Plant Biodiversity and Plant

Genetic Resources Directorate

General objective

Conservation of local plant genetic resources and sustainable utilization

Other objectives

- Conservation of plant genetic resources for improving agricultural productivity
- Evaluation of plant genetic resources according to the international standards
- Helping in implementing legislations, rules and public awareness regarding conservation of plant genetic resources and utilization
- Collection of Plant genetic resources for *ex situ* conservation
- Improvement of data base and documentation system of herbarium and seed gene bank information
- Improvement of productivity system of medicinal plants and pharmaceutical utilization
- Cooperation with National and International plant genetic resources Institutions and implementing national and international related agreements Jordan Signed the International Agreements CBD, MTA,SMTA , NAGOYA protocol
- Monitoring of extreme events result from, climate change.

1- Gene bank.

Main Goal:

Ex situ Conservation of plant genetic resources and making them available to users.

Objectives:

- Collection of plant genetic resources (seeds and herbarium).
- Identification of collected material.
- Documentation and characterization (at morphological & molecular levels).
- Conservation and management of genetic resources and facilitate access to PGR
- Make available plant material needed for breeders and other research purposes.
- Contribution in conservation and studies of biodiversity.
- Enhance cooperation with national, regional and international organizations.
- Follow up international treaties relevant to exchanging genetic resource.
- Enhance cooperation with national, regional and international organizations.


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A-Viability testing

Up to the time being, the Gene bank at NARC holds around 675 different species represented by more than 4000 accessions of seeds and about 4000 accessions of Herbarium specimens.

Objectives:

To conserve Flora of Jordan as seeds under cold dry conditions and to be inspected periodically according to international standards for each plant family.

rogress of Plant Accessions Conserved at Gene Bank in the period, (1994-2014)

B-Gene bank database Available data:

- Passport - the most important category.
- Characterization and preliminary evaluation - routine for major crops.
- Stock - quality and quantity of seeds.
- Distribution of material.
- Other - taxonomy, collaborators, etc.

