

Paