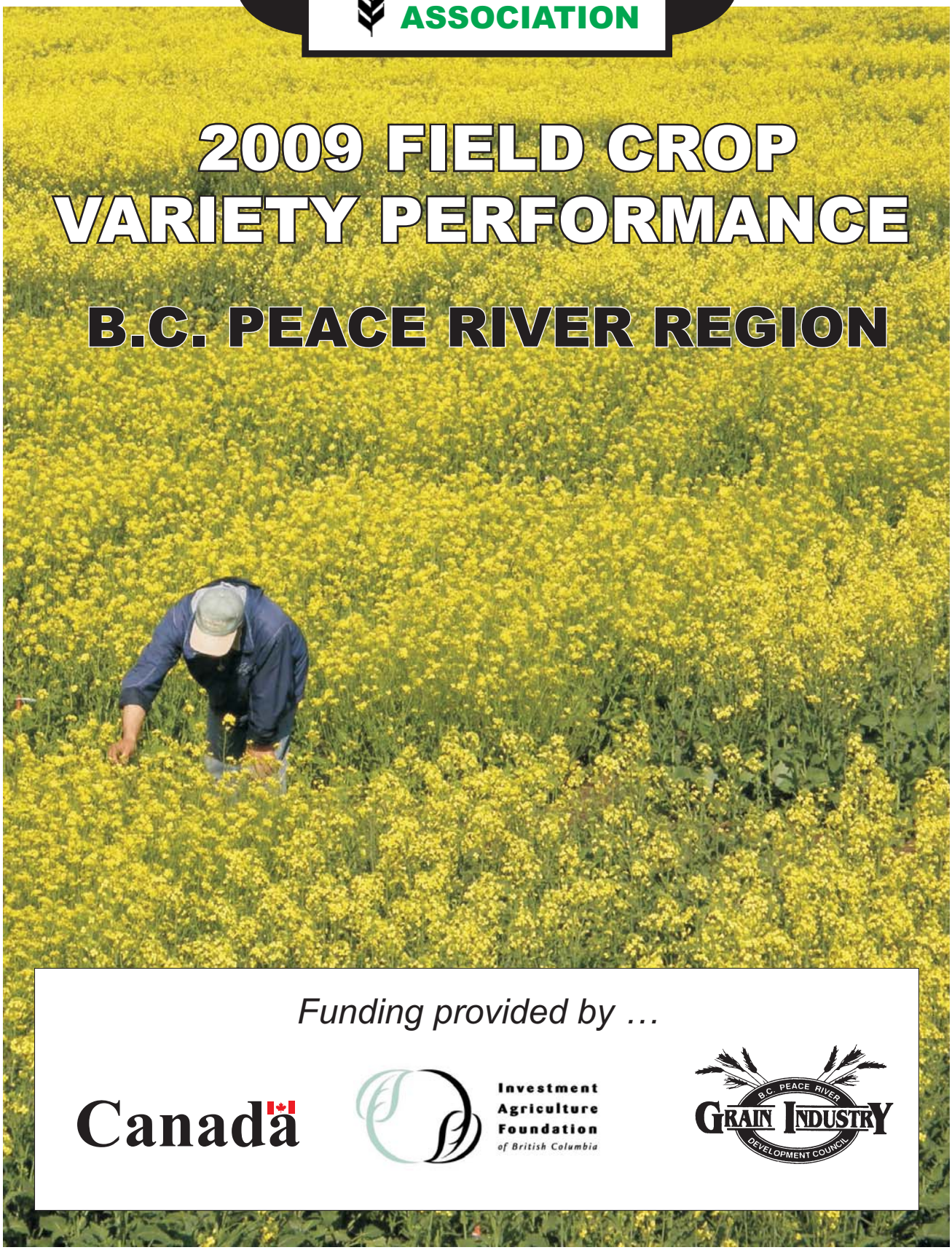
B.C. GRAIN PRODUCERS ASSOCIATION

2009 FIELD CROP VARIETY PERFORMANCE

B.C. PEACE RIVER REGION



Funding provided by …

Canada

Investment Agriculture Foundation of British Columbia

B.C. Peace River Grain Industry Development Council

BC Grain Producers Association
2009 Field Crop Variety Performance
BC Peace River Region

Introduction, Acknowledgements, and Cautionary Notes

This report summarizes the *Field Crop Variety Performance Trials* that were conducted by the *Research Committee* of the *BC Grain Producers Association*, and is the result of funding and partnering with the following organizations:

Investment Agriculture Foundation of British Columbia – IAF
BC Peace River Grain Industry Development Council - BCPRGIDC

LOUIS DREYFUS (Dawson Creek office) and **VITERRA** (Dawson Creek and Calgary offices) should also be recognized for their contribution via kernel protein analysis. We thank these organizations for their "in-kind" support toward making our field-testing and the production of this book possible. Special thanks also extended to the site cooperators who continue to generously give their support of the program, ***Vic Blanchette*** for the Fort St. John site, and ***School District 59*** for the use of the ***Hudson School Farm*** near Dawson Creek, BC**.** A further word of thanks goes out to ***Dennis Meier*** of Dawson Creek who continuously and generously offers us space on his adjacent farm for all our field equipment.

We should also thank our field and lab team whom once again helped to make this year yet another successful year. They are full-time technicians ***Satoru Nosho***, ***Brandi Smith***, and ***Rebekah Langlois*** whom all worked very hard and well together. Many thanks yet once again to ***Colleen Anderson*** for her help this time, in the review of this report.

This document reports all registered materials grown during the 2009 growing season from performance trials placed at both the Dawson Creek and Fort St. John research farms, and as such the **data compiled in this report is derived from "head-to-head" comparisons only**. Materials not included in 2009, but which were previously tested, may now be viewed via earlier publications and are available for viewing or downloading @ ***www.bcgrain.com***.

Multiple-year testing for any one variety is our goal, but often new materials have only been tested for one year, the current year usually. This can sometimes result in an unfair representation of the new single-year materials against statistically stronger multiple-year materials even though this report cautions readers about this possible effect. To try to resolve this issue starting in 2007 we now displayed the results in two graphs for each crop, one with only the current year's results, and one with multiple-year results. In the multiple-year graphs, new one-year data is left out. Where one-year results are shown, be it in current-year graphs or in charts, readers still **must interpret and use such one-year data with considerable caution**, as a variety may change position regarding both yield and maturity as additional results are obtained. This is simply the effect of compiling data from variable weather patterns over time. The more station years, (defined as one test site at one location in one year), that can be used to produce an average, the more stable and reliable the result will be, hence the association's steadfast efforts to procure such data. By providing readers now with a separate "current year graph" for each crop-type, many of the risks with looking at one-year data is still there but the chances of misrepresenting a new entry against its older neighbors is greatly reduced.

