## **Poster Communication Abstract – 4.22**

## MORPHO-AGRONOMICAL AND GENETIC CHARACTERIZATION OF TWO TRADITIONAL APULIAN BRASSICA CROPS: CIMA DI RAPA (*B. RAPA* SUBSP. *SYLVESTRIS*) AND CAVOLO RICCIO (*B. OLERACEA* VAR. *ACEPHALA*)

MAZZEO R.\*, LOTTI C.\*\*\*, MARCOTRIGIANO A.R.\*, ZONNO V.\*, BARDARO N.\*, PAVAN S.\*, SONNANTE G.\*\*, IOVIENO P.\*, RICCIARDI L.\*

\*) Department of Soil, Plant and Food Science, Section of Genetics and Plant Breeding, University of Bari, Via Amendola 165/A, 70126 Bari (Italy)
\*\*) Department of the Sciences of Agriculture, Food and Environment, University of Foggia, Via Napoli 25 (Italy)
\*\*\*) National Research Council Institute of Biosciences and Bioresources, Via Celso Ulpiani 5, 70126 Bari (Italy)

## genetic diversity, molecular markers, SSR, germplasm characterization, Apulian brassica vegetables

"Cima di rapa" and "cavolo riccio" are two typical Apulian brassica vegetables with high nutritional values, used for several traditional recipes and considered as local heritage. "Cima di rapa" is largely cultivated occurring with several landraces of significant economic importance. On the contrary, "cavolo riccio" is a secondary crop, grown in a few peri-urban vegetable gardens in the metropolitan area of Bari and, recently, it has been mentioned as one of typical vegetable at risk of genetic erosion.

The aim of the present work has been to establish a germplasm collection of the two crops, in order to preserve their genetic variation and, for the first time, to characterize the two crops at the molecular level. On this purpose, morpho-agronomic and molecular data have been recorded on 50 accessions of "Cima di rapa" and 19 of "cavolo riccio" were performed. Furthermore, all entries were evaluates their yield performances.

Genotyping by highly informative simple sequence repeat (SSR) molecular markers highlighted significant patterns of molecular variation among accessions. Polymorphic data were used to carry out principal component analysis and obtain dendrograms of genetic similarity.