The Italian National program to implement the International FAO Treaty on Plant Genetic Resources for Food and Agriculture

Izzo M., Avanzato D., Fideghelli C.
CRA-Istituto Sperimentale per la Frutticoltura di Roma
Via di Fioranello, 52 00134 Roma

On the year 2004, the Italian Government ratified the FAO International Treaty on Plant Genetic Resource (PGR) that has the aim of conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits derived from their use, in armony with the Convention on Biological Diversity, for sustainable agriculture and food security. To implement the Treaty, the Ministry of Italian Agriculture and Forestry Policy entrusted the CRA (Agriculture Research Council), to develop the necessary actions, through the coordination of the ISF of Rome and the activity of seventeen research Institute.


The main targets of the project are:
To establish ex situ and in situ collections
Inventory of the PGR for food uses
Genetic characterization of the PGR accessions
Evaluation of the risk of genetic erosion
To promote actions for the valorization.

The main expected results are:

Conservation of the autochthonous varieties in situ and ex situ collections for genoma studies and utilization

ISFruitculture, Rome: Germoplasm collection established in the year 2001 in Rome, where are kept 4546 accessions (1883 indigenous)

Inventory of the fruit germoplasm conserved by the ISF

Inventory of the germoplasm conserved by the CRA Institutes

IS for Vegetables, Pontecagnano, Sa: three Asparagus spontaneous species of the Mediterranean area utilized to introgress Puccinia asparagi, Sisymbrium vesicarium, salt and drought resistance into A. officinalis L.

Keep the existing agricultural biodiversity under cultivation

ISFruitculture, Rome
Olea oleaster resistant to drought and Verticillium

ISFruitculture Sanremo
Arbutus andrachne Spontaneous plant of the Mediterranean region, growing from the Atlantic coast up to Ireland.

ISFlowerculture Sanremo
Poncirus trifoliata resistant to the virus “Tristeza” and cold tolerant

ISFruitculture, Roma
P. terebinthus Monocious form for horticulture breeding programme

ISFruitculture, Roma
Trifolium pratense L. from Latium (left side) characterized by early blooming and abundant flowers, from Sardinia (centre) characterized by prostrate habitus and a vigorous ecotype from Piedmont (right side).

ISFruitculture, Rome
Poncirus trifoliata resistant to the virus “Tristeza” and cold tolerant

ISFlowerculture Sanremo
Limonium maritimum endemic wild species collected in the west coast of Sicily

Producing of basic propagating material

Cloned selections of P. pyraster silvestris (resistant to soil high calcium content) and P. maritimum (drought resistant)