

USDA-ARS

**NATIONAL CENTER FOR GENETIC
RESOURCES PRESERVATION**

FORT COLLINS, COLORADO

2005 ANNUAL REPORT



The National Center for Genetic Resources Preservation is located on the campus of Colorado State University in Fort Collins, Colorado

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ABOUT NCGRP

Our Vision: Excellence in preservation and security of genetic resources for use by current and future generations.

Mission Statement: To acquire, assess, preserve, and provide a collection of genetic resources to secure the biological diversity that underpins economic and environmental sustainability of agriculture through research, stewardship, and communication.

Our Guiding Principle: The National Center for Genetic Resources Preservation pursues its strategic objectives by strengthening coordination with public and private sectors. The Center recognizes that genetic resources are global assets and will develop communication, outreach, training, and technology transfer activities accordingly.

Strategic Objectives:

- Preservation
- Research
- Information Management
- Partnerships

2005 IN BRIEF REVIEW FOR NCGRP

Remodeling NCGRP: The contract was let to expand the second floor cold vault with the addition of rolling shelves. Work started in January 2006 and is expected to be completed by May 2006. In addition, we are planning to do retrofit lighting where we can improve lighting quality, receive power company rebates, and reduce energy consumption about 30-35 percent..

New Curator and Retirements: Dr. David Ellis, who joined NCGRP in March 2004, was selected to be the new Curator for the Plant Genetic Resources Preservation Program in November 2005. He served as Acting Curator after Dr. Wiesner's retirement.

Unit Project Plans: The new cycle of the Five-year Project Plans for the Animal and Plant National Programs for NCGRP begins later in 2006. We will be working with the National Program Staff to identify the cutting edge science and the goals and objectives for the next cycle.

PROGRAM-RELATED WEB LINKS

USDA's National Genetic Resources Program (NGRP)

<http://www.ars-grin.gov>

USDA's Germplasm Resources Information Network (GRIN) Database

<http://www.ars-grin.gov>

National Plant Germplasm Program (NPGS)(NP 301)

<http://www.nps.ars.usda.gov/programs/programs.htm?NPNUMBER=301>

<http://www.ars-grin.gov/npgs>

National Animal Germplasm Program (NAGP)(NP101)

<http://www.nps.ars.usda.gov/programs/programs.htm?npnumber=101&docid=406#gi>

<http://www.ars-grin.gov/animal>

National Center for Genetic Resources Preservation (NCGRP)

<http://www.ars.usda.gov/npa/ftcollins/ncgrp>

Links to other US and International Program Websites

<http://www.ars-grin.gov/npgs/ngo.html>

CURRENT RESEARCH INFORMATION SERVICE (CRIS) PROJECTS AT NCGRP

National Animal Germplasm Program (NAGP)

5402-31000-002-00-D	National Animal Germplasm Program (NAGP)
5402-31000-002-02-S	Population Status of Livestock Genetic Resources in the United States
5402-31000-002-04-S	Development of a National Collection of Swine Germplasm
5402-31000-002-07-S	Collection, Cryopreservation and Evaluation of Different Poultry Lines
5402-31000-002-08-S	The Effect of Holding Time on Ram Semen Fertility
5402-31000-002-09-S	Sheep and Goat Embryo Cryopreservation for Conservation of Genetic Resources
5402-31000-002-10-G	Economic Evaluation of the Exchange of Animal Genetic Resources
5402-31000-002-11-S	Preservation of Swine Germplasm

Plant Germplasm Preservation Research Unit (PGPRU)

5402-21000-011-00-D	Research to Develop Strategies and Technologies for Preserving Plant Genetic Diversity in Ex Situ Genebanks
5402-21000-011-01-R	Dynamics of White Pine Colonization After Fire
5402-21000-011-02-S	Population Genetic Analyses to Preserve Genetic Resources of Crops
5402-21000-011-03-S	Mechanisms of Genetic Change During Ex Situ Conservation of Rye Germplasm
5402-21000-011-04-S	Ultrastructural Changes in Plant Tissues Induced by Cryoprotective Treatments
5402-21000-011-05-R	Genetic Diversity of Wild Apple Accessions in the National Plant Germplasm System
5402-21000-011-06-R	Increased Profits for Sustainably Produced Garlic

Plant Genetic Resources Preservation Program (PGRPP)

5402-21000-006-00-D	Preservation and Quality Assessment of Plant Genetic Resources
5402-21000-006-01-S	Evaluation of Seed Longevity of Germplasm Placed in Long-Term Storage
5402-21000-006-02-R	Establish a Framework for the Preservation of Voucher Specimens of Cultivars Issued Under PVPO
5402-21000-006-03-S	Regeneration of Maize Landrace Collections in Central and South America
5402-21000-006-04-S	Regeneration of Sorghum Accessions
5402-21000-006-06-N	Establish a General Framework for Cooperation and Coordination for the Conservation of Plant Genetic Resources
5402-21000-006-08-N	Cooperation with the International Rice Research Institute (IRRI)
5402-21000-006-09-N	Cooperation with the Colegio de Postgraduados en Ciencias Agrícolas
5402-21000-006-10-S	Evaluation of Seed Longevity of Germplasm Placed in Long-term Storage
5402-21000-006-13-N	Primary and Backup Storage of National Tree Seed Laboratory Material at National Center for Genetic Resources Preservation
5402-21000-006-14-N	Storage of Black Ash from Indian Tribal Land in the Lake States