This book is produced without bias and is reported to the best of our ability from our own site data collected. It should only be used as a guide, and where labels are available with your product, always follow label directions.

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BC Grain Producers Association
- Reference & Terminology -

Station Years
The number of station years that the variety has been tested can be seen in the yield tables inside the square brackets [ ]. A station year is one test site at one location in one year. For example, a canola trial conducted at two locations over three years would have six station years, or [6]. We advise using caution if the data is based on *less than three station years in total*, or less than two years at both locations. This of course is a concern for canola where often a line does not even stay in the seed market for more than three years.

Interpreting Yield Results
Crops in this book are managed using the same level of inputs as field sized recommendations would suggest. Small-plot research plots offer better consistency and can be better controlled, whereas wet areas and variable soil fertility affect field-scale crop production. However, small plots are subject to *edge effect*. "Edge effect" is caused by the spaces around the individual plots allowing extra sunlight to penetrate, boosting yields on these exposed outer plants, as compared to the average plant in a field scale situation that would be shadowed by its neighbors. **The important concept here is that these effects are *equal* for *all* small plots in a given trial, and we can therefore compare varieties in each trial and look at resulting yields *relative to one another*.** Yields here are thus the result of *small plot production* and the same *level* of production is unlikely to be achieved on a large-scale basis. Unfortunately statistics, which are vital, cannot be used on "*percent of check variety*" data. Thus, we elected to show *bushels per acre* for this current year for the sole purpose of displaying statistical results for the current year. Treat *all* yields, (*percent of check* and *bushels per acre*), as relative results. Agronomic information for the check variety has been bolded in all the tables to identify it.

Plant Breeders Rights
The Plant Breeders' Rights (PBR) gives plant breeders "copyright" protection of a variety for up to 18 years. Once a variety has been granted PBR, the breeder has control over the multiplication and sale of the seed. The breeder can take legal action for damages if someone infringes on their rights. Farmers may save some seed for seeding the next year on their own farm, but the sale of the crop as seed for planting purposes to others is not allowed. Many new transgenic herbicide-tolerant varieties have additional restrictions through '*technical use agreements*', so be aware of these too, as they often replace PBR status and can have strong consequences if ignored. Varieties protected by PBR can be identified by their PBR logo on a seed bag, seed tag, or advertising material. This book tries to identify such PBR lines within "*Variety Description*" tables with a solid square box. Ultimately however, it is the responsibility of the grower to know which line is PBR.

Certified Seed
The cost of *certified seed* is a small additional expense in relation to total crop production input costs, especially when changing to a different variety. Certified seed assures genetic purity, high germination rates and low percentage of foreign seed when compared to common seed. Certified seed can be purchased in bulk through authorized seed dealer networks, (see "Seed Distributors" at the back of this report).

Seed Treatment
Choosing disease-resistant varieties and using certified seed is good, but treated seed goes a long way in the fight against plant diseases too. The cost of a fungicide or a combined fungicide/insecticide seed treatment can be a small price to pay for the amount of protection and peace of mind they provide. The right seed treatment choice is important as some perform better than others for certain crop types. Treated seed must not contaminate grain delivered to an elevator or be used for feed.

- Cereal seed should be treated to control *true loose smut* and early season *seedling* diseases.
- Seed of rye, winter wheat, and flax should be treated to control *seedling blight*. Winter wheat and rye also require protection against *smut*.
- Canola seed should be treated to control seed borne *blackleg*, *damping off*, and early *flea beetle* attack.

Ergot
The fungal disease Ergot can attack the grain of all varieties of wheat, barley, rye, triticale, and most common species of grass. Oat varieties are rarely attacked. Grain having 0.1% ergot is considered poisonous to livestock and should not be used as feed. The black rice-like *"seed mummies"* can be spotted prior to harvest in heads during a field inspection.

Seed Inoculation
Peas can make much of their nitrogen (N) requirement from the air through a partnership with soil bacteria called *Rhizobium*. The pea seed must be inoculated immediately before or during seeding with a proper strain of bacteria specific to peas. *Rhizobia* are living organisms so check the expiry date on the package and follow inoculant label directions carefully. Generally it is a good idea prior to its use and even during use if possible, to try and reduce the inoculant's exposure to sunlight, open-air, and warmth. Granular formulations placed with the seed have traditionally offered good results in Peace soils, but new inoculants are constantly entering the market place which may offer excellent inoculation as well. Survival of residual rhizobia organisms in our cool Peace soils is not consistently reliable; making use of inoculant with seed is a good form of insurance. High soil nitrogen levels (over 60 kg N/ha) will reduce nodulation in the field regardless of inoculation. Cool, dry, or excessively wet soils, provide a harsh environment for proper inoculation and under these conditions, a low level of nodulation formation will be seen. Granular inoculant placed with the seed at plant was used on all pea-trials seen here in this report.

Seeding Rates

While the following *range* of seeding rates has given consistent yields for each crop in these trials, experience has shown that the top end of the range provides even more consistent results. **Risk can be reduced under conditions of stress that impair emergence by increasing seeding rates.** In addition, higher seeding rates can reduce the amount of secondary tillering, **produce earlier and more uniform maturity**, and reduce the amount of green kernels at harvest.

For example, tests conducted by the Beaverlodge Research Station several years ago throughout the Peace region showed that by increasing the seeding rate of wheat from 80 to 120 lbs/ac (90 to 134 kg/ha), that the time to maturity was reduced by two days. Our own BCGPA trials involving seeding rates in barley did not show similar results upon conclusion. Initially our results did show that when increasing seeding rates to 2.25 to 2.5 bushels per acre for barley, it decreased maturity from 2 to even 4 days, which is significant by harvest. However, over the full 5 years of the project, results became less significant. Wheat was not tested.

Suggested Rates of Seeding

Wheat	90 - 120 lb/ac	100 - 135 kg/ha
CPS Wheat	130 - 180 lb/ac	145 - 200 kg/ha
Barley	75 - 100 lb/ac	85 - 110 kg/ha
Oats	70 - 90 lb/ac	85 - 100 kg/ha
Flax	26 - 40 lb/ac	30 - 35 kg/ha
Rye	65 - 85 lb/ac	73 - 95 kg/ha
Peas	150 - 300 lb/ac	165 - 330 kg/ha
Argentine Canola	5 - 8 lb/ac	6 - 9 kg/ha
Polish Canola	5.5 lb/ac	6 kg/ha

Due to large differences in seed sizes, seeding rates can vary considerably. Therefore, one should base the seeding rate on a *target number* of *viable seeds per square foot*. Using the 1000 kernel weights, adjusting for percent germination, and allowing for seed decay (3%), calculate the number of pounds of seed required per acre.