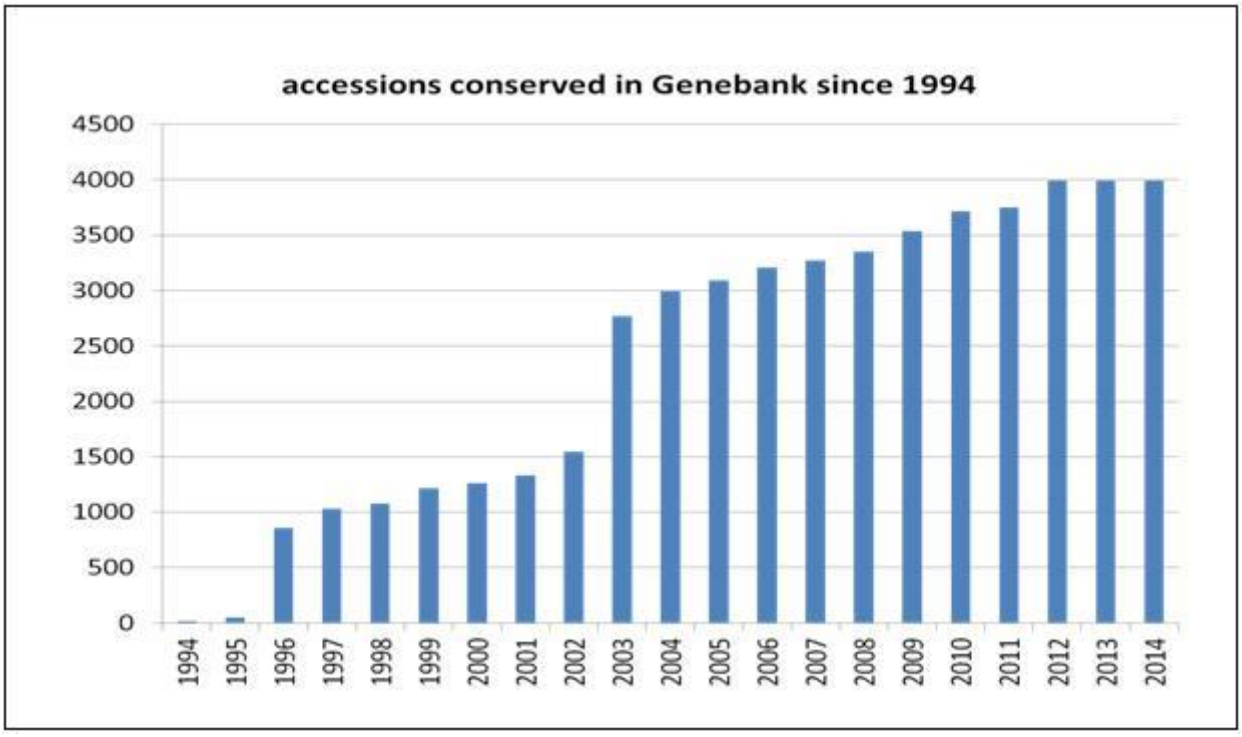


Figure (1): Accession Conserved in Genebank since 1994

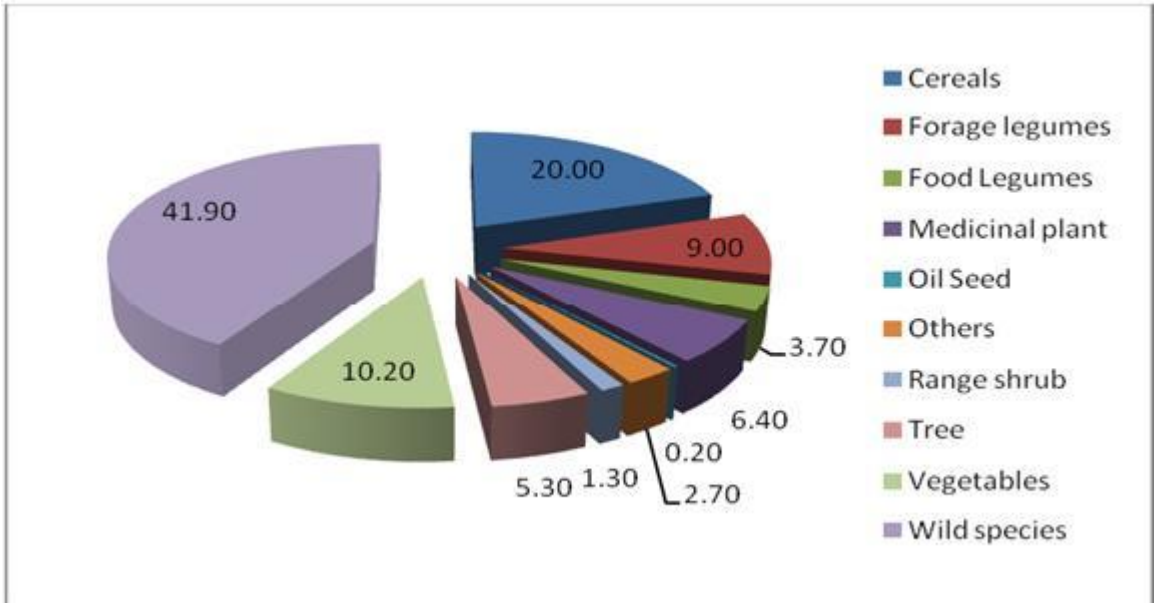


Figure (2): NARC germplasm collection by crop type Percentage in 2014.

2-Herbarium.

Herbarium is a collection of preserved plant specimens. Specimens may be whole plants or plant parts: these will usually be in a dried form, mounted on a sheet, but depending upon the material may also be kept in alcohol or other preservative.

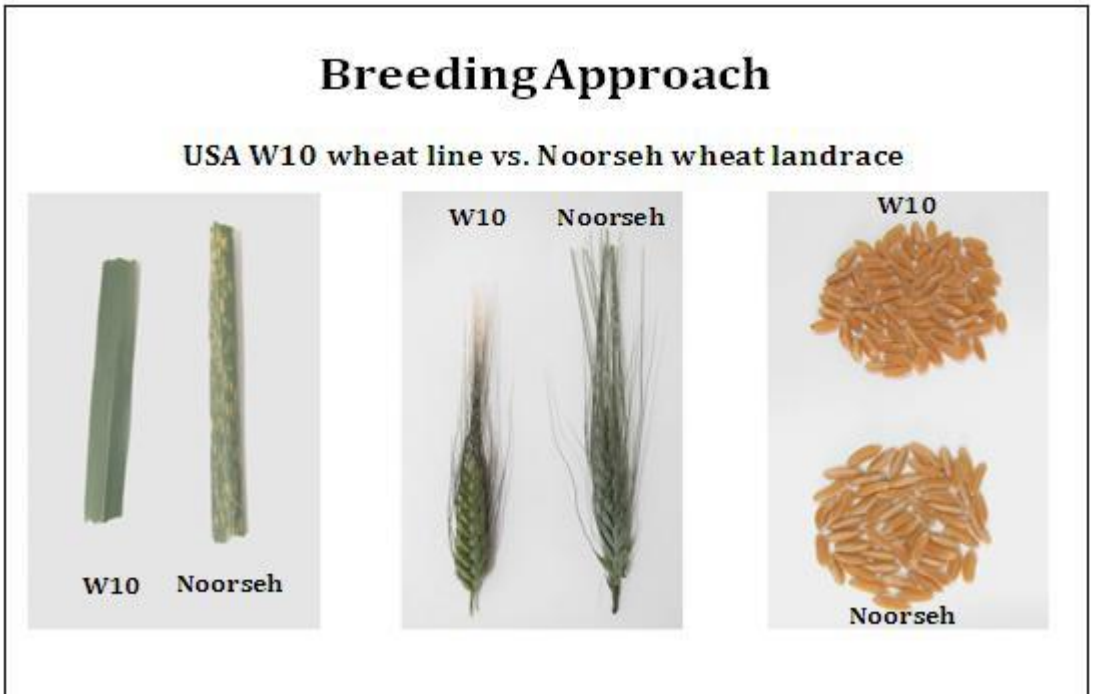
The specimens in a herbarium are often used as reference material in describing plant taxa; some specimens may be types. The Herbarium at NARC hosts around 3617 specimens, among which some valuable specimens that had been collected during late 19th century.

