

Other Durum varieties

recently released by the North Dakota Agricultural Experiment Station:

Carpio – (2012) Excellent quality, high yield potential, and good protein.

Tioga – (2010) High yield potential, very large kernel size, and excellent quality.

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

Divide – (2005) Excellent quality with high yield potential, great yield stability, and some tolerance to FHB.

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

Mountrail – (1998) Great yield potential and average quality.

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), your local county Extension 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 NDSSD.

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AGRICULTURE

Joppa Durum



For information on the availability of foundation seed, contact:

NDSU Research/Extension Centers

Agronomy Seed Farm, Casselton.....(701) 347-4743
Carrington Research Extension Center....(701) 652-2951
Hettinger Research Extension Center.....(701) 567-4323
Langdon Research Extension Center.....(701) 256-2582
North Central Research Ext. Center.....(701) 857-7679
Williston Research Extension Center.....(701) 774-4315

Or

NDSU Foundation Seedstocks Project

(701) 231-8140

www.ndfss.com



www.ndcropimprovement.org

Joppa Durum

Joppa was developed by the NDSU Durum Breeding Program and released by the North Dakota Agricultural Experiment Station in 2013.

Joppa is a very high yielding durum variety with excellent agronomic traits. From 2008-2014 Joppa's mean yield was the highest across North Dakota at 64.0 bushels/acre, nearly 3 bushels/acre more than the second highest yielding variety.

Pasta quality characteristics of Joppa include very high dough and gluten strength, high gluten index, and outstanding color. Compared with other popular varieties, Joppa was rated highest in pasta color tested by the NDSU Durum Quality Lab of samples grown at multiple North Dakota locations during 2008-2012. This variety also scores high on the mixograph scale.

Joppa has medium straw strength and a good disease resistance package including scab (FHB) resistance similar to other NDSU varieties.

In comparison with Mountrail, the long-standing industry standard variety, Joppa has higher yield and better quality traits. The gluten strength of Joppa is a notable improvement over Mountrail. Joppa also consistently out-yields Mountrail in variety trials across the state.

Joppa was named in honor of Dr. Leonard Joppa, the renowned USDA durum research geneticist. Dr. Joppa made significant contributions to the improvement of durum wheat quality.

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

For more information about Joppa and other durum varieties visit www.ag.ndsu.edu/varietytrials/durum or contact the NDSU durum breeder at 701-231-8159 or small grains agronomist at 701-231-7971.



Joppa General Characteristics

- High yield potential
- Excellent agronomic traits
- Outstanding color
- Excellent gluten strength
- Moderate FHB and leaf disease resistance

Grain yield (bu/a) of Joppa and other durum varieties grown in the Variety Trials at NDSU Research Extension Centers, 2008-2014.

| Variety | Carrington | Langdon | Minot | Dickinson | Hettinger | Williston | Mean |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Joppa | 60.9 | 89.1 | 70.3 | 66.9 | 58.6 | 37.3 | 63.9 |
| Carpio | 59.0 | 85.8 | 67.8 | 62.8 | 55.5 | 35.5 | 61.1 |
| Divide | 58.0 | 82.0 | 66.3 | 63.2 | 54.1 | 34.8 | 59.7 |
| Alkabo | 60.4 | 82.3 | 66.4 | 58.6 | 55.8 | 35.4 | 59.8 |
| Mountrail | 57.8 | 84.1 | 66.7 | 67.4 | 54.6 | 34.5 | 60.9 |
| Tioga | 59.2 | 85.4 | 67.4 | 62.0 | 55.2 | 41.1 | 61.7 |
| Lebsock | 59.1 | 84.1 | 62.5 | 60.1 | 54.4 | 31.0 | 58.5 |
| Grenora | 57.7 | 86.0 | 63.2 | 64.0 | 53.3 | 31.0 | 59.2 |

Agronomic traits and disease scores of Joppa and other durum varieties grown at various locations in ND, SD, MT, MN and Canada, 2008-2013.

| Variety | Yield (bu/ac) | Test Weight (lb/bu) | Kernel Weight (mg) | Heading Date (days) | Height (in) | Lodging Score (0-9) | Leaf Disease (0-9) | FHB (0-9) | Protein (%) | Mixograph (1-8) | Gluten Index (1-100) |
|--------------|---------------|---------------------|--------------------|---------------------|-------------|---------------------|--------------------|------------|-------------|-----------------|----------------------|
| Joppa | 59.0 | 59.3 | 41 | 63 | 34.3 | 1.2 | 3.8 | 4.7 | 13.8 | 7.7 | 90 |
| Carpio | 56.5 | 59.2 | 41 | 64 | 34.3 | 1.5 | 4.4 | 4.7 | 14.3 | 7.9 | 93 |
| Divide | 55.1 | 59.4 | 41 | 63 | 34.6 | 1.1 | 4.0 | 5.3 | 14.4 | 7.3 | 82 |
| Alkabo | 55.3 | 59.8 | 41 | 62 | 33.1 | 0.5 | 4.6 | 4.9 | 14.0 | 6.2 | 65 |
| Mountrail | 57.2 | 58.7 | 40 | 63 | 34.3 | 1.3 | 4.5 | 5.7 | 14.2 | 4.6 | 33 |
| Tioga | 57.3 | 59.4 | 43 | 63 | 35.8 | 1.0 | 4.3 | 5.1 | 14.6 | 7.5 | 86 |
| Lesock | 55.4 | 60.1 | 40 | 62 | 33.1 | 0.9 | 4.6 | 4.9 | 14.3 | 5.5 | 53 |
| Grenora | 56.0 | 58.9 | 41 | 62 | 32.3 | 0.9 | 3.8 | 5.2 | 14.3 | 6.5 | 75 |