Crop Type	Seeds / sq.ft	avr. 1000 K wt
Wheat - CWRS	24 - 25	35 - 44 g
- CPS / CWES	24 - 25	44 - 52 g
Barley - 6 Row	24 - 25	35 - 43 g
- 2 Row	24 - 25	44 - 53 g
Oats - Hulled	24 - 25	38 - 47 g
Rye	24	30 - 35 g
Peas	8	200 - 345 g

Example (using peas):

Target **8** pea plants per square foot, the variety has a 1000 K wt. of **250** grams, and you estimate that between seed decay and percent germination of the seed lot that you will have, **90**% of the seeds will grow into healthy plants. Thus…

$$\frac{\textbf{8}\ \text{plants/sq.ft}\ \textbf{x 250}\ (\text{g/1000 K})}{\textbf{90}\ (\%)}\ \textbf{x 10 = 222}\ \text{lb/acre}$$

Answer: You would plant 222 lbs. of pea seed/acre.

BC Grain Producers Association - 2009 Growing Conditions -

Our farming season started cold and wet via the reluctance of winter to leave - delaying the initiation of planting as a result. Once planting started about the end of the first week of May, it was halted by mid-May via heavy late snowfall. Even after planting resumed late May, soil moisture reserves quickly depleted as little to no significant rainfall fell after planting and throughout the entire month of June. Soil temperatures also remained cool and ironically, for those who received the snowfall, it protected early emerging crops from the freezing temperatures and once it melted it gave those same crops their only real drink of moisture post-winter until early July.

Results from such a cool dry spring were reflected in the slow and stunted plant growth of the seedlings, placing most crops at least two weeks behind by July. Both research farms received the first significant rainfall on or near July 2nd that turned growing patterns around – and just in time. As a result, sincere tillering started finally for most cereals with the new growth outperforming the original spikes by harvest but with surprisingly little "green seed". For canola and flax, its "real" growth only started at this time – having laid almost dormant in order to survive the spring drought prior to July 2nd. The months of July and most of August were above normal temperatures with average rainfall which helped to make up for the potentially devastating spring. A lack of a killing frost until near Thanksgiving also helped our two sites finish up, although harvest was easily still one to two weeks behind.

The only exception to this pattern was the field peas, which took longer than normal to emerge but took the best advantage of the late snowfall to do most of its growth right through the dry month of June. As Dawson Creek was once again drier than Fort St. John during the drought, most crops (including peas) at DC were shorter than usual and lower yielding in 2009 than those grown at FSJ. In fact many crops at FSJ made some incredible yields once rains returned July/August as most crops there had less stress earlier on.

Interpreting Data

The yield for each variety is reported on a regional basis for the Dawson Creek and Fort St.John areas as well as an average for the entire BC Peace. Also, the number of years each variety has been tested is given for each of the two regions. In the following examples, the number of years is indicated in **[ ]** right after the yield. "Station years" are the total number of times a variety has been tested in these trials.

Two Row Barley — **Yield as % of AC Metcalfe**

Variety		Type	Dawson Creek 2009 Yield	Dawson Creek 2003-2009 Avg.	Dawson Creek Stn.Yrs.	Fort St.John 2009 Yield	Fort St.John 2003-2009 Avg.	Fort St.John Stn.Yrs.	B.C. Peace 2009 Yield	B.C. Peace 2003-2009 Avg.	B.C. Peace Stn.Yrs.
XENA	2-row	feed	115	113	[3]	125	105	[5]	120	109	[8]

Number of **years** the variety was tested at **each station**

Number of **times** in total the variety was tested in the **BC Peace**.

note: above example is dramatization

Statistical Values Entries into the Regional trials are replicated (or repeated) four times (three times minimum) at both locations. Replication is used to derive an overall average per entry per trial, and allow for statistical analysis.

Coefficient of Variance (CV value) , given as a percentage, it tells us how statistically sound or reliable a given data set is. Generally, any value less than or equal to 15% is considered to be acceptable and indicates "sound" data. This means if you were to repeat the trial under similar conditions, you would get similar results, or at least we are 95% confident that we would. We tend to be a little more lenient on this 15% for such things as disease or insect data, as these are normally highly variable due the nature of the beast, but we do not like to see yield data from a single trial with a high CV value. Anything less than 10% is considered excellent.

Least Significant Difference test (LSD value) , are those little letters behind the *data means* . Basically, if two or more *data means* (or averages) have the same letter behind their number, they are NOT significantly different from one another according to statistics. Therefore, means or averages with the same letter should not be viewed as one being "superior" or "inferior" from the other or others of the same letter. LSD takes variability into account, and compares "apples" to "apples".

Example:

	Dawson Creek	
	2009	2003-2009
Variety	**Yield**	**Avg. Stn.Yrs.**
Super X	105 ab	102 [3]
Superdooper Y	107 a	105 [3]
So-So 101	100 b	98 [2]
Old Goody	95 c	97 [6]

In this example, some people might think variety "*Superdooper Y*" is superior to variety "*Super X*" and "*So-So 101*". This is not true according, to statistics, "*Superdooper Y*" is superior to variety "*So-So 101*", but is equivalent to "*Super X*" in yield because both "*Superdooper*" and "*Super X*" have the letters "*a*" with them. In this example, "*Super X*" is not superior (or significantly different), from variety "*So-So 101*" either, as both have a "*b*" behind their means. Also, "*Superdooper Y*", "*Super X*", and "*So-So 101*" are superior to, (or a better term is significantly different from), "*Old Goody*". Note, in this report, we only have LSD values for this current year's data, and thus you should still take notice of the long term averages. Note that preferably data should have six station years, (usually meaning 3 years at each site), but that for **any varieties with less than three station years of data, you must compare data with caution.**

Fertilizer Rates Used In 2009

Fort St. John, B.C. **Legal Description: SW19 Tp84 R18 W6**

Crop	Fertilizer Applied	kg/ha	Placement	lbs actual/ac Recom. vs. Applied	Enviro-Test Labs N	$P_2 0_5$	K_2O	S
Canola	27-0-0-12	69	banded	Recommended* =	0	30	15	5
	6-26-30	50	banded	Actually applied =	22.5	25.5	13.4	7.4
	12-52-0	30	in-furrow					
Flax	27-0-0-12	69	banded	Recommended* =	25	30	15	10
	6-26-30	50	banded	Actually applied =	22.5	25.5	13.4	7.4
	12-52-0	30	in-furrow					
Cereals	34.5-0-0-0	75	banded	Recommended* =	0	25	15	5
	6-26-30	50	banded	Actually applied =	28.6	25.5	13.4	0
	12-52-0	30	in-furrow					
Peas	27-0-0-12	0	banded	Recommended* =	0	30	15	0
	6-26-30	50	banded	Actually applied =	6.0	25.5	13.4	0
	12-52-0	30	in-furrow					

