

The main objective of the National Centre for Plant Genetic Resources: Polish Genebank (NCPGR) is protection of biodiversity of crop plants endangered with genetic erosion.

NCPGR objectives:

- collection of crop plants and their wild relatives endangered with genetic erosion,
- characterization and evaluation of collected materials in both, traditional and molecular way,
- keeping the accessions in viable state and genetic purity,
- drawing up documentation and exchanging the collected materials with other genebanks and botanical gardens worldwide,
- distribution of the material for breeding, research and education,
- development of research and use of crop plants genetic resources.

The objectives are realized within the scope of Area 1 „Crop plants genetic resources protection” within the framework of the Multiannual Programme „Creating the scientific basis of the biological progress and conservation of plant genetic resources as a source of innovation to support sustainable agriculture and food security of the country” coordinated by Plant Breeding and Acclimatization Institute—National Research Institute and financed by the Polish Ministry of Agriculture and Rural Development.

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BIODIVERSITY PROTECTION IN THE GENE BANK

**PLANT BREEDING AND
ACCLIMATIZATION INSTITUTE—
NATIONAL RESEARCH INSTITUTE
NATIONAL CENTRE FOR PLANT
GENETIC RESOURCES:
POLISH GENE BANK**



We are able to manipulate genes, but only nature can create them. When a plant with unique feature disappears, it is an irreversible loss.

A lot of factors endanger biodiversity, including:

- change of land cultivation methods,
- limitation or abandoning of traditional farming methods,
- Liquidation and fragmentation of habitats and agroecosystems,
- Chemical contamination, dehydration and acidification of soils,
- Displacing landraces and old varieties of crop plants with new, high yielding varieties,
- Intrusion of alien species and their planned or accidental introduction.

It is crucial to stop the process of genetic erosion.

NCPGR activities extend biodiversity of agricultural crops through introduction of landraces and old crop varieties of field crops, vegetable crops, medicinal plants and through raising public awareness of the importance of plant genetic resources.



Plant collections protected within the framework of Multiannual Programme, Area 1 „Crop plants genetic resources protection”:

- collections of agricultural plants: rye, winter and spring wheat, pea, lupin, serradella, underutilized grain legumes, durum wheat, triticale, buckwheat, corn, potatoes, herbal plants, medicinal and aromatic plants (including spice crops), hop, hemp, smallseed legumes, meadow and pasture plants, reclamation plants, energetic plants and grasses,
- collections of vegetable crops: onions, garlic, shallot, cucumbers, cucurbits, tomatoes, parsley, celery, dill, beans, asparagus, carrots, cabbages, cauliflowers, broccoli and peppers,
- collections of fruit trees: apple, pear, plum, sour and sweet cherry, peach, apricot, hazel, walnut, and rare varieties of fruit crops,
- collections of berry crops: strawberry, wild strawberry, raspberry, blackberry, currant, gooseberry, blueberry and cranberry, grapevine and ornamental plants (lily, narcissus, tulip, gladiolus and rose),
- collection of wild crop relatives and accompanying weed species.



Cooperative units managing field crops collections



Cooperative units managing vegetable crops collections.