

Project Title: Evaluation of durum wheat under dryland recrop conditions

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Summary: Due to the dry soil condition at planting in 2020, the durum wheat had lower emergence than a normal year. Although the stand densities were improved from additional tillers in the late growing season, the recrop durum wheat grain yields might have been affected by the lower stands in some of the varieties. Therefore, the variety performance in 2020 needs to be compared with results from other years and locations.

Table 1. Recrop durum wheat at Eastern Agricultural Research Center, Sidney, MT 2020

Variety	Stand %	PlantHeight in	HeadingDate Julian*	TestWeight [†] lb/bu	Protein %	GrainYield [†] bu/a
Alzada	78.3	22.4	170	64.0	14.1	38.2
Carpio	78.3	26.5	176	65.2	15.3	47.8
CDC-Vivid	86.7	27.9	174	64.6	16.1	47.8
Divide	76.7	27.8	174	65.2	15.7	43.5
Grenora	81.7	25.3	174	65.2	15.2	44.9
Joppa	66.7	27.0	174	65.3	15.3	40.4
Mountrail	70.0	26.9	175	64.5	15.3	44.4
MTD16001	75.0	27.1	176	64.5	14.9	42.4
MTD16002	78.3	28.0	177	65.3	16.0	42.4
MTD16005	78.3	27.7	175	64.0	16.0	47.2
MTD18067	70.0	26.9	175	64.4	15.6	40.4
MTD18091	73.3	26.5	176	65.1	15.3	42.3
MTD18148	81.7	20.2	172	64.9	14.8	42.8
MTD18155	81.7	25.3	173	64.6	15.8	43.6
MTD18172	85.0	26.8	175	65.7	16.6	44.3
MTD18179	73.3	27.3	174	62.9	16.3	39.0
MTD18181	65.0	28.5	178	65.2	16.4	38.0
MTD18213	81.7	26.8	177	63.7	15.8	44.8
MTD18217	78.3	27.1	179	64.7	16.2	44.2
MTD18256	78.3	29.2	178	64.8	16.0	50.4
MTD18266	78.3	27.0	177	65.5	16.8	46.4
MTD18313	68.3	21.5	169	66.4	15.4	41.3
MTD18348	80.0	29.1	177	64.6	15.3	54.3
MTD18381	73.3	24.8	173	63.5	15.3	32.1
MTD18413	78.3	26.4	173	64.7	16.3	42.6
MTD18430	76.7	29.1	179	63.3	15.8	43.7
MTD18486	86.7	26.1	179	65.8	15.7	43.9
ND-Grano	80.0	26.1	176	65.7	15.6	41.3
ND-Riveland	66.7	29.4	175	65.3	15.9	47.4
Tioga	78.3	29.4	176	65.4	15.4	41.1
Mean	76.8	26.7	175.3	64.8	15.7	43.4
P-Value	0.12	<0.0001	<0.0001	<0.0001	<0.0001	0.29
CV (%)	10.7	5.1	0.5	0.56	1.9	15.2
LSD (0.05)	13.5	2.2	1.5	0.59	0.50	10.8

[†] Grain yield and test weight were adjusted to 12.0% moisture

*Julian is a continuous count of days since January 1

Field Management

Previous crop:	Fallow	Soil type:	Williams clay Loam
Seeding date:	4/21/2020	Soil residual nitrate:	21 lb NO ₃ -N/a
Season precipitation:	8.16 in	Soil test P ₂ O ₅ :	21.3 ppm
Harvest date:	8/12/2020	Nutrient fertilizer applied (N, P ₂ O ₅ , K ₂ O; lb/A):	76-23-0