

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 Seed Directory. The directory is available from the North Dakota State Seed Department (NDSSD), your NDSU Extension agent, or under the field seed 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.

Other Durum varieties

released by the North Dakota Agricultural Experiment Station:

ND Grano – (2017) Low cadmium uptake, high yield potential and good quality.

Joppa – (2013) High yield potential, excellent agronomic traits and outstanding color.

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.

Contact information:

Foundation seed

NDSU FOUNDATION SEEDSTOCKS 701-231-8140
ndfss.com

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

Registered/Certified seed

NDCISA **NDSSD**
ndcropimprovement.com ndseed.com
701-838-6213 701-231-5400
701-231-8067

NDSU

ND Riveland Durum



ND Riveland Durum

ND Riveland was developed by the Durum Breeding Program at North Dakota State University and released by the North Dakota Agricultural Experiment Station in 2017. The North Dakota Crop Improvement and Seed Association (NDCISA) has a license agreement with the NDSU Research Foundation to produce and distribute ND Riveland seed.

ND Riveland has high yield potential, good quality and low cadmium (Cd) uptake. It also has very good test weight, large kernels, medium maturity and medium resistance to leaf diseases.

ND Riveland performed well in the Uniform Regional Durum Nursery and has good yield potential across the state of North Dakota. It had higher yield than all the varieties tested in the variety trials across North Dakota.

ND Riveland has good straw strength. Compared with Carpio and Joppa, ND Riveland is taller, has higher test weight and larger kernel size.

ND Riveland is resistant to both leaf and stem rust diseases, similar to Carpio. ND Riveland had the lowest Fusarium head blight (FHB) disease severity among all varieties tested in field and greenhouse screening nurseries. ND Riveland had lower DON accumulation than Carpio.

ND Riveland had lower Cd uptake than all varieties tested, including the well known low Cd uptake Canadian variety, AC Strongfield. End use quality characteristics of color and firmness are very favorable for ND Riveland.

ND Riveland was named in honor of Neil Riveland for his significant contributions to ND agriculture. Neil was a research agronomist and assistant director at the Williston Research Extension Center.

To help ensure genetic purity, ND Riveland will be protected under Plant Variety Protection Title V and must be sold as a class of certified seed.

For additional information about ND Riveland and other durum varieties, refer to the most recent North Dakota Durum Wheat Variety Trial Results and Selection Guide circular A1067. The Extension agronomist can be contacted at 701-231-7971 or visit www.ag.ndsu.edu/ndsuag/crops.



ND Riveland General Characteristics

- Low cadmium uptake
- Good quality
- High yield potential
- Good straw strength

Grain yield (bu/a) of ND Riveland and other durum varieties grown in variety trials at NDSU Research Extension Centers, 2013-2017.

| Variety | Carrington | Langdon | Minot | Dickinson | Hettinger | Williston | Mean |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ND Riveland | 58.6 | 82.3 | 68.5 | 58.7 | 60.5 | 37.9 | 61.1 |
| Joppa | 58.1 | 77.5 | 71.8 | 56.2 | 58.5 | 38.3 | 60.1 |
| ND Grano | 59.7 | 78.0 | 72.6 | 53.7 | 58.2 | 37.1 | 59.9 |
| Carpio | 59.2 | 78.1 | 70.0 | 52.8 | 54.2 | 35.3 | 58.3 |
| Tioga | 57.6 | 72.4 | 64.9 | 55.0 | 57.9 | 40.6 | 58.0 |
| Divide | 54.9 | 73.6 | 67.3 | 55.8 | 57.2 | 36.6 | 57.6 |
| Alkabo | 54.7 | 74.9 | 71.5 | 53.5 | 53.8 | 36.5 | 57.5 |
| AC Strongfield | 51.1 | 69.7 | 58.9 | 51.8 | 54.6 | 34.7 | 53.5 |

Agronomic traits and disease scores of ND Riveland and other durum varieties grown at various locations in MN, MT, ND and SD, 2013-2017.

| Variety | Yield (bu/ac) | Test Weight (lb/bu) | Kernel Weight (g) | Heading Date (days) | Height (cm) | Leaf Disease ¹ (0-9) | FHB ¹ (0-9) | Lodging Score ² (0-9) | Protein (%) | Cadmium (ppb) |
|--------------------|---------------|---------------------|-------------------|---------------------|-------------|---------------------------------|------------------------|----------------------------------|-------------|---------------|
| ND Riveland | 66.4 | 60.1 | 40.8 | 60.8 | 90.7 | 2.8 | 1.8 | 1.0 | 13.4 | 39 |
| Joppa | 62.8 | 60.0 | 39.0 | 60.9 | 85.7 | 3.0 | 2.4 | 1.2 | 13.4 | 120 |
| Carpio | 62.6 | 59.9 | 39.9 | 61.5 | 86.6 | 2.8 | 2.0 | 1.4 | 13.3 | 146 |
| ND Grano | 62.5 | 60.2 | 38.2 | 61.8 | 85.6 | 3.1 | 2.1 | 0.9 | 13.5 | 43 |
| Tioga | 62.2 | 59.7 | 40.7 | 60.9 | 91.2 | 3.3 | 2.5 | 1.1 | 13.4 | 135 |
| Divide | 61.2 | 59.8 | 38.7 | 61.3 | 88.5 | 2.8 | 2.4 | 1.0 | 13.6 | 130 |
| AC Strongfield | 60.3 | 58.9 | 36.7 | 60.8 | 85.5 | 5.3 | — | 1.6 | 14.3 | 48 |
| Alkabo | 59.5 | 60.2 | 39.0 | 60.2 | 84.4 | 3.8 | 2.9 | 0.6 | 13.6 | 154 |

¹Leaf disease and Fusarium head blight (scab) reaction score from 0-9, with 0 = resistant and 9 = very susceptible.

²Lodging score from 0-9, with 1 the strongest and 9 the weakest.