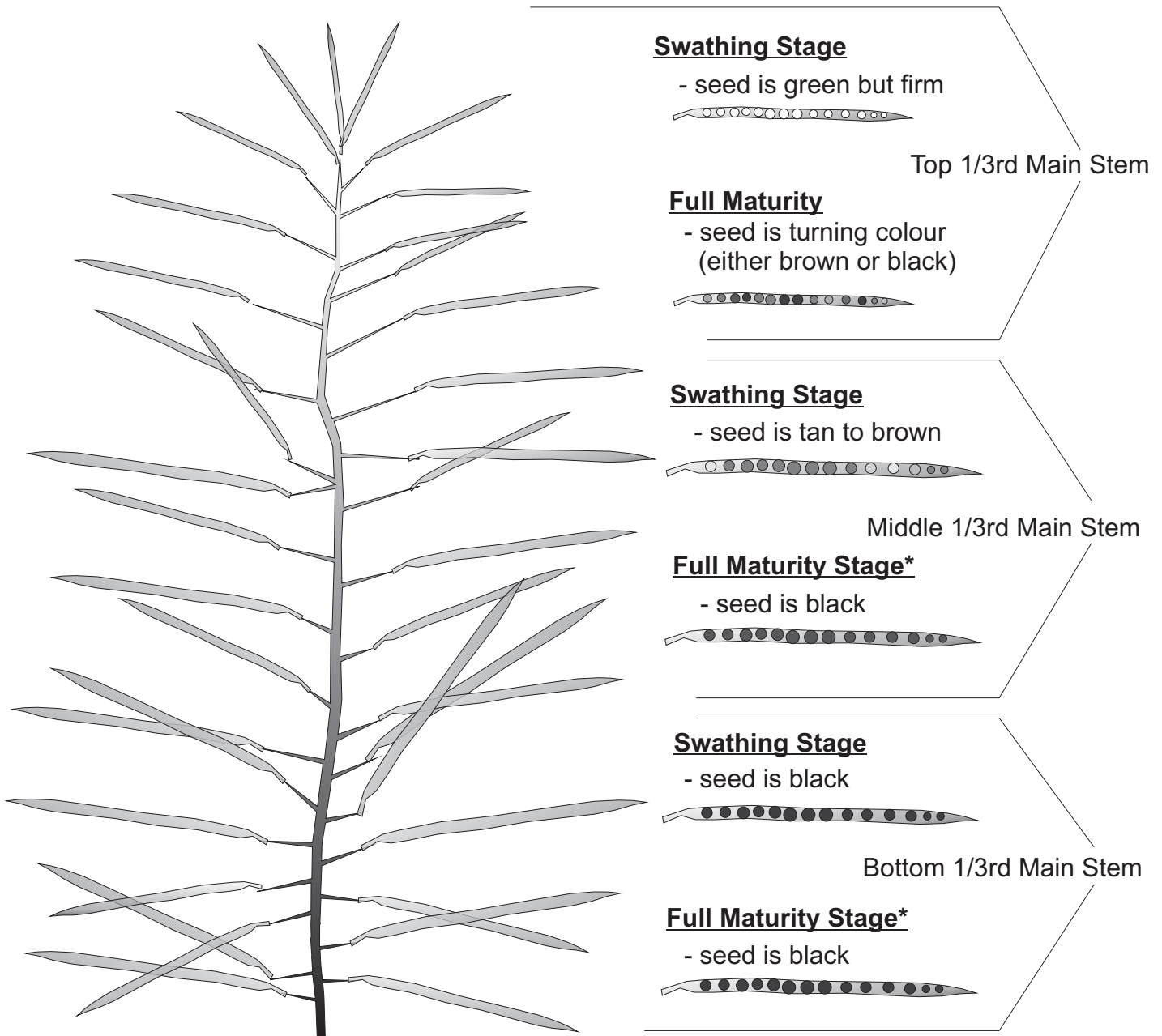


# Definitions of Canola Maturity Used In This Report

Please check with the *Canola Council of Canada* for complete definition of “swathing maturity”.

It is very important to split pods and check the seed inside as outer pod colour does not reflect the true maturity of the plant. Often the outer pod colour can still be green while seed inside has turned to black. Other times the pod colour could be pale yellow while green seed is within. One field inspection is not enough, one must visit a particular field several times to catch a progression in maturity so as not to miss the safe swathing period. Cool wet weather periods can slow or even temporarily halt the progression of maturity, especially prior to swathing. Several portions of the same field per variety must be checked as well because often minor field variations can change maturity across a given field.