Dawson Creek, B.C. **Legal Description: SW20 Tp78 R14 W6**

Crop	Fertilizer Applied	kg/ha	Placement	lbs actual/ac Recom. vs. Applied	Enviro-Test Labs N	$P_2 0_5$	K_2O	S
Canola	27-0-0-12	90	banded	Recommended* =	25	25	20	15
	6-26-30	55	banded	Actually applied =	27.8	26.7	14.7	9.6
	12-52-0	30	in-furrow					
Flax	27-0-0-12	50	banded	Recommended* =	10	25	15	10
	6-26-30	50	banded	Actually applied =	17.9	25.5	13.4	5.4
	12-52-0	30	in-furrow					
Wheat & Barley	34.5-0-0-0	75	banded	Recommended* =	0	27	12	0
	6-26-30	50	banded	Actually applied =	28.6	25.5	13.4	0
	12-52-0	30	in-furrow					
Malt Barley & Oats	34-0-0-0	64	banded	Recommended* =	0	30	15	5
	6-26-30	50	banded	Actually applied =	25.3	25.5	13.4	0
	12-52-0	30	in-furrow					
Peas	27-0-0-12	0	banded	Recommended* =	0	20	15	0
	6-26-30	50	banded	Actually applied =	6.0	25.5	13.4	0
	12-52-0	30	in-furrow					

Recommended* = recommendations given by Enviro-Test Labs of Calgary, Alberta, calculated from soil samples pulled earlier in the spring of the same calendar year.

Pesticide Applications

Fort St. John, B.C.	Legal Description: SW19 Tp84 R18 W6		
Crop	**Date Applied**	**Product Used**	**Product Rate**
Canola	19-Jun-09	Muster (ethametsulfuron methyl)	12 g/ac
		Lontrel 360 (clopyralid)	227 ml/ac
		Poast Ultra (sethoxydim)	200 ml/ac
		Merge	400 ml/ac
	11-Jun-09	Decis	60 ml/ac
Field Peas	21-May-09	Roundup Ultra (glyphosate) (pre-emerge to crop following no-till planting; all plots checked first for emergence)	500 ml/ac
	--	Late weeds controlled by hand-pulling in crop	
Flax	21-May-09	Roundup Ultra (glyphosate) (pre-emerge to crop following no-till planting; all plots checked first for emergence) Late weeds controlled by hand-pulling in crop	500 ml/ac
Wheat, Barley, Oat	21-May-09	Roundup Ultra (glyphosate) (pre-plant to no-till planting; late weeds hand-pulled)	500 ml/ac

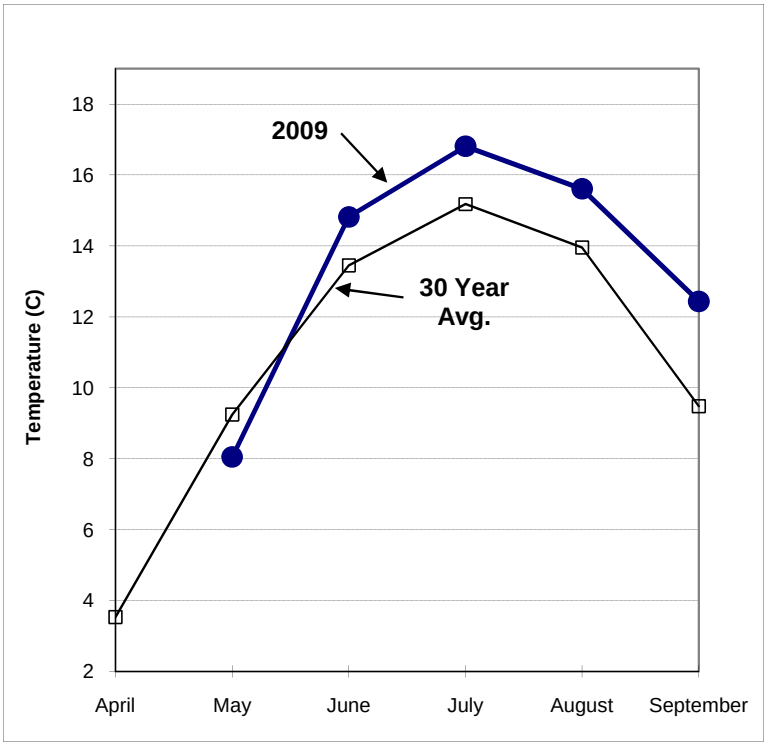
Dawson Creek, B.C.	Legal Description: SW20 Tp78 R14 W6		
Crop	**Date Applied**	**Product Used**	**Product Rate**
Wheat & Barley	18-Jun-09	Refine Extra (older formulation)	8 g/ac
Oats, Malt Barley		AgSurf	2L/1000L H2O
Field Peas	10-Jun-09	Sencor (metribuzin) 75%DF	77 g/ac
		MCPA Sodium	190 ml/ac
	--	(late flushes of grasses hand-pulled - very few)	
Flax	15-Jun-09	Curtail-M	800 ml/ac
	--	(late flushes of grasses hand-pulled - very few)	
Canola (napus & rapa)	19-Jun-09	Muster (ethametsulfuron methyl)	12 g/ac
		Lontrel 360 (clopyralid)	227 ml/ac
		Poast Ultra (sethoxydim)	200 ml/ac
		Merge	400 ml/ac
	15-Jun-09	Decis	60 ml/ac

All seed was treated with seed treatment; canola with Helix Xtra®, cereal & flax with Raxil FL®, and pea seed with Vitaflo 280®.

