

INTEGRATING GENETIC AND MORPHOLOGICAL CHARACTERIZATION OF CHESTNUT CULTIVARS: WHERE ARE WE AND WHAT FOR?

VILLANI F.*, MATTIONI C.*, MARTIN A.**

*) CNR, Institute of Agro-Environmental and Forest Biology, Viale Marconi 2, 05010 Porano (Italy)

**) Departamento de Genetica, Escuela Tecnica Superior de Ingenieros Agronomos y de Montes, Edificio Gregor Mendel, Campus de Rabanales, Universidad de Cordoba, Cordoba (Spain)

Genetic variability, varietal characterization, chestnut, Castanea sativa, environmental security

During the last few decades, one of the principal challenges in agriculture has been to combine increased productivity and competitiveness with maintenance of biodiversity. In this context, on-farm conservation has been receiving increasing attention and international initiatives have been encouraged to enhance and preserve the genetic diversity of traditional varieties (FAO, 1996; Esquinas-Alcazar, 2005). Many researches have been carried out to identify morphological and genetic standards able to univocally characterize local varieties or landraces that are encouraged to be retained either because they fill ecological, cultural and local socioeconomic niches as well as because of the increasing market requests for typical products derived from them.

Within this context, chestnut is one of the key multipurpose tree species which is considered of utmost importance in all Mediterranean countries for both timber and fruit production. Many studies have been made to identify synonymy and homonymy in the traditional classification of the local varieties.

An overview of the studies carried out using morphological as well as molecular markers is reported. Scientific results are discussed in relation to their impact on policy and marketing measures and their application in the context of genetic resources conservation, breeding, environmental security. Examples of lack of appropriate link between scientific community, governance, market, gene conservation and people are reported.