\*Full Maturity Stage: as defined in this report on page 21 under column “days to mature”.

## Five Insect Pests in Peace River Region Canola

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The BC Peace region is not an especially bad place for insect damage to canola crops, but since insecticide treatments can make the difference between a positive and a negative financial margin, and untreated insect pests in a particular year can be even more costly, it is worth knowing the players and the risks. Further information is available from agriculture service suppliers (id. booklets), on websites such as Canola Council [http://www.canola-council.org/growing\\_watchreports.html](http://www.canola-council.org/growing_watchreports.html), and at other websites mentioned below.

Here are brief discussions of five insect pests that have caused significant damage in the past: flea beetles, cut worms, lygus bugs, Bertha armyworm and diamondback moth.

**Flea beetles:** at the emergence to cotyledon crop stage, high beetle populations can move from last year's fields and gradually add damage to a slower emerging crop when the weather is dry or cool and seed treatments have worn off from early seeding, or a switch to warm weather can make the beetles active and destroy a crop in a day or two. While there is always some flea beetle damage, plants in good growing conditions can quickly outgrow damage that is below the economic threshold <http://www.canola-council.org/fleabeetlemonitoring.aspx>. Canola seedlings can withstand 50 % leaf loss, but a decision to treat should be made when damage approaches 25 % of the leaf surface. Checking the intensity of beetles on early weeds or volunteer canola more developed than the crop can give a warning of crop damage to come.

**Cut worms:** are less common than flea beetles and cause damage only in fields where they were last fall. Each plant fed on is killed, so plants up to a few leaves can disappear in patches.

**Lygus bugs:** do their greatest damage to buds or developing pods. Healthy plants with moisture can compensate for damage, but high populations damaging plants before bolting may be worth treatment. A sweep net and threshold numbers (see Crop Watch reports [http://www.canola-council.org/growing\\_watchreports.html](http://www.canola-council.org/growing_watchreports.html)) could make a treatment decision more financially valid.

**Bertha armyworm and diamond back moth** caterpillars feed on canola leaves and in certain years can destroy crops. Bertha populations result from last year's population in the same area, so it could be valuable to be aware of monitoring from the previous summer, if it indicates some developing possible "hot spots" in the Peace. Diamondback moths arrive on the wind in Canada each spring, so are not related to last year's population. Risk maps (search Bertha diamondback map) for both these species are available at the website: <http://www.agf.gov.bc.ca/cropprot/forecastmaps.htm>

Contact the BC Agriculture office if you would like to be involved in monitoring for these pests. [Kerry.clark@gov.bc.ca](mailto:Kerry.clark@gov.bc.ca)

