

PROJECT TITLE **PNW CANOLA VARIETY TRIAL 2006**

PROJECT LEADER: Jack Brown, University of Idaho

COOPERATORS: Duane Johnson, NWARC
Louise Strang, NWARC

OBJECTIVE: To evaluate germplasm and determine what canola varieties and experimental lines are adapted to a northwestern Montana environment.

METHODS:

Thirty cultivars/experimental lines of canola were seeded 4/18/06 at the Cross Bow ranch. Each plot consisted of 7-20' rows with 6" row spacing and 2' between plots. Seeding rate was 5 lbs/acre. The varieties were arranged in a randomized complete block configuration with 4 replicates. Stand establishment was evaluated by counting plants in square foot quadrats in each plot. The date on which 50% of the plants bloomed was recorded for each plot.

The trial was direct combined 8/28/06. Seed shatter was estimated for each variety and used to correct for yield loss. The seed was weighed for plot yield determination, and 1-pint samples from each were weighed to determine test weight.

RESULTS:

Stand establishment was best for the control variety 'Profit' and the Roundup-Ready variety 'Hyola357Magn RR'. Stand counts ranged from 3.4 plants/ft² to 17.9 plants/ft². The canola flowered between June 7 and June 19. Plant height varied from 45 to 68 inches. Seed yield ranged from 540 lbs/acre ('UISH00.3.19.23') to 2118 lbs/acre (Hyola357Magn RR). Test weight ranged from 45.2 lbs/bu ('03H580 RR') to 49.4 lbs/bu (the Clearfield variety 'US.040501 CF').

2006 PNW Canola Variety Trial

Kalispell

<u>Cultivar</u>	<u>Entry</u>	<u>Stand</u> <i>pl/sqft</i>	<u>Bloom</u> <i>date</i>	<u>Ht</u> <i>in</i>	<u>Yield</u> <i>lbs/a</i>	<u>Test</u>	Estimated	Corrected
						<u>Wt.</u> <i>lbs/bu</i>	<u>Shatter</u> <i>%</i>	<u>Yield</u> <i>lbs/a</i>
Hyola 401	1	9.7	6/10	48.0	1069	47.8	50	1603
Westar	2	6.4	6/15	55.3	912	46.8		912
Profit	3	8.5	6/12	57.8	1118	47.3	30	1454
Hero	4	17.9	6/12	54.3	933	48.2	30	1213
Goldrush	5	12.8	6/7	48.0	949	48.5	50	1424
Premier	6	3.8	6/12	53.2	1042	48.0	30	1354
Clearwater CF	7	7.0	6/14	58.5	1265	47.3	30	1645
Sterling	8	8.1	6/12	52.8	764	47.2	30	993
Gem CF	9	13.2	6/12	49.3	891	47.4	30	1158
UISC00.1.3.5	10	7.3	6/12	53.2	1147	47.0	30	1491
UISC00.3.1.17	11	6.8	6/12	51.5	1300	47.8	30	1691
UISC00.3.8.DE	12	12.3	6/10	50.7	920	48.4	50	1380
UISH00.3.19.23	13	10.7	6/12	52.3	415	47.6	30	540
Hyola357Magn RR	14	13.8	6/9	45.3	1412	46.2	50	2118
HyCLASS 431 RR	15	10.7	6/14	58.7	1143	47.0	30	1486
HyCLASS 712 RR	16	9.4	6/17	60.7	1434	47.2		1434
HyCLASS 905 RR	17	6.9	6/17	63.0	1675	47.0		1675
US.040501 CF	18	3.4	6/16	65.0	963	49.4		963
US.040503 CF	19	7.6	6/19	64.0	1469	46.4		1469
US.040504 CF	20	11.1	6/18	68.3	1959	49.3		1959
CNX.03 CF	21	8.7	6/14	61.2	1147	47.9	30	1491
CNX.06 CF	22	8.5	6/15	51.0	868	48.7		868
CNX.19 CF	23	12.6	6/17	56.5	1658	48.6		1658
V1030 RR	24	7.9	6/15	59.8	1178	47.1		1178
V1031 RR	25	5.1	6/16	65.3	1178	47.7		1178
03H252 RR	26	7.3	6/13	63.2	1434	47.0	30	1864
03H406 RR	27	4.4	6/16	61.0	1453	47.4		1453
03H411 RR	28	6.0	6/14	58.2	1355	47.0	30	1761
03H580 RR	29	5.8	6/15	56.7	1611	45.2		1611
03H631 RR	30	6.5	6/14	56.5	1568	47.3	30	2038
mean		8.7		56.6	1208	47.5		1435
		<		<	<	<		
Pr>F		0.0001		0.0001	0.0001	0.0001		< 0.0001
LSD(0.05)		4.4		5.7	394	0.9		468
CV(%mean)		35.8		5.0	22.9	1.3		23