

NDSU already is prepared with an Applied Plant Breeding Institute which contains more than 10 plant breeding programs (hard red and hard white spring wheat, durum wheat, six-rowed barley and two-rowed barley, oat, corn, flax, soybean, potato, dry edible bean, crambe, sugarbeet, sunflower and pulse crops).

The NDSU plant-breeding programs are especially recognized for the successful variety and germplasm releases (over 90 releases in the past five years, worth millions of dollars) and for training applied plant breeders for both public and private sectors.

The Plant Sciences Department consists of 38 faculty members and 22 adjunct faculty dedicated to providing students with the training required to meet the many challenges and opportunities in agriculture in the 21st century.

Facilities: Loftsgard Hall, a state-of-the-art facility, houses the Department of Plant Sciences, which includes classrooms, research labs and student learning centers.

Other facilities include a new state-of-the-art greenhouse complex which will begin construction in May 2008.

Variety trial plots are on the NDSU campus and at Research Extension Centers throughout the state that allow research under diverse environmental conditions.



For more information, contact:
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 North Dakota State University
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 Phone: (701) 231-7971
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NDSU

NDSU is an equal opportunity institution.
 This information is available in other
 formats on request.



NDSU



Applied Plant Breeding Institute

Providing a single site for reliable, high-quality targeted research, education and technology transfer in applied plant breeding.

Mission

The APBI offers the stakeholders a single site for reliable, high-quality targeted research, education, and technology transfer.

APBI provides excellent value to its stakeholders and rewards those working in plant improvement.

Objectives

1. Provide state, national and international research leadership and recognition in applied plant improvement.
2. Develop improved germplasm using a vertically integrated approach.
3. Monitor, identify and incorporate resistance to pests that threaten plant production.
4. Validate and incorporate proven useful new techniques into plant breeding programs.
5. Identify and incorporate quality into improved germplasm.
6. Provide essential and unique training in applied plant improvement.
7. Students will develop skills in a team approach to any applicable plant improvement programs.
8. Provide graduates desired by public and private plant improvement entities and allied industries.
9. Promote public/private partnerships for research, product commercialization and economic growth.

WHY NDSU?

NDSU has national plant breeding and genetics research and training expertise, providing a unique center for plant breeding research, education and training, and offering an outstanding opportunity for students to pursue graduate studies in this area. NDSU is rated among the top 10 U.S. institutions for training plant breeders.

The program emphasizes classical plant breeding, along with the use of biotechnology as a breeding tool. Students receive thorough training in investigative techniques by using modern facilities and through experienced guidance by faculty. Graduates of the program are in high demand by employers.

WHY NORTH DAKOTA?

North Dakota leads the nation in the production of 13 crops. Genetic improvement, as a consequence of plant breeding, is a major reason North Dakota crop production agriculture generates more than \$4 billion in cash receipts annually. The availability of diverse products through plant breeding and biotechnology has been essential to maintain this large sector of the state's economy.

Because of the importance of numerous crops to the state's economy, a strong interdisciplinary research and education program has been ongoing at NDSU, developing superior adapted varieties and training the next generation of plant breeders. Due to a strong demand from the commercial sector, a critical mass of plant breeders is essential to meet the future demands for increased crop productivity and value.

