

In view of the above facts it is appropriate to change the designation of this mutant to a dominant yellow-green allele of oy and give it the symbol Oy^{YG}.

Another peculiar characteristic of this dominant allele is that homozygous kernels appear to lose their viability quite rapidly. Plantings made soon after harvest of randomly selected kernels from selfed ears from dominant/normal heterozygotes gave good 1 yellowish white: 2 yellow-green: 1 green ratios, while plantings from the same ears 1 year later gave 2 yellow-green: 1 green seedlings with an occasional yellowish white seedling. Approximately 1/4 of the kernels did not germinate. These would account for the missing yellowish white seedlings.

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10. tn allelic to oy, designated oy^{tn}.

Crosses of tinged (tn tn) with yellow-green heterozygotes (Oy Oy^{YG}) and with oil yellow (oy oy) plants have given seedling progenies whose phenotypes clearly indicate allelism. The interactions are as follows:

<u>parent genotypes</u>	<u>seedling phenotype</u>
<u>tn tn</u>	green → yellow green
<u>oy oy</u>	oil yellow → yellow green
<u>tn tn</u> x <u>oy oy</u>	intermediate (yellow green)
<u>tn tn</u> x <u>Oy Oy</u> ^{YG}	1 green: 1 lethal yellow
<u>oy oy</u> x <u>Oy Oy</u> ^{YG}	1 green: 1 lethal yellow
<u>Oy Oy</u> x <u>Oy Oy</u> ^{YG}	1 green: 1 yellow green

These observations demonstrate a complexity of activity at the oy locus that had not been suspected. More complete descriptions of phenotypes and better comparisons await conversion to a common background.

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11. Tan necrotic (nec-E409).

One of the tan necrotic mutants reported last year (nec-E409) has been located by selfing the hypoploids from each of the TB tests. Three out of four selfed ears from TB-5a hypoploids produced from the cross of