Planting and Harvest Information

Loc.	Crop	Seeding rate lbs/ac	Seeding rate kg/ha	Date Planted	Soil Temp (C^o) @ plant	Seeding Depth	Harvest Date	Harvesting Method
FSJ	**Napus Canola**	8	8.9	16-May-09	4	0.75 - 1 inch	23-Sep-09	crop-push/direct
	Flax	40	45	11-May-09	9	0.5 - 0.75 inch	27-Sep-09	desiccate/direct
	Barley	77	86	22-May-09	8	0.5 - 1 inch	5-Sep-09	direct cut
	CWRS Wheat	90	101	22-May-09	8	0.5 - 1 inch	18-Sep-09	direct cut
	CPS/CWES	90	101	22-May-09	8	0.5 - 1 inch	2-Oct-09	direct cut
	Oats	81	90	22-May-09	8	0.5 - 1 inch	11-Sep-09	direct cut
	Triticale	117	131	22-May-09	8	0.5 - 1 inch	2-Oct-09	direct cut
	Peas	149	167	9-May-09	7	1 inch	28-Aug-09	desiccate/direct
DC	**Napus Canola**	8	8.9	15-May-09	5	0.75 inch	24-Sep-09	crop-push/direct
	Flax	40	45	10-May-09	6	0.75 inch	25-Sep-09	desiccate/direct
	Barley	77	86	23-May-09	9	0.75 inch	12-Sep-09	direct cut
	CWRS Wheat	90	101	23-May-09	9	0.75 inch	22-Sep-09	direct cut
	CPS/CWES	90	101	23-May-09	9	0.75 inch	1-Oct-09	direct cut
	Oats	81	90	24-May-09	8	0.75-1 inch	16-Sep-09	direct cut
	Triticale	117	131	23-May-09	9	1 inch	1-Oct-09	direct cut
	Peas	149	167	8-May-09	5	1 - 1.25 inch	29-Aug-09	direct cut

Dawson Creek Weather Information 2009



TEMPERATURE

Month	Monthly Avg. Temp. (C)	Temp.* 30 year Avg. (C)
April		3.5
May	8.0	9.2
June	14.8	13.5
July	16.8	15.2
August	15.6	14.0
September	12.4	9.5

Frost Events: -7.4 May 20 **-2.4 June 6**
-1.5 June 1 **-2.2 Oct 1**

Killing Frost (-2.2 C) Free Period: 116 days
June 6 to October 1

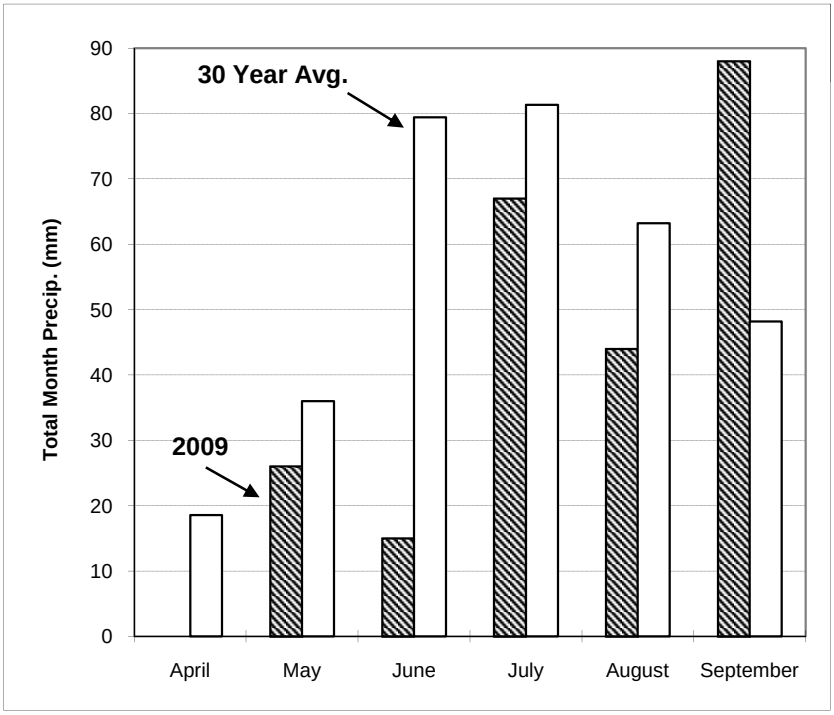
Accumulated Growing Degree Days:
2009: 1230
1994-2009 Average: 1193

* 30 year average DC from 1968-1997
Source: Environment CANADA

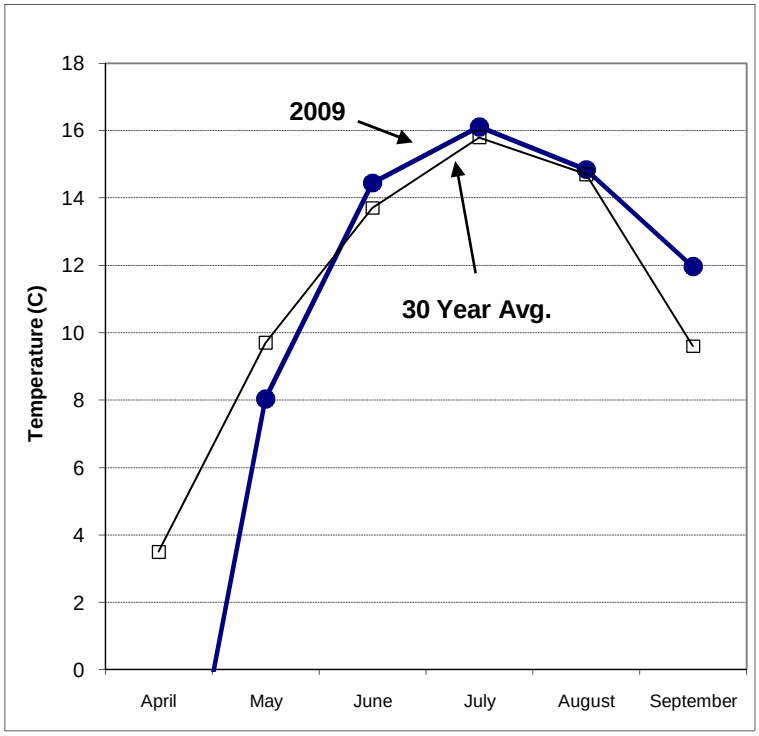
PRECIPITATION

Month	Monthly Precipitation (mm)	Precipitation * 30 year Avg. (mm)
April		19
May	26	36
June	15	79
July	67	81
August	44	63
September	88	48

Data is provided by an on site weather station maintained by the Agriculture Risk Management Branch of the BC Ministry of Agriculture and Lands.



