20lb/a liquid UAN at flag leaf
- TRT-16 Rec N+ 20lb/a liquid at NH4(SO4) post flowering
- TRT-17 Rec N + 20lb/a Broadcast NH4(SO4) at flag leaf
- TRT-18 Rec N + 20lb/a Broadcast N Mix at Post Flowering

AWC ULTRA EARLY SEEDED WHEAT

Advantages of Seeding Spring Wheat Ultra-Early in Alberta

This trial will compare maturity, yield, grain quality from 2 varieties of wheat (AAC Brandon and AAC Connery) seeded as early as possible compared with a conventional seeding date.

This trial is replicated 4 times and randomized in each replication. The outside are guards that are consistent through all the replications.

This trial is funded by



For any questions please contact the CARA office at 403-664-3777



		5
	Guard	
	101	E1
U	102	E2
L	103	E3
T	104	E4
R	105	E5
A	106	E6
	Guard	
E	Guard	
A	101	N1
R	102	N2
L	103	N3
Y	104	N4
	105	N5
	106	N6
	Guard	

		8	13
	Guard		
	201	E3	
	202	E6	
	203	E2	
	204	E4	
	205	E1	
	206	E5	
	Guard		
	Guard		
	201	N3	
	202	N6	
	203	N2	
	204	N4	
	205	N1	
	206	N5	
	Guard		

		16	21
	Guard		
	301	E6	
	302	E1	
	303	E3	
	304	E5	
	305	E2	
	306	E4	
	Guard		
	Guard		
	301	N6	
	302	N1	
	303	N3	
	304	N5	
	305	N2	
	306	N4	
	Guard		

		24	29
	Guard		
	401	E5	
	402	E3	
	403	E6	
	404	E4	
	405	E1	
	406	E2	
	Guard		
	Guard		
	401	N5	
	402	N3	
	403	N6	
	404	N4	
	405	N1	
	406	N2	
	Guard		

ABC BARLEY FERTILITY TRIAL

Evaluation of Various Fertilizer and Mycorrhizae Applications on Barley

The objectives of this trial includes evaluation of different levels of nitrogen and phosphorus evaluates the effect of different nitrogen sources (fertilizer rates applied with the seed.

Yield and protein are monitored.

This trial is replicated 4 times with the 18 treatments randomized in each replication. The outside are guards that are consistent through all the replications.

This trial is funded by



**Alberta
Barley**



For any questions please contact the CARA office at 403-664-3777



M = Metcalf

Guard
101 M - Myco
102 M - 80N 40P Myco
A 103 C - 80N 40P Myco
B 104 M - 40N 40P
C 105 M - 80N 20P
106 C - No fertilizer
F 107 M - 120N 40P
E 108 C - 40N 40P
R 109 C - 80 N 40 P Myco
T 110 C - 120N 40P
111 C - Myco
112 C - 80N 40P
113 C - 120N 40P
114 M - 80N 40P
115 M - No fertilizer
116 M - 80N 20P Myco
Guard
Guard
Guard

C = CDC Cowboy

Guard
201 M - No fertilizer
202 C - 80N 20P Myco
203 M - 80N 20P Myco
204 M - 80N 20P
205 M - 80N 40P
206 C - 40N 40P
207 C - No fertilizer
208 C - 120N 40P
209 M - 120N 40P
210 M - 80N 40P Myco
211 M - 40N 40P
212 C - 80N 40P Myco
213 M - No fertilizer
214 C - 80N 40P
215 C - No fertilizer
216 C - 80N 20P
Guard
Guard
Guard

Myco = Mycorrhizae

Guard
301 C - 120N 40P
302 C - No fertilizer
303 M - 80N 40P Myco
304 M - No fertilizer
305 C - 40 N 40P
306 M - 40 N 40P
307 M - 90N 20P
308 C - Myco
309 M - 120N 40P
310 C - 80N 40P Myco
311 M - 80N 20P Myco
312 C - 80N 40P
313 M - Myco
314 M - 80N 40P Myco
315 C - 80N 20P Myco
316 C - 80N 20P
Guard
Guard
Guard

Guard
401 C - Myco
402 C - 40 N 40P
403 C - 80N 20P
404 C - No fertilizer
405 M - 80N 40P Myco
406 M - 80N 20P Myco
407 M - No fertilizer
408 M - 120N 40P
409 M - 80N 40P Myco
410 M - Myco
411 C - 80N 40P Myco
412 M - 40 N 40P
413 C - 120N 40P
414 C - 80N 20P Myco
415 C - 80N 40P
416 M - 90N 20P
Guard
Guard
Guard

PHOSPHORUS RATES ON FIELD PEAS

Evaluation of phosphorus rates on field peas

Adequate levels of phosphorus are known to influence yield and maturity in field peas. The impact of monoammonium phosphate (MAP) fertilizer will be evaluated on the yield and quality of Meadow field peas.

