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1. Golden-2.

The location of golden-2 still seems to be in doubt if my survey of the News Letters is complete. In recent years it has been included in the long arm of the seventh linkage group near Bn, twenty units to the right of ij, in a number of publications, apparently on the basis of the following data from Sprague (N. L. 14, 1940).

g₂ ij RS 310 118 101 3 532 20% recombination

Brink and Arney in 1942 (N.L. 16, p. 34) report linkage of g₂ with T3-7b (3S.90; 7L.03) of 11.3% while earlier in the 1937 News Letter (p. 14), Brink had reported g₂ and d₁ linkage indicating a chromosome 3 location. I have some data to report which do nothing to resolve the matter.

Genes X Y	Phase	X Y	X y	x Y	x y	Total	Recombination
<u>Chrom. 3</u>							
<u>G₂ Gr</u>	CB	93	97	86	80	356	ca 51%
<u>Chrom. 7</u>							
<u>G₂ Pn</u>	CB	72	77	92	99	340	ca 50%
<u>G₂ Pn</u>	CS	126	40	96	40	302	ca 42%
<u>G₂ Bd</u>	RS	168	54	62	18	302	ca 49%

Only the coupling-self (CS) of G₂ Pn shows a significant deviation from the expected 1:1 ratio of independent gene segregation. Since I find Papyruscent (Pn) somewhat difficult to classify in certain cultures, this family may not be indicative of linkage.

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2. Golden-4.

A variety of observations suggest that the stock of golden-4 carried by the Coop is not really golden-4, but more likely golden-1. The F₁ of g₁ x g₄ is golden in colour. In addition a supposedly 3-point linkage test with wx and bm₄ on chromosome 9 showed no significant deviation from a 1:1:1:1:1:1:1:1 ratio indicating independent assortment of golden with both wx and bm₄. The previously indicated position of g₄ is between wx and bm₄.

F ₁	Parental	Region 1	Region 2	Region 1-2	Total
<u>+ + +</u> <u>wx g₄ bm₄</u>	74 67	77 77	70 61	62 50	538
	141 26.2%	154 28.6%	131 24.3%	112 20.8%	

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