

As our estimation was made on flies with high fecundity, where the relations between egg production and ovariole number were accurately analysed, it may be concluded that the new results describe the process of normal oogenesis in *Drosophila melanogaster* more precisely. It may be assumed that, in the flies studied by King, a partial retention of stage 14 oocytes took place, which, as a consequence, partly inhibited the growth of the following egg chambers. Such retention is frequent in most inbred lines (David, 6) and particularly among virgin females. So, the stage distribution given by King is to be taken into consideration by workers utilizing such flies.

- (1) King, R.C., Rubinson, A.C., Smith, R.F. - 1956 - Growth 20 121-157
- (2) King, R.C. - 1957 - Growth 21 95-102
- (3) King, R.C. - 1964 - Symp. Roy. Ent. Soc. London 2 13-25
- (4) David, J., Clavel, M.F. - 1967 - D.I.S. 42 101-102
- (5) David, J. - 1962 - D.I.S. 36 128
- (6) David, J. - 1961 - Bull. Biol. fr. Belg. 95 521-535

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Tokunaga, C. Lawrence Radiation Lab., University of California, Berkeley, California. A test for functional allelism between Multiple sex comb (Msc) and the mutants Polycumb (Pc) and Extra-sexcomb (Scx).

According to Hannah-Alava (1958, '64), the 'extra sex comb' locus consists of two sub-loci each represented by a semi-dominant mutant, Polycomb (Pc) and Extra-sexcomb (Scx) separated by 0.2-0.3 of a crossover unit. Pc and Scx are located in the third chromosome between st(44.0) and p(48.0) probably just to the left of

p. They are not associated with any chromosomal aberration.

Multiple sex comb (Msc) (Tokunaga, 1966) is also located very close to p between ri(47.1) and p. It is associated with a small inversion extending from 84B to 84F.

The following crosses were made to determine whether Msc and Pc, and Msc and Scx are functionally allelic.

1. Test between Msc and Pc.

Crosses: A. Pc/TM1, M^e ri spd¹ ♀♀ x pr en; Msc/Sb ♂♂
 B. Pc/T(2;3)M^e ♀♀ x pr en; Msc/Sb ♂♂

F₁ segregation (A+B)

	Msc/Pc	Msc/M ^e	Pc/Sb	M ^e /Sb	Total
♂♂	318	305	288	1	912
♀♀	280	290	325	0	895

The fact that Msc/Pc is viable in contrast to the lethality of Msc/Msc and Pc/Pc indicates that Msc and Pc are not functionally allelic.

2. Test between Msc and Scx.

Cross: th st Pc Scx pP ss/TM1, M^e ri ♀♀ x pr en; Msc/Sb ♂♂

F₁ segregation

	Msc/Pc Scx	Msc/M ^e	Pc Scx/Sb	M ^e /Sb	Total
♂♂	790	1026	1063	0	2879
♀♀	662	1099	1176	1	2938

The fact that Msc/Pc Scx is viable in contrast to the lethality of Msc/Msc and Scx/Scx indicates that Msc and Scx are not functionally allelic. It is noted however, that the viability of Msc/Pc Scx is very much reduced.

Furthermore, it is seen that the combinations Tm1, M^e/Sb and T(2;3)M^e/Sb are nearly always lethal, as reported by E. B. Lewis (1949).