This trial is replicated 4 times with the 4 treatments randomized in each replication. The outside are guards that are consistent through all the replications.

This trial is funded by



For any questions please contact the CARA office at 403-664-3777



AB	Guard	
P	101	0
H	102	15 lbs MAP
O	103	30lbs MAP
S	104	15 lbs MAP*
	Guard	

Guard	
201	
202	
203	
204	
Guard	

Guard	
301	
302	
303	
304	
Guard	

SOIL HEALTH BENEFITS FROM CROP DIVERSITY

Evaluation of Soil Health Benefits from Improved Crop Diversity in Alberta

The impact from several rotations, including pulses, cereals and oilseeds as well as cocktail mixes, on soil health was initiated in 2020.

This trial is replicated 4 times with the 4 treatments randomized in each replication. The outside are guards that are consistent through all the replications.

This trial is funded by



For any questions please contact the CARA office at 403-664-3777



	77		82
	Guard		
C	101	Peas	
R	102	Lentils	
O	103	Peas	
P	104	Lentils	
	105	CCC Mix 1	
D	106	CCC Mix 2	
I	107	CCC Mix 3	
V	108	CCC Mix 4	
E	109	CCC Mix 1	
R	110	CCC Mix 2	
S	111	CCC Mix 3	
I	112	CCC Mix 4	
T	113	Wheat	
Y	114	Wheat	
	Guard		

	85		90
	Guard		
	201	Lentils	
	202	CCC Mix 1	
	203	Wheat	
	204	Peas	
	205	Wheat	
	206	CCC Mix 2	
	207	CCC Mix 2	
	208	CCC Mix 4	
	209	CCC Mix 4	
	210	CCC Mix 3	
	211	CCC Mix 1	
	212	CCC Mix 3	
	213	Peas	
	214	Lentils	
	Guard		

	93		98
	Guard		
	301	CCC Mix 1	
	302	CCC Mix 1	
	303	Wheat	
	304	Lentils	
	305	Peas	
	306	CCC Mix 3	
	307	CCC Mix 2	
	308	Peas	
	309	CCC Mix 3	
	310	CCC Mix 4	
	311	CCC Mix 4	
	312	CCC Mix 2	
	313	Wheat	
	314	Lentils	
	Guard		

	101		106
	Guard		
	401	Peas	
	402	CCC Mix 4	
	403	Lentils	
	404	Wheat	
	405	CCC Mix 4	
	406	CCC Mix 3	
	407	CCC Mix 1	
	408	Lentils	
	409	CCC Mix 2	
	410	Peas	
	411	CCC Mix 2	
	412	CCC Mix 3	
	413	CCC Mix 1	
	414	Wheat	
	Guard		

COVER CROPS VARIETY TRIALS

Utilizing cover crops by planting them early in the growing season can provide producers with improved soil health, a high quality source of forage, and a longer grazing season.

Cocktail crops have traditionally been used to help hold the soil when transitioning between different types of cash crops, and are often plowed down before planting the next crop to add organic material and fertility to the soil. Farmers with livestock often select cover crops that can be grazed, adding an additional benefit as feed and the advantage of additional nutrients from animal manure.

An annual and alternative cover crop variety trial at this site is to evaluate the annual and alternative cover crops for grazing & soil health purposes.

10 different varieties were seeded (each variety was replicated three times for each of the seeding methods). Varieties used were:

- Forage Radish
- Japanese Millet
- Forage Turnip
- Sorghum Sudan Grass
- Red Siberian Millet
- Plantain
- Forage Kale
- Chicory
- Forage Brassica &
- Phacelia



For any questions please contact the CARA office at 403-664-3777



	140	145	148	153	156	161	164	169
	Guard		Guard		Guard		Guard	
	101	FORAGE RADISH	201	SORGUM SUDAN GR	301	FORAGE KALE	401	HYBRID RY
A	102	HYBRID RYE	202	MILLET	302	CHICORY	402	FORAGE R
L	103	FORAGE TURNIP	203	PLANTAIN	303	FORAGE BBRASSICA	403	FORAGE T
T	104	SORGUM SUDAN GR	204	FORAGE KALE	304	PHACELIA	404	MILLET
E	105	MILLET	205	CHICORY	305	FORAGE RADISH	405	PLANTAIN
R	106	PLANTAIN	206	FORAGE BBRASSICA	306	FORAGE TURNIP	406	SORGUM S
N	107	FORAGE KALE	207	PHACELIA	307	HYBRID RYE	407	CHICORY
	108	CHICORY	208	FORAGE RADISH	308	PLANTAIN	408	FORAGE B
	109	FORAGE BBRASSICA	209	FORAGE TURNIP	309	SORGUM SUDAN GR	409	PHACELIA
	110	PHACELIA	210	HYBRID RYE	310	MILLET	410	FORAGE K
	Guard		Guard		Guard		Guard	