with Y in 6L and Gl close to the centromere either in 9S or 9L.

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6. Linkage of oy.

The data listed below come from crosses of oy R kl0/ Oy r Kl0 females with oy R kl0 males. Two types of kernels were produced, R R R and r r R. The r r R class is more frequent because of preferential segregation. There is no evidence of preferential segregation of oy or of linkage of oy and R.

| | R R R | | R r r | |
|---|---|---|---|---|
| | Oy | oy | Oy | oy |
| 22843 X 23063 | 138 | 140 | 399 | 407 |

Because of the negative results obtained above, a further test of the location of oy on chromosome 10 was made. Plants trisomic for chromosome 10 were crossed to an oy stock and the trisomic $F_1$'s were used as male parents in the backcross to oy. Five different male parents gave ratios of green to oil yellow as follows:

| | Oy | oy |
|---|---|---|
| 24610-4 | 59 | 21 |
| 24610-11 | 56 | 22 |
| 24610-13 | 190 | 110 |
| 24612-12 | 42 | 23 |
| 24612-15 | 70 | 27 |
| | 417 | 203 |

The total of 417 green to 203 oil yellow indicates that oy is located on chromosome 10, as was reported by E. G. Anderson (MNL 25,1951). Although abnormal 10 is present in the trisomic stock, no distortion of ratios is expected since male gametes were tested. A stock of du, which is 20 units proximal to R, was obtained from H. H. Kramer and will be crossed to oy for more precise location. The information given here indicates that oy is either in 10S or is close to the centromere in 10L.

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