# CANOLA

Argentine Canola		Yield as % of 46A65								
		Dawson Creek**			Fort St. John			B.C. Peace		
Variety	Type	2006	2003-2005		2006	2003-2006		2006	2003-2006	
		% of check	Avg. (%)	Stn. Yrs.	% of check	Avg. (%)	Stn. Yrs.	Avg. (%)	Avg. (%)	Stn. Yrs.
<b>46A65</b>	<b>conventional</b>	<b>100</b>	<b>[10]</b>		<b>100</b>	<b>100</b>	<b>[10]</b>	<b>100</b>	<b>100</b>	<b>[20]</b>
Peace	conventional	85	[3]		70	87	[4]	70	86	[7]
1818 *	Roundup Ready®				126	126	[1]	126	126	[1]
1896	Roundup Ready®	97	[2]		114	104	[3]	114	100	[5]
9551	Roundup Ready®	107	[1]		131	116	[2]	131	112	[3]
1759 S *	Roundup Ready®				123	123	[1]	123	123	[1]
1839 V	Roundup Ready®	99	[1]		106	102	[2]	106	100	[3]
1852 H *	Roundup Ready®				127	127	[1]	127	127	[1]
225RR	Roundup Ready®	100	[3]		108	100	[4]	108	100	[7]
32-75	Roundup Ready®	105	[1]		117	109	[2]	117	107	[3]
43A56	Roundup Ready®	98	[3]		107	98	[4]	107	98	[7]
45H21	Roundup Ready®	109	[3]		119	108	[6]	119	109	[9]
45H24	Roundup Ready®	106	[2]		131	119	[3]	131	113	[5]
45H25	Roundup Ready®	106	[1]		121	114	[2]	121	110	[3]
45H26 *	Roundup Ready®				128	128	[1]	128	128	[1]
46P50 *	Roundup Ready®				139	139	[1]	139	139	[1]
71-45 RR	Roundup Ready®	117	[1]		147	126	[2]	147	121	[3]
997 RR *	Roundup Ready®				106	106	[1]	106	106	[1]
Café *	Roundup Ready®				107	107	[1]	107	107	[1]
FortuneRR	Roundup Ready®	95	[3]		100	97	[4]	100	96	[7]
LBD449RR	Roundup Ready®	90	[3]		86	90	[4]	86	90	[7]
LBD612RR	Roundup Ready®	101	[2]		114	104	[3]	114	102	[5]
LBD644RR	Roundup Ready®	105	[3]		99	103	[4]	99	104	[7]
Prairie 719RR	Roundup Ready®	104	[1]		103	103	[2]	103	103	[3]
Reaper	Roundup Ready®	102	[1]		89	89	[2]	89	96	[3]
SP 621 RR *	Roundup Ready®				125	125	[1]	125	125	[1]
SP Banner	Roundup Ready®	104	[3]		117	101	[4]	117	102	[7]
SP Desirable RR	Roundup Ready®	110	[1]		109	112	[2]	109	111	[3]
SP Favourable RR *	Roundup Ready®				104	104	[1]	104	104	[1]
SW 3950	Roundup Ready®	100	[1]		88	95	[2]	88	98	[3]
SW 6802	Roundup Ready®	96	[2]		99	99	[3]	99	98	[5]
SW 9803	Roundup Ready®	105	[1]		120	116	[2]	120	111	[3]
v1030	Roundup Ready®	112	[1]		117	110	[2]	117	111	[3]
v1031	Roundup Ready®	111	[1]		110	108	[2]	110	109	[3]
v1035 *	Roundup Ready®				138	138	[1]	138	138	[1]
5020	LibertyLink®	129	[3]		120	117	[4]	120	123	[7]
5030	LibertyLink®	112	[3]		138	121	[4]	138	116	[7]
5070	LibertyLink®	119	[3]		143	127	[3]	143	123	[6]
5108	LibertyLink®	87	[2]		91	106	[3]	91	97	[5]
9590 *	LibertyLink®				131	131	[1]	131	131	[1]
74P00 LL *	LibertyLink®				116	116	[1]	116	116	[1]
292CL	Clearfield®	98	[1]		119	110	[2]	119	104	[3]
45H72	Clearfield®	105	[2]		118	107	[3]	118	106	[5]
45H73 *	Clearfield®				126	126	[1]	126	126	[1]
45P70 *	Clearfield®				128	128	[1]	128	128	[1]
71-20 CL	Clearfield®	97	[2]		111	103	[3]	111	100	[5]
Manor	Clearfield®	101	[1]		118	103	[2]	118	102	[3]
SP Force CL *	Clearfield®				92	92	[1]	92	92	[1]

### 46A65 - check variety

\* caution, first year tested and or very limited data available

Roundup Ready® is a registered trademark of Monsanto Canada Inc.

LibertyLink® is a registered trademark of Bayer CropScience

Clearfield® is a registered trademark of BASF

\*\* No yield data available from Dawson Creek site in 2006 due to severe drought conditions.

**Note:** "System Varieties" (Clearfield®, Roundup Ready®, or LibertyLink®) are grown together in with "conventional" Argentine varieties (actually as three napus trials with a common check) and thus, conventional herbicides are used for weed control. (See page 6 for herbicides used). However, combining the three trials to produce the chart above means statistical analysis cannot be shown for the entire group. Coefficient of Variance (CV) values of the three individual napus trials per site for 2006 were as follows: DC = unacceptable (thus not used) FSJ = 9.26, 8.75, 9.82

