Facilities and Contacts

Plant Sciences Department

North Dakota State University, Fargo

Dale Williams.....(701) 231-8140 Director

Gonzalo Rojas.....(701) 231-8168 Assistant Director

Toni Muffenbier.....(701) 231-8067 Office Manager

Joyana Wardrip(701) 231-8542 Lab Manager

Production, Conditioning and Seed Distribution Locations

Agronomy Seed Farm, Casselton, ND Brian Otteson(701) 347-4743
Carrington Research Extension Center Dave Copenhaver (701) 652-2951
Langdon Research Extension Center Randy Mehlhoff(701) 256-2582
North Central Research Extension Center Chad Anderson(701) 857-7679

Williston Research Extension Center Kyle Dragseth.....(701) 774-4315

Additional seed production and storage facilities located at Hettinger Research Extension Center.

Plant Quality Certified Seed

Certified seed provides assurances of 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



AGRICULTURE

Foundation Seedstocks Program (FSS)

Providing genetically pure foundation seed to the North Dakota agriculture industry



Pure genetics of high yielding varieties for maximum profitability

Foundation Seedstocks Program

Objectives

- 1. Increase, maintain and distribute genetically pure foundation class seed of new and established crop cultivars.
- 2. Coordinate the Seedstocks program with other agencies in North Dakota and other states or countries.
- 3. Implement improved systems for foundation seed increase and distribution.

Breeder Seed Production

FSS supports the public plant variety development programs by engaging purification and seed increase procedures before a variety is released to allow plant researchers to concentrate on breeding.

Purification and Re-purification

FSS carefully purifies the genetics of new and re-purifies maintenance varieties using labor intensive field rouging, single head selections and head row increases to insure foundation seed will perform and have the quality characteristics as described by the releasing documents.

Genetically Pure Production

Careful attention is given to field and cropping history to prevent volunteer plant contamination, field isolation distances are maintained to prevent out crossing, diligently cleaning and checking all equipment that comes in contact with the planting or produced seed crop (planters, combines, augers, bins, conditioning equipment etc.). Laboratory tests are utilized to assure varietal purity and physical quality.

Educational Activities

FSS provides information and support to:

- Commodity Producers
- Seed Producers
- Seed Conditioners
- Plant Breeding Programs
- Seed Certification Programs
- ND Ag Experiment Station Personnel
- NDSU Extension Personnel
- NDSU Research Foundation
- Commodity Organizations
- Teaching NDSU Class 'Seed Technology Course'

FSS provides varietal information for news releases publishes varietal brochures and gives presentations on seed related activities.

ND Crop Improvement & Seed Assoc. (NDCISA)

FSS works closely with NDCISA and the County Crop Improvement Associations to provide for a rapid clean genetic increase of newly released varieties. These activities allow ND commodity growers to have quick access to new varieties and the economic advantages they provide.

Conditioning Facilities

FSS facilities allow hands-on educational activities on conditioning equipment operation and maintenance. Proper adjustment and use of modern conditioning equipment allows precise separation of genetically clean seed from impurities, other crop seed and weed seed.

Economic Impact

Foundation class seed distributed by the Foundation Seedstocks Project (FSS) has been planted by seed producers to produce the registered and certified seed classes used by farmers to produce commodity. The ND seed and commodity industry have depended on the FSS for genetically pure foundation seed which is illustrated by the following:

ND planted crops which originated from foundation seed maintained and distributed by FSS during the past 3 years (approximate average)

- 70 to 75% of the spring wheat
- 90% of the durum wheat
- 90% of the barley
- 90+% of flax crops (actual statistics unavailable)

Value of the Annual ND Wheat Crop

- Approximately \$2 billion
- Approximate economic impact \$6 billion
- Approximately 74% of the crop has a seed history traceable back to FSS.

Value of other crops have a similar economic impact.