Objectives:

- Floral survey, Identification of specimens collected, seed collection and *Ex situ* conservation, Seed banking.

- Floral survey and evaluation of status of vegetation cover in different ecosystem particularly fragile ecosystem, restoration and improvement of livelihood conditions, under the fund of different projects targeting such areas for the sake of improve the livelihood conditions.

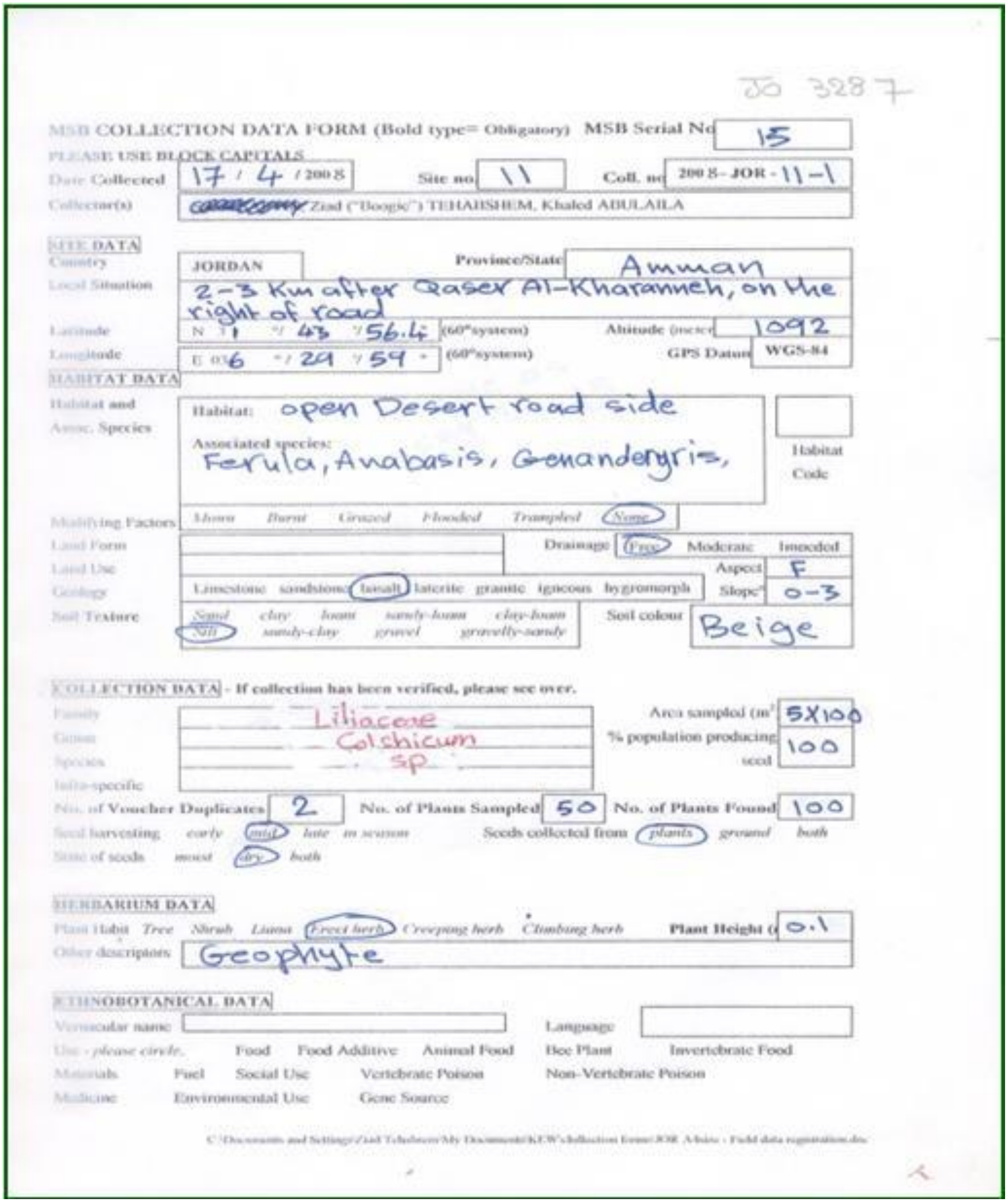
- Survey and conservation and use of crop wild relatives of field crops native to Jordan