Argentine Canola				Variety Descriptions			
Variety	Type	Herbicide Tolerance	B.C. Peace Avg. 2003-2006**		Alberta Agdex 100/32	Canola Council of Canada	Distributor
			Days to Swathing <sup>1</sup> as +/- check	Days to Mature <sup>1</sup> as +/- check	Straw Strength + = better	Blackleg Rating	
1818 *	OP	Roundup Ready®	1	3		R	Monsanto
1896	HYB	Roundup Ready®	-3	-1	0	R	Canterra
5020	HYB	LibertyLink®	-2	-3	0	R	Bayer
5030	HYB	LibertyLink®	0	1	1	R	Bayer
5070	HYB	LibertyLink®	0	1	0	R	Bayer
5108	HYB	LibertyLink®	-5	-4			Bayer
■ 9551	OP	Roundup Ready®	0	2		MR	SW Seed Ltd
9590 *	HYB	LibertyLink®	-7	-3		R	Bayer
1759 S *	SYN	Roundup Ready®	0	-1		MR	Canterra
■ 1839 V	OP	Roundup Ready®	-3	-3		MR	Canterra
1852 H *	HYB	Roundup Ready®	-1	-3		R	SW Seed Ltd
■ 225RR	OP	Roundup Ready®	1	1	1	MR	Monsanto
■ 292CL	OP	Clearfield®	3	4	0	R	Monsanto
32-75	OP	Roundup Ready®	-1	-2		R	Monsanto
■ 43A56	OP	Roundup Ready®	-8	-8	0	MR	Pioneer
45H21	HYB	Roundup Ready®	-2	-2	1	R	Pioneer
45H24	HYB	Roundup Ready®	-3	-4	0	R	Pioneer
45H25	HYB	Roundup Ready®	-3	-4	0	R	Pioneer
45H26 *	HYB	Roundup Ready®	-7	-9		R	Pioneer
45H72	HYB	Clearfield®	0	1	0	R	Pioneer
45H73 *	HYB	Clearfield®	-5	-4		R	Pioneer
45P70 *	HYB	Clearfield®	-1	-3		R	Pioneer
■ 46A65	OP	Conventional	0	0	0	R	Pioneer
46P50 *	HYB	Roundup Ready®	4	2		R	Pioneer
71-20 CL	HYB	Clearfield®	-5	-4	0	R	Monsanto
71-45 RR	HYB	Roundup Ready®	0	0	0	MR	Monsanto
74P00 LL *	OP	LibertyLink®	5	3		MS	Bonis & Co Ltd.
997 RR *	OP	Roundup Ready®	-3	-2		R	Brett-Young
Café *	OP	Roundup Ready®	-8	-6		R	SW Seed Ltd
FortuneRR	OP	Roundup Ready®	1	1	0	R	SeCan
LBD449RR	OP	Roundup Ready®	0	0	1	R	Brett-Young
LBD612RR	OP	Roundup Ready®	-1	1			Brett-Young
LBD644RR	OP	Roundup Ready®	-1	0			Brett-Young
■ Manor	OP	Clearfield®	4	5	-1	MS	FarmPure Seeds
■ Peace	OP	Conventional	-9	-9	0	MR	Sask W P
Prairie 719RR	OP	Roundup Ready®	0	-1			Prairie Seeds Inc
■ Reaper	OP	Roundup Ready®	3	5	0	R	FarmPure Seeds
SP 621 RR *	HYB	Roundup Ready®	-3	-3		MR	Sask W P
■ SP Banner	OP	Roundup Ready®	1	-1	0	R	Sask W P
SP Desirable RR	SYN	Roundup Ready®	-2	-1	0	R	Sask W P
SP Favourable RR *	SYN	Roundup Ready®	0	-1		MR	Sask W P
SP Force CL *	OP	Clearfield®	-2	0		R	Sask W P
SW 3950	HYB	Roundup Ready®	0	1	0	MR	SW Seed Ltd
SW 6802	SYN	Roundup Ready®	-1	-1	0	MR	FarmPure Seeds
SW 9803	-	Clearfield®	-2	-2			SW Seed Ltd
v1030	HYB	Roundup Ready®	1	-2	0	MR	Cargill Spec.
v1031	HYB	Roundup Ready®	0	0	0	MR	Cargill Spec.
v1035 *	HYB	Roundup Ready®	-1	-3		R	Cargill Spec.

■ Protection by Plant Breeders' Rights R = Resistant, MR = Moderately Resistant, MS = Moderately Susceptible  
 \* caution, first year tested and/or very limited OP = open pollinated, SYN = synthetic, HYB = hybrid  
 \*\* FSJ data only for 2006

Roundup Ready® is a registered trademark of Monsanto Canada Inc.  
 LibertyLink® is a registered trademark of Bayer CropScience  
 Clearfield® is a registered trademark of BASF

Average number of days to swathing<sup>1</sup> for 46A65 is 112 days.  
 Average number of days to maturity<sup>1</sup> for 46A65 is 124 days.

<sup>1</sup>Note that the "days to mature" describes a date when seed at the top of the plant has changed colour. "Days to swathing" data is a date as defined by the Canola Council of Canada's definition for swathing. (Complete maturity descriptions on page 18).

## ARGENTINE CANOLA - HISTORICAL INFORMATION

**Note:** For further historical information, please refer to previous reports, all of which can be viewed at [www.bcgrain.com](http://www.bcgrain.com).

