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1. Opaque endosperm mutants in Italian varieties.

By self pollination of about 500 samples of Italian local populations, many phenotypically opaque endosperm mutants have been isolated.

Allelism tests have been performed by crossing the mutants to stocks bearing the $\underline{\mathrm{fl}}_1$, $\underline{\mathrm{fl}}_2$, $\underline{\mathrm{o}}_1$, $\underline{\mathrm{o}}_2$ factors in homozygous and/or heterozygous condition. Among the mutants, eight turned out to be allelic to the locus $\underline{\mathrm{o}}_2$ on chromosome 7. No clear information has been obtained about the other mutants although they have been recognized as different from $\underline{\mathrm{o}}_2$.

The o_2 mutants were present in the varieties:

Comune di Vasto
Giallo bastardo di Stradalta di Basiliano
Giallo di Ferrandina
Giallo precoce di Valdarno
Locale di Sulmona
Nostrale di Montepulciano
Quarantino di Terracina
Quarantino di Vigo di Non

The opaque-2 isolated from the Giallo bastardo di Stradalta is the already known "Italian \underline{o}_2 source" detected and distributed by Bianchi and Coll. Among the examples turning out to be not allelic to \underline{o}_2 , at least two cases appear different also from the tested factors \underline{o}_1 , \underline{fl}_1 , \underline{fl}_2 °

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