

Crop Breeding - Genetic Diversity

Key Terms and Concepts:

Upon completion of this course, the student should be familiar with the following terms, concepts, and programs.

Conservation of genetic resources

Plant germplasm

Heirloom varieties

Gene banks

Ex situ conservation

In situ conservation

Genetic stocks

Accessions

Gene mapping

Genetic drift

Active collections

Tissue culture

Cryopreservation

Recombinant DNA technologies

National Plant Germplasm System (NPGS)

Germplasm sampling

Regeneration

Replenishment

Characterization

Evaluation

Documentation

Passport data

Grassroots campaigns for conservation of genetic diversity

Seed Savers Exchange

The Garden Seed Inventory

The North American Fruit Explorers

Association of Living Historical Farms and Agricultural Museums

Rodale Research Center
Native Seeds / Search

Links:

Plant Germplasm Conservation – USA:

National Center for Genetic Resources Conservation

http://www.ars.usda.gov/main/site_main.htm?modecode=54020500

National Plant Germplasm System

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

Plants Database, USDA

<http://plants.usda.gov/>

Center for Plant Conservation

<http://www.centerforplantconservation.org/>

Seedsaving and SeedSaver's Resources

<http://homepage.eircom.net/~merlyn/seedsaving.html>

Plant Germplasm Conservation – International:

International Plant Genetic Resources Institute

<http://www.ipgri.cgiar.org/index.htm>

Plant Breeding and Genetics, FAO

<http://www-naweb.iaea.org/nafa/pbg/index.html>

Global Crop Diversity Trust

<http://www.croptrust.org/main/>

Doomsday Seed Conservation Vault, Global Crop Diversity Trust

<http://www.croptrust.org/main/articles.php>

Economic Analysis of Crop Genetic Resources Conservation

<http://www.ipgri.cgiar.org/themes/human/economics.htm>