

CHARACTERISATION OF OLIVE GERMPLASM FROM ABRUZZO REGION BY MICROSATELLITE MARKERS

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In the whole Mediterranean basin a large number of varieties of *Olea europaea* L. are present. This produce a series of problems concerning the germplasm characterization, management and preservation. In addition there is the problem arising from the existence of homonyms and synonyms. This make difficult the cultivar identification. The single sequence repeats (SSR) are co-dominant markers, showing a large number of polymorphisms *per primer* set and often multiple alleles in a variety, which can be highly informative.

In this work 23 accessions of olive from the Italian germplasm collection of the *CRA Istituto Sperimentale per l'Olivicoltura at Rende, Cosenza, Italy* (CRA-ISOL), were studied, corresponding to the major part of the autochthon germplasm of Abruzzo region: Caprina di Casalanguida, Caprina Vastese, Carbonchia, Carpinetana, Castiglione, Crognalegna, Cucco, Dritta, Gentile dell'Aquila, Gentile di Chieti, Intosso, Nebbio di Chieti, Nebbio di Pescara, Olivastro di Bucchianico, Olivastro Frentano, Pescarese, Posola, Posolella, Precoce, Puntella, Rustica, Toccolana and Tortiglione.

Thanks to the identification and characterization of 23 olive cultivars with unique genotype we can affirm that SSR technology is an efficient tool for genotyping the olive germplasm collection of Abruzzo region and could be valid to distinguish other accessions which can be introduced into the collection.

This study showed that the use of molecular markers like SSRs is very useful to build a data base available for variety analysis and for olive germplasm collection management.