Fort St. John Weather Information 2009



TEMPERATURE

Month	Monthly Avg. Temp. (C)	Temp.* 30 year Avg. (C)
April	-8.6	3.5
May	8.0	9.7
June	14.4	13.7
July	16.1	15.8
August	14.8	14.7
September	12.0	9.6

Frost Events: **-4.4 May 19** -1 August 14 & 15
-1.3 June 7 **-3.5 Oct 3**

Killing Frost (-2.2 C) Free Period: 136
May 19 to October 3

Accumulated Growing Degree Days:
2009: 1184
1994-2009 Average: 1173

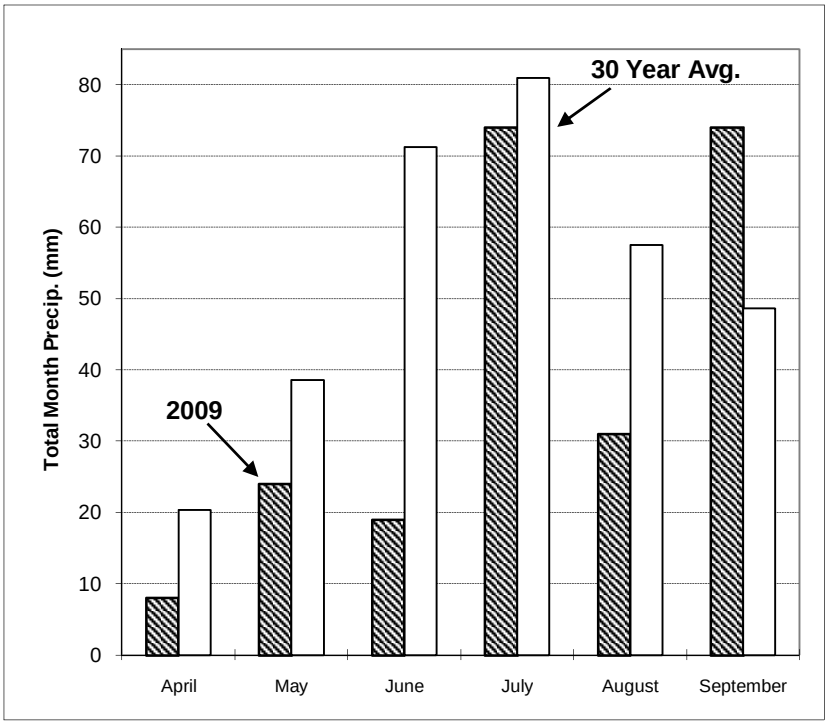
* 30 year average FSJ from 1968-1997
source: Environment CANADA

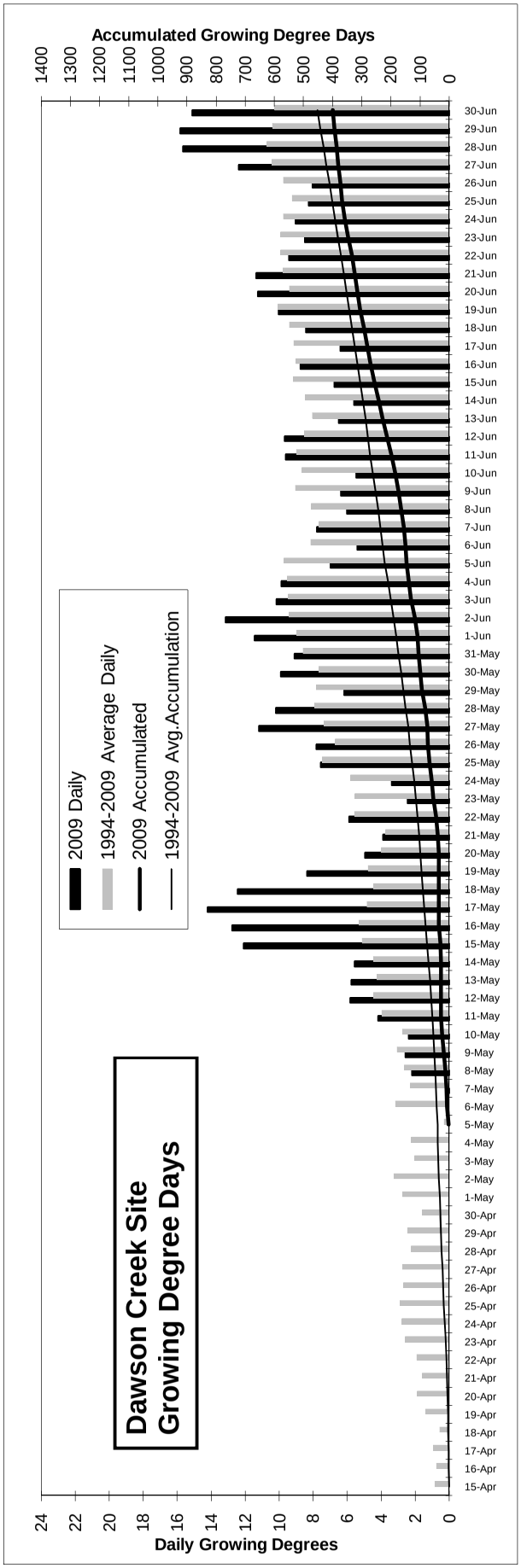
PRECIPITATION

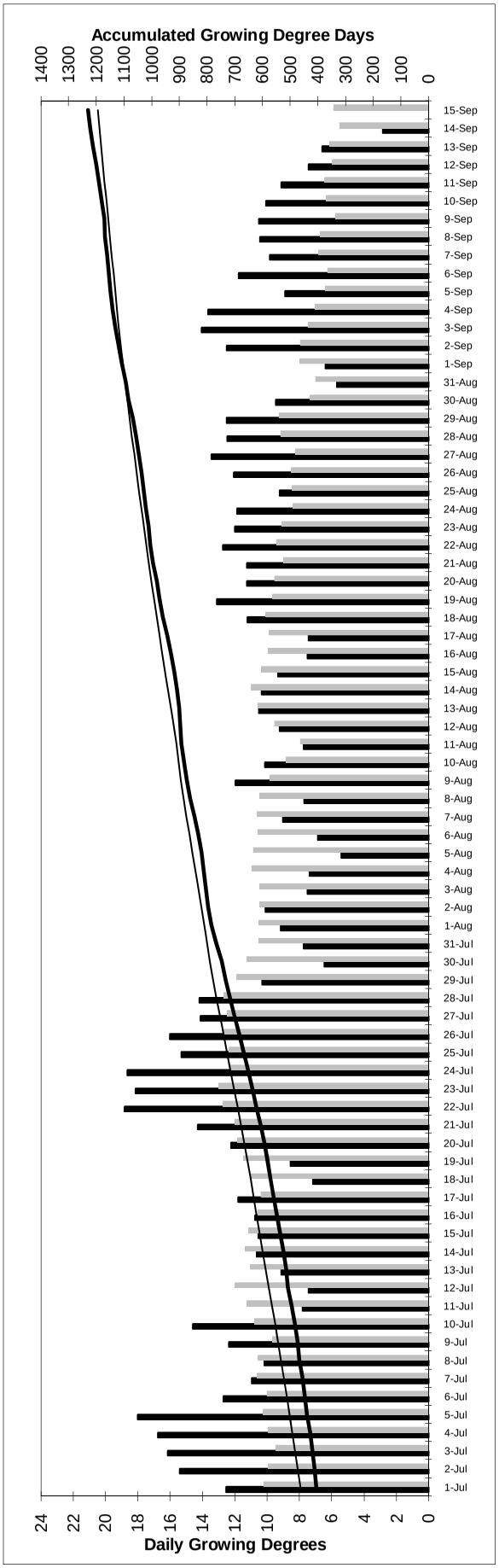
Month	Monthly Precipitation (mm)	Precipitation * 30 year Avg. (mm)
April	8	20
May	24	39
June	19	71
July	74	81
August	31	58
September	74	49

