

COMBINING ABILITY AND HERITABILITY OF MALE STERILE AND RESTORER LINES IN SUNFLOWER FOR OIL QUALITY.- I. Greco\*, E. Alba\*, R. Tuberosa\*\* - \* Institute of Plant Breeding, University of Bari, via G. Amendola, 165/A- 70126 Bari; \*\* Institute of Agronomy, University of Bologna, Via Filippo Re, 8 - 40126 Bologna.

Qualitative improvement in fatty acids contents responding to specific nutritional needs are being evaluated in breeding programmes. This in order to obtain two different types of oil: one characterized by a high linoleic acid content, useful in specific diets and industrial purposes, the other with a better linoleic/oleic rate for wider and more general purposes. The paper reports the values of general and specific combining ability in 6 male sterile lines and 4 restorer lines. Among the lines the crosses were carried out according to N.C.M. II. The character data: seed production, oil, protein, fatty acids and ashes contents were subjected to combining ability analysis. Heritability values for each character were also calculated.

The data reveal that cultivars characterized by different linoleic/oleic ratio can be obtained by plant breeding methods.