IX HARVESTABILITY TRIAL

Objective: Compare the harvestability of varieties entered in the variety and systems comparison trial.

Background: A number of varieties have very similar yield and quality traits. In choosing a variety a grower needs to consider additional traits like lodging and harvestability. Harvestability is the measurement of swathing and combining ease. Currently, there is no meaningful scientific measurement for harvestability. Therefore, a standardized criterion for a subjective measurement was used.

Methodology: A **Lodging score** was a visual score in which 1 = erect and 9 = flat. Varieties that were standing well and had a 'high yield tip' were given a score of two or three. Varieties that had severe uneven lodging with patches standing upright and patches laying flat were given a seven or eight, depending on the severity. **Lodging ratios** were obtained by dividing the average height of the canopy by the average height of randomly selected plants. **Harvestability** was evaluated as swathing and combining were completed on the variety and systems comparison trial. Swathing and combining were each evaluated on a scale of one to five, compared to the check (Q2), which was given a three to match the rating at the Canola Production Centres in Canada. The following criteria were considered; lodging, height, straw stiffness, straw strength, stand uniformity, swath fluffiness (pod dispersion), tendency to clump, flowability, feeding and speed of operation.

The following ratings were subjective. The machine operator, crop conditions, weather and time of day can affect the harvestability of a variety.

Ratings:
1 = much better than the check
2 = better than the check
3 = equal to the check
4 = worse than the check
5 = much worse than check

Observations: Lodging was variable among varieties. The greatest challenge in swathing occurred in varieties where the pods fell through the canopy in areas of the field where the stand was thinner. The excess moisture resulted in weak, short, thin and spindly plants. The plots were swathed with an 18 ft Versatile swather equipped with a pick-up reel. They were harvested with a New Holland TR-98 combine.

Results:

HARVESTABILITY TRIAL Variety and Systems Comparison Trial Thief River Falls, MN				
Treatment	**Lodging ratio**	**Lodging score**	**Swathing Rating**	**Combining Rating**
45H21	0.54	5.3	3.3	3
46A76	0.73	3.8	3.3	3
46H02	0.58	4.5	3.3	3
Canterra 1670	0.49	6.0	3.5	3
Canterra 1812	0.65	4.5	3.0	3
Dakota	0.55	5.0	3.5	3
DKL 223	0.67	4.5	4.0	3
DKL 3455	0.65	3.8	3.0	3
DKL 3585	0.52	6.0	3.8	3
DS Roughrider	0.37	6.0	3.8	3
Gladiator	0.67	4.0	3.0	3
Hyola 357 Magnum	0.74	3.5	3.0	3
Hyola 401	0.80	5.5	2.8	3
InVigor 2663	0.46	5.5	3.0	3
InVigor 2733	0.55	5.0	4.0	3
LiBred 499RR	0.71	4.3	3.5	3
Q2	0.43	4.5	3.0	3
RR Hyb 2013	0.58	5.5	3.3	3
SW Peak	0.61	4.5	3.3	3
LSD (0.10) C.V.	0.117 16.7	1.10 19.7	0.52 18.6	

Discussion: Canterra 1670, DKL 3585 and DS Roughrider had slightly more lodging than the other varieties. Swathing was similar for all the varieties with the most common problem coming from pods hanging down through the canopy to sickle height and catching on the sickle bar. There were no noticeable differences in combining ratings due to the large capacity of the combine and the relatively thin swaths.