Argentine Canola		Yield as % of 46A65					
Variety	Type	Dawson Creek		Fort St. John		B.C. Peace	
		2003-2005		2003-2005		2003-2005	
		Avg. (%)	Stn. Yrs.	Avg. (%)	Stn. Yrs.	Avg. (%)	Stn. Yrs.
		<u>Varieties not tested in 2006 ( Averages 2003-2005 )</u>			<u>Last Year Tested</u>		
9451	Roundup Ready®	100	[2]	108	[2]	( 2005 )	104 [4]
9550	Roundup Ready®	102	[2]	98	[2]	( 2005 )	100 [4]
289 CL (AV 9289)	Clearfield®	98	[2]	95	[2]	( 2005 )	96 [4]
34-55	Roundup Ready®	98	[3]	103	[3]	( 2005 )	100 [6]
46H02	Conventional	108	[2]	107	[2]	( 2004 )	108 [4]
46H23	Roundup Ready®	112	[3]	100	[3]	( 2005 )	106 [6]
46H70	Clearfield®	93	[2]	101	[2]	( 2005 )	97 [4]
624RR *	Roundup Ready®	94	[1]	98	[1]	( 2005 )	96 [2]
71-25 RR (AV 9525)	Roundup Ready®	104	[2]	101	[2]	( 2005 )	103 [4]
821RR (SW G5251 RR) *	Roundup Ready®	107	[1]	109	[1]	( 2005 )	108 [2]
829RR *	Roundup Ready®	94	[1]	98	[1]	( 2005 )	96 [2]
InVigor® 2733	LibertyLink®	98	[3]	114	[3]	( 2005 )	106 [6]
NEX 822 CL *	Clearfield®	92	[1]	78	[1]	( 2005 )	85 [2]
NEX 828 CL *	Clearfield®	89	[1]	75	[1]	( 2005 )	82 [2]
SP Deliver CL	Clearfield®	94	[2]	88	[2]	( 2005 )	91 [4]
SW GladiatoRR	Roundup Ready®	89	[2]	96	[2]	( 2005 )	92 [4]

### 46A65 - check variety

\* caution, first year tested and very limited data available

Clearfield® is a registered trademark of BASF  
 Roundup Ready® is a registered trademark of Monsanto Canada Inc.  
 LibertyLink® is a registered trademark of Bayer CropScience  
 InVigor® is a registered trademark of Bayer CropScience

Argentine Canola		Variety Descriptions					
Variety	Type	Herbicide Tolerance	B.C.Peace Avg. 2003-2005		Data from Alberta Agdex 100/32 **		Distributor
			Days to Swathing +/- check	Days to Mature +/- check	Straw Strength	Blackleg Tolerance	
					<u>Varieties not tested in 2006 ( Averages 2003-2005 )</u>		
9451	SYN	Roundup Ready®	0	1	0	MR	Proven
9550	OP	Roundup Ready®	-2	-2	0	R	Proven
■ 289CL (AV 9289)	HYB	Clearfield®	0	0			Monsanto
■ 34-55	OP	Roundup Ready®	5	4	0	MR	Monsanto
46H02	HYB	Conventional	4	2		R	Proven
46H23	HYB	Roundup Ready®	3	3	0	R	Pioneer
46H70	HYB	Clearfield®	2	5	0	R	Pioneer
624RR *	HYB	Roundup Ready®	1	5	1	R	Brett-Young
71-25 RR (AV 9525)	HYB	Roundup Ready®	-3	-3	0	R	Monsanto
821RR (SW G5251 RR) *	HYB	Roundup Ready®	1	4	0	MR	SW Seed Ltd.
829RR *	OP	Roundup Ready®	2	7		R	Brett-Young
InVigor® 2733	HYB	LibertyLink®	-3	-5	0	MR	Bayer
NEX 822 CL *	OP	Clearfield®	7	3			Dow
NEX 828 CL *	OP	Clearfield®	6	6	1	R	Dow
■ SP Deliver CL	OP	Clearfield®	1	1	0	MR	Sask Wheat Pool
SW GladiatoRR	SYN	Roundup Ready®	-3	-3	0	MR	FarmPure Seeds

OP = open pollinated, SYN = synthetic, HYB = hybrid  
 R = Resistant, MR = Moderately Resistant, MS = Moderately Susceptible

\*\*Note for Blackleg: 1 = tolerant, 2 = moderately tolerant, 3 = moderately susceptible, 4 = susceptible, 5 = highly susceptible

\*\*Note for Straw Strength: 0 = normal, 1 = above normal

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Argentine Canola

B.C. Peace River - Variety Performance 2003-2006

