

WINTER GRAIN IMPROVEMENT
Winter Wheat

Sixteen varieties of winter wheat were seeded Oct. 7, 1950 on dryland, in 3 row plots 18 feet long spaced 1 foot, with 3 replications. Good stands were secured, and even though some growers in the area complained of winter killing of winter wheat the nursery plots all came through with comparable stands.

Yield data for this nursery is shown in Table XKa. It will be noted that yields of Masatch, the variety recommended for this area, are quite low compared to several other varieties. This was not true in a nursery of fewer varieties harvested in 1950, and may reflect the winter injury more accurately than does the stand. Other data, including maturity date, height, percent lodging, and weight per bushel is shown in Table XKa.

Winter Barley

Sixteen varieties or strains of winter barley were seeded near the winter wheat nursery, in three row plots replicated three times.

Stands were variable in the spring after severe temperatures with little or no snow cover during part of the winter. However several varieties came through with good stands and yields exceed those for the nearby winter wheat nursery in some cases.

Yield data is shown in Table XXIIa. Other data including maturity date, percent of lodging, percent of survival, and pounds per bushel is shown in Table XXIIa.

Maturity dates for the winter barleys were (in 1951) a week or more ahead of dryland spring barleys, and some three weeks ahead of irrigated spring barleys which might be of some advantage in harvesting large acreages.

Yields for some of the better winter barleys compare favorably with spring barleys grown in another dryland location on the Station. (Table XKc)

Table _____ Agronomic data from dryland winter wheat nursery Creston, Montana 1951. Three row plots, three replications.

Date Planted, October 7, 1950.

Date Harvested, Aug. 10 & 15, 1951.

Variety or Cross	Height in Inches	Lod- ging %	Date Ripe- nd	Wt/ Bu. Lbs.	Yield Per Plot In Bushels Per Acre			Total Bushels	Average Bushels Per Acre
					I	II	III		
Yogo	40	20	8-14	58	43.2	29.1	43.2	115.5	38.5
Karakof	40	25	8-15	59	36.9	45.4	50.3	132.6	44.2
Karmont	40	40	8-13	60	44.7	39.0	36.1	119.8	39.9
Newturk	40	80	8-12	57	39.7	19.1	44.7	103.5	34.5
Wasatch	38	15	8-13	57	36.1	22.7	28.3	87.1	29.0
Nobred	38	10	8-14	59	38.3	56.7	51.0	146.0	48.7
Comanche	40	30	8-14	59	54.6	27.6	39.0	121.2	40.4
Cheyenne	36	10	8-13	57	29.8	29.8	45.4	105.0	35.0
Tenmarq	38	20	8-12	59	26.2	26.9	35.4	88.5	29.5
Minter	40	10	8-12	56	27.6	32.6	23.4	83.6	27.9
Huntley 44	38	30	8-14	59	32.6	56.0	54.6	143.2	47.7
Turkey x Oro-221	40	10	8-13	59	32.6	24.8	44.7	102.1	34.0
Turkey x Oro-216	38	10	8-13	58	34.7	24.8	60.9	120.4	40.1
Turkey x Oro-205	40	10	8-13	56	31.2	36.1	29.8	97.1	32.4
Yogo x Wasatch-9	38	20	8-13	57	27.6	36.1	41.8	105.5	35.2
Yogo x Wasatch-11	38	20	8-13	59	25.5	27.6	43.9	97.0	32.3
Fourty fold ¹					39.0	32.6	45.4	117.0	39.0

Note: Wasatch is the check variety.

¹ Not included in the analysis.

Mean Yield.....36.28
 S. E. \bar{X}5.11
 L.S.D. (5%).....N. S.
 C. V.14.10%