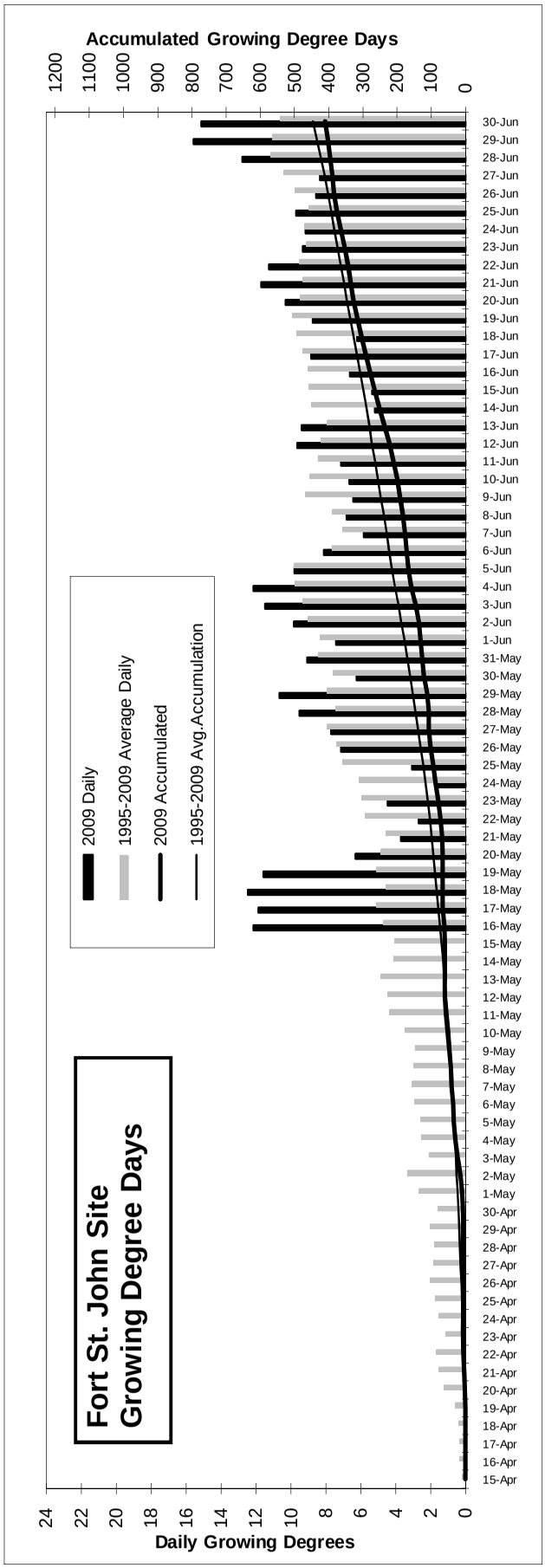
Data is provided by an on site weather station maintained by the Agriculture Risk Management Branch of the BC Ministry of Agriculture and Lands.

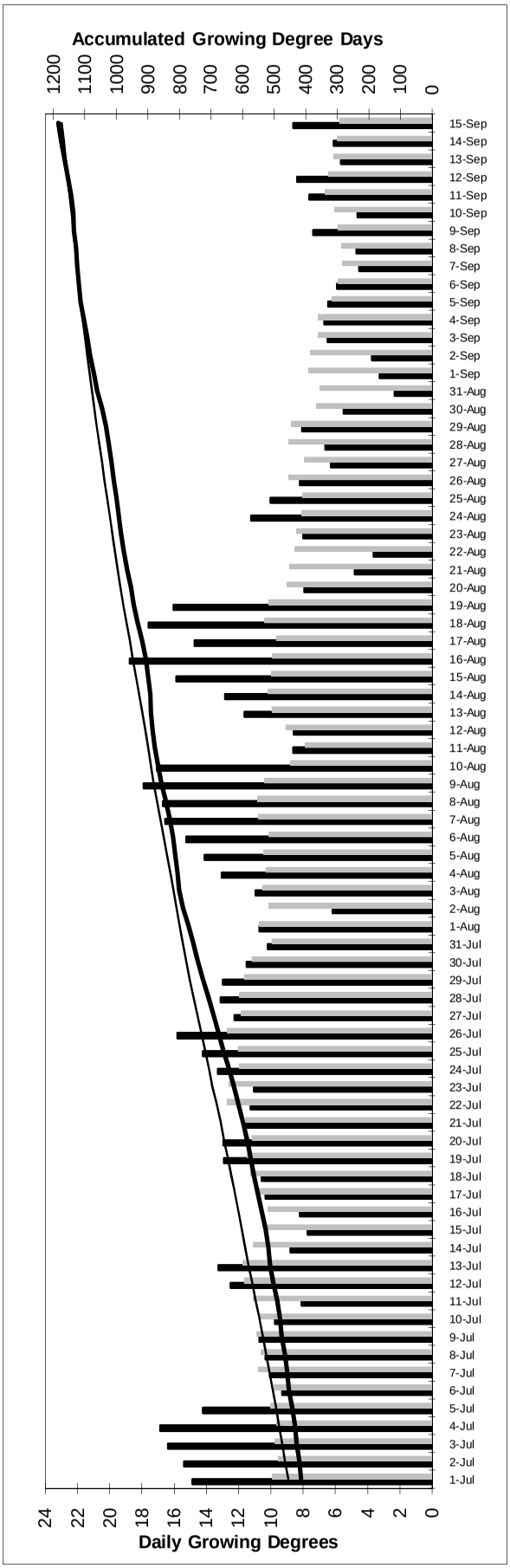
Production INSURANCE for British Columbia




Dawson Creek Site
Growing Degree Days
2009 Daily
1994-2009 Average Daily
2009 Accumulated
1994-2009 Avg.Accumulation
Accumulated Growing Degree Days
Daily Growing Degrees


