



DYNAMICS AND CONSERVATION OF GENETIC DIVERSITY IN FOREST ECOSYSTEMS

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CONSERVATION OF GENETIC RESOURCES OF BROADLEAVED FOREST TREE SPECIES IN UKRAINE

Results of activities carried out in Ukraine within the scope of the project «Genetic resources of broadleaved forest tree species in Southeastern Europe» funded by the Ministry of Finances of Luxembourg and coordinated by IPGRI are presented. A complementary approach was chosen encompassing the in situ conservation of genetic diversity of native forests, further development and use of technologies for ex situ conservation as well as genetically sustainable forest management. A comprehensive inventory of the existing system of genetic reserves and other in situ gene conservation units to start throughout the country, with an emphasis in 2001 on *Quercus* and *Fagus* resources. Particular emphasis was given to the inventory of rare broadleaved species in the relevant gene conservation units. All partners ensured the use of common information standards for description of the gene conservation units. The units inventoried were mapped using GPS to be associated to the relevant species distribution maps. In 2001, the inventory was carried out in 8 provinces: Ternopil, Chernivtsi, Zhytomyr, Rivne, Sumy, Kharkiv, Poltava and partly Crimea. 93 gene reserves, 11 «plus» stands and 416 «plus» trees have been inventoried. Totally 123 sample plots have been established. Results of the inventory are to be added to the existing EUFORGEN databases and to be made available on the Internet. The original national database containing more detailed information is under development. Feasibility studies on genetic inventories of beech (*Fagus* sp.) using RFLP and RAPD methods have been started. The map of natural distribution range of beech in Ukraine has been developed. The area covers two mountain regions in Ukraine: Carpathians and Crimea. In Carpathian region beech is represented by the species *Fagus sylvatica*. In Crimea beech is represented by *Fagus taurica*, which is considered as a subspecies of *F. sylvatica* or a hybrid between *F. sylvatica* and *F. orientalis*. Establishing clonal archive of the most endangered plus trees of *Quercus robur* L. using in vitro culture has been started. In order to support conservation strategies and propose options for further developing or updating legislation and policy systems, an analyse of the legal and policy framework in Ukraine of main legislative documents in force in the area of FGR conservation has been done.