### Other Durum varieties

released by the North Dakota Agricultural Experiment Station:

**Alkabo** – (2005) High yield potential, especially in northwestern North Dakota. Large kernel size, good quality and very strong straw.

**Grenora** – (2005) Very high yield potential with great yield stability and good quality.

**Pierce** – (2001) Excellent balance of quality and yield.

**Lebsock** – (1999) Very high test weight with great yield potential and good quality.

**Mountrail** – (1998) Average quality rating with great yield. Slightly later maturity.

### For information on the availability of Foundation seed contact:

#### **NDSU Research/Extension Centers**

Agronomy Seed Farm, Casselton............347-4743
Carrington Research Extension Center......652-2951
Hettinger Research Extension Center.......567-4323
Langdon Research Extension Center.......256-2582
North Central Research Ext. Center.......857-7679
Williston Research Extension Center .......774-4315

#### Or

NDSU Foundation Seedstocks Project P.O. Box 5051 Fargo, ND 58105-5051 701-231-8140 www.ag.ndsu.nodak.edu/aginfo/seedstock/fss/

### **Plant Quality Certified Seed**

Certified seed is field inspected and lab analyzed to help ensure variety identity, germination, and purity.

Contact your local seed producer or dealer for quality certified seed.

Seed producers or dealers can be found in the North Dakota Field Inspected Seeds Directory. The directory is available from the North Dakota State Seed Department (NDSSD), North Dakota Crop Improvement & Seed Association, your local county agent, or under the field seeds program of the NDSSD website. www.ndseed.com



Varieties protected under PVPA with Title V option can only be sold as a certified class of seed. It is the responsibility of the buyer and/or seller to confirm the PVP status of a specific crop variety prior to buying or selling the variety. PVP status information can be obtained from the ND State Seed Department.



# Tioga Durum





# Tioga Durum

**Tioga** was developed by the NDSU Durum Breeding Program and released by the North Dakota Agricultural Experiment Station in 2010. Tioga was selected from a cross between the NDSU varieties Plaza and Maier. Tioga durum is named for the northwest North Dakota town of Tioga in Williams County, but is well adapted to the entire durum producing region of North Dakota.

Tioga has shown excellent yield potential in NDSU yield trails as well as very good yield stability across multiple environments. Tioga provides slight yield advantage over Lebsock and Divide across environments in North Dakota. Tioga has the largest kernel size among the predominant grown durum varieties in North Dakota. The test weight of Tioga is very good.

Tioga has been given an overall quality rating of "Excellent" by the NDSU Cereal Chemists. The overall quality rating is based on agronomic, milling, and spaghetti processing performance. Tioga has very good protein content and has the highest mixograph score and gluten index among NDSU's varieties. Therefore Tioga has high yield potential that is combined with excellent quality.

The scab tolerance of Tioga is close to that of Divide which is slightly better than Grenora, Alkabo, Lebsock, Mountrail, and Pierce. Tioga has moderate level of resistance to foliar diseases which is similar to Divide and Mountrail.

To help insure genetic purity, 'Tioga' durum will be protected under the Plant Variety Protection (PVP) under Title V and must be sold as a class of certified seed.

For more information about Tioga and other durum varieties visit www.ag.ndsu.edu/varietytrials/durum or contact the NDSU durum breeder or small grains agronomist at 701-231-7971.



## **Tioga** General Characteristics

- Very good yield potential
- Good test weight
- Excellent quality
- Very good protein content
- A good level of Fusarium Head Blight (HSB) resistance
- Moderate resistance to leaf diseases

Grain yield (bu/a) of Tioga and other durum varieties grown in the Uniform Regional Durum Nursery at NDSU Research Extension Centers, 2004-2009.

Variety	Carrington	Langdon	Minot	Prosper	Williston	Mean
Tioga	48.6	92.1	68.4	78.9	33.4	64.3
Alkabo	50.4	86.0	66.9	72.6	33.0	61.8
Divide	47.7	88.2	71.7	72.7	32.1	62.5
Grenora	46.6	92.6	72.8	76.0	34.8	64.5
Lebsock	47.4	88.6	64.9	77.9	33.3	62.4
Mountrail	47.5	91.0	71.6	79.1	32.7	64.4
Pierce	46.6	94.7	71.2	71.9	31.5	61.2

Agronomic traits and disease of Tioga and other durum varieties grown in the Uniform Regional Durum Nursery at various locations in North Dakota, South Dakota, Montana, Minnesota and Canada, 2004-2009. Quality Traits are from the drill strips grown at 35 locations in ND, 2004-2008.

Variety	Yield (bu/ac)	Test Weight (lb/bu)	Kernel Weight (mg)	Height (cm)	Heading (days)	Leaf Disease (0-9)	<b>FHB</b> (0-9)	Lodging (0-9)	Protein (%)	Mixograph	Gluten Index
Tioga	58.6	59.3	39.8	90.3	63.7	4.4	2.7	0.5	15.1	7.4	83
Alkabo	57.0	59.5	38.2	82.9	63.1	5.0	3.0	0.1	14.6	6.4	63
Divide	57.3	59.3	38.0	86.0	64.1	4.3	2.6	0.5	15.1	7.2	80
Grenora	59.5	58.7	37.6	80.2	62.8	3.6	2.9	0.3	14.7	6.5	73
Lebsock	57.2	60.0	36.4	82.4	62.7	5.0	3.8	0.4	14.6	5.5	50
Mountrail	58.6	58.6	36.9	84.3	64.1	4.8	4.2	0.5	14.8	4.9	31
Pierce	56.0	59.8	35.7	86.6	63.2	5.0	3.3	0.6	14.9	7.1	77