Data Base and Documentation:

Information system to help running and sustaining genetic resources conservation and utilization.

Passport Data Collection and Documentation



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MSB COLLECTION DATA FORM (Bold type= Obligatory) MSB Serial No 15

PLEASE USE BLOCK CAPITALS

Date Collected 17 / 4 / 2008 Site no 11 Coll. no 2008-JOR-11-1

Collector(s) [illegible] Ziad ("Boogie") TEHABSHEM, Khaled ABULAILA

SITE DATA

Country JORDAN Province/State Amman

Local Situation 2-3 Km after Qaser Al-Kharanneh, on the right of road

Latitude N 31 ° 43 ' 56.4 " (60°system) Altitude (meter) 1092

Longitude E 036 ° 29 ' 59 " (60°system) GPS Datum WGS-84

HABITAT DATA

Habitat and Assoc. Species Habitat: open Desert road side

Associated species: Ferula, Anabasis, Gonandergris,

Habitat Code

Modifying Factors Mown Burnt Grazed Flooded Trampled None

Land Form Drainage Free Moderate Impeded

Land Use Aspect F

Geology Limestone sandstone basalt laterite granite igneous hygromorph Slope° 0-3

Soil Texture Sand clay loam sandy-loam clay-loam Silt sandy-clay gravel gravelly-sandy Soil colour Beige

COLLECTION DATA - If collection has been verified, please see over.

Family Liliaceae Area sampled (m²) 5X100

Genus Colchicum % population producing seed 100

Species sp

Infra-specific

No. of Voucher Duplicates 2 No. of Plants Sampled 50 No. of Plants Found 100

Seed harvesting early mid late in season Seeds collected from plants ground both

State of seeds moist dry both

HERBARIUM DATA

Plant Habit Tree Shrub Liana Erect herb Creeping herb Climbing herb Plant Height (m) 0.1

Other descriptors Geophyte

ETHNOBOTANICAL DATA

Vernacular name Language

Use - please circle. Food Food Additive Animal Food Bee Plant Invertebrate Food

Materials Fuel Social Use Vertebrate Poison Non-Vertebrate Poison

Medicine Environmental Use Gene Source

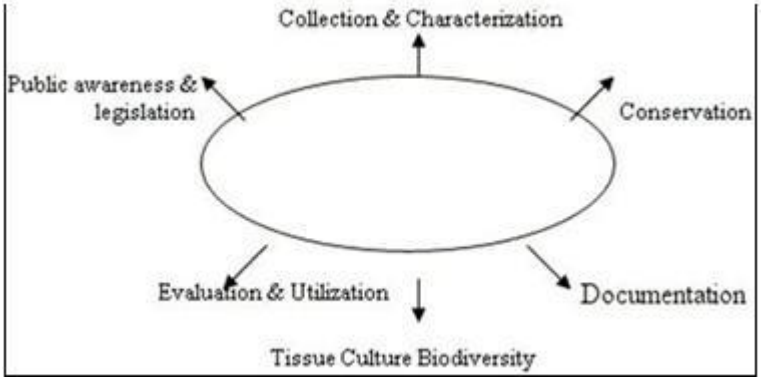
Objectives:

- Focus on data documenting accessions (seeds, Herbaria) conserved in short-terms storage.
- Focus on "operational" data that supports management of collections, supports planning of future work.

3- Biodiversity.

Main Goal:

- Conducted plant biodiversity study for different ecosystem and *In situ* conservation management, Monitoring and Sustainable utilization of plant biodiversity.


Collection & Characterization
Public awareness & legislation
Conservation
Evaluation & Utilization
Documentation
Tissue Culture Biodiversity