Accumulated Growing Degree Days
Daily Growing Degrees


Accumulated Growing Degree Days
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
30-Jun
29-Jun
28-Jun
27-Jun
26-Jun
25-Jun
24-Jun
23-Jun
22-Jun
21-Jun
20-Jun
19-Jun
18-Jun
17-Jun
16-Jun
15-Jun
14-Jun
13-Jun
12-Jun
11-Jun
10-Jun
9-Jun
8-Jun
7-Jun
6-Jun
5-Jun
4-Jun
3-Jun
2-Jun
1-Jun
31-May
30-May
29-May
28-May
27-May
26-May
25-May
24-May
23-May
22-May
21-May
20-May
19-May
18-May
17-May
16-May
15-May
14-May
13-May
12-May
11-May
10-May
9-May
8-May
7-May
6-May
5-May
4-May
3-May
2-May
1-May
30-Apr
29-Apr
28-Apr
27-Apr
26-Apr
25-Apr
24-Apr
23-Apr
22-Apr
21-Apr
20-Apr
19-Apr
18-Apr
17-Apr
16-Apr
15-Apr
2009 Daily
1995-2009 Average Daily
2009 Accumulated
1995-2009 Avg.Accumulation
Fort St. John Site
Growing Degree Days
24
22
20
18
16
14
12
10
8
6
4
2
0
Daily Growing Degrees


Accumulated Growing Degree Days
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
15-Sep
14-Sep
13-Sep
12-Sep
11-Sep
10-Sep
9-Sep
8-Sep
7-Sep
6-Sep
5-Sep
4-Sep
3-Sep
2-Sep
1-Sep
31-Aug
30-Aug
29-Aug
28-Aug
27-Aug
26-Aug
25-Aug
24-Aug
23-Aug
22-Aug
21-Aug
20-Aug
19-Aug
18-Aug
17-Aug
16-Aug
15-Aug
14-Aug
13-Aug
12-Aug
11-Aug
10-Aug
9-Aug
8-Aug
7-Aug
6-Aug
5-Aug
4-Aug
3-Aug
2-Aug
1-Aug
31-Jul
30-Jul
29-Jul
28-Jul
27-Jul
26-Jul
25-Jul
24-Jul
23-Jul
22-Jul
21-Jul
20-Jul
19-Jul
18-Jul
17-Jul
16-Jul
15-Jul
14-Jul
13-Jul
12-Jul
11-Jul
10-Jul
9-Jul
8-Jul
7-Jul
6-Jul
5-Jul
4-Jul
3-Jul
2-Jul
1-Jul
24
22
20
18
16
14
12
10
8
6
4
2
0
Daily Growing Degrees

List of Certified Seed Distributors

AgriPro
Syngenta Seeds Canada
1001 Thornbill St., Box 5105, R6M 1Y9
Morden, Manitoba
Tel: (204) 822-5412
www.agriprowheat.com

Agriprogress Inc.
Box 2499 Morden, MB R6M 1C2
Tel: 204-331-3611
Fax: 204-325-8052

Bayer CropScience Canada Co.
#100, 3131-114 Ave. SE Calgary AB T2Z3X2
Tel: (888) 283-6847 (toll-free help desk)
www.bayercropscience.ca

Bonis & Company Ltd.
P.O. Box 217 Lindsay, ON K9V 5Z4
Tel: (705) 324-0544

Brett - Young Seeds Ltd.
Box 99, St. Norbert Postal Station,
Winnipeg, MB R3V 1L5
Tel: 1-800-665-5015
www.byseeds.com

Canseed Ltd.
R.R. #1, Box 1155 Stettler, AB T0C 2L0
Tel: 403-742-4091
Fax: 403-742-0621

Canterra Seeds Ltd.
201-1475 Chevier Blvd.
Winnipeg, MB R3T 1Y7
Tel: (204) 992-2727
1-877-439-7333 (toll-free)
www.canterra.com

Cargill Canada
P.O. Box 5900
300-240 Graham Avenue
Winnipeg, Manitoba
CANADA R3C 4C5
Tel: +1-204-947-0141
Fax: +1-204-947-6444
www.cargill.com

Columbia Seed Company Limited
Box 808 Grassy Lake, AB T0K 0Z0
Tel: (403) 654-2158
www.klempnauer.ab.ca

Dekalb Canada Seeds (Monsanto)
67 Scurfield Blvd. Winnipeg, MB R3Y 1G4
Tel: (800) 667-4944
www.dekalb.com

DSV Canada Inc.
Box 99 St. Norbert Postal Station
Winnipeg, MB R3V 1L5
Tel: (204) 261-7932

FarmPure Seeds
422 McDonald St. Regina SK S4N 6E1
Tel: (877) 791-0500
www.farmpure.com

Haney Farms Ltd.
Box 280 Picture Butte, Alberta T0K 1V0
Toll Free: (877) 738-4517
Phone: (403) 738-4517
Email: office@haneyfarms.com

Monsanto Canada
PO Box 181, Rycroft, AB T0H 3A0
Tel: (780) 518-3963 Nick Sekulic
Tel: (800) 667-4944 (info line)
www.monsanto.ca

Pioneer Hybrid
Box 730 Country Rd 264
Chatham, ON N7M 5L1
Tel: (250) 782-4800 or (800) 265-9435
www.pioneer.com/canada

Prairie Seeds Ltd.
RR#4, Corner of Hwy 60 & Hwy 39
Calmar, AB T0C 0V0
Tel: (780) 985-7305 or (800) 369-5503
www.prairiebrandseed.com

Progressive Seeds Ltd.
4819C-48 Ave Red Deer, AB T4N 3T2
Tel: (403) 347-4925
www.progressiveseeds.ca

SeCan Association
201-52 Antares Dr. Ottawa ON K2E 7Z1
Tel: (613) 225-6891 or (800) 764-5487
www.secan.com

Seed-Link Inc.
Box 217 Lindsay, ON K9V 5Z4
Tel: (705) 324-0544
www.seed-link.ca

S.S. Johnson Seeds Ltd.
Box 3000 Arborg, MB R0C 0A0
Tel: (204) 376-5228
Toll-free:1-800-363-9442
www.johnsonseeds.com

Syngenta
Western Regional Office:
Syngenta Crop Protection Canada, Inc.
Suite 300, 6700 Macleod Trail South
Calgary, Alberta
T2H 0L3
Ph: (403) 219-5400
www.syngenta.ca

University of Alberta
114 St 89 Ave. Edmonton, AB T6G 2M7
Tel: (403) 492-3239
www.afns.ualberta.ca

Viterra / Proven Seeds
Dawson Creek Tel: (250) 782-9264
Fort St.John Tel: (250) 785-3445
Proven Seeds Tel: (800) 565-7333
www.viterra.ca