

KURDISH OLIVE GERMPLASM: GENETIC DIVERSITY ASSESSMENT THROUGH SSR MARKERS

GADALETA S.*, EL BEAINO T.**, MASCIO I.*, PARMA C.**, DEBS P.**,
MONTEMURRO C.*

*) Department of Soil, Plants and Food Sciences (DI.S.S.P.A.), section of Genetics and Plant Breeding, University of Bari Aldo Moro, Via Amendola 165/A, 70126 Bari (Italy)

**) International Centre for Advanced Mediterranean Agronomic Studies of Bari (CIHEAM-Bari), Via Ceglie 9, 70010 Valenzano (Italy)

Olive plant (*Olea europaea* L. subsp. *europaea*) is a diploid specie ($2x = 46$). It's widespread in Mediterranean basin, area in which represents an important source of income and its fruits are used to produce olive oil e table olives. The Fertile Crescent is the site of the first civilizations and putative first centres of origin of many crops as assumed for the olive tree. Situated near the Fertile Crescent, there is the Iraqi Kurdistan. This country, in the northeast part of Iraq, is crossed by the Zagros Mountains, a long mountain chain, and characterized by semi-arid climate conditions. In particular, summers are very hot and dry, in contrast with cool wet winters. Objects of this study is the investigation of genetic variability of 47 endemic and international accessions collected in this area as a means of 16 simple sequence repeat markers. Specifically, diversity genetic indexes were estimated and genetic relationship among olive samples was evaluated through Principal Coordinates Analysis (PCoA) and Unweighted Neighbor-Joining dendrogram. In conclusion, the goal of this work is to investigate part of genetic variability of olive growing in Iraqi Kurdistan, area in which only a few olive biodiversity information is available to nowadays. Moreover, in prospective to cope the climate change is essential the identification of genotypes suitable for adverse conditions for using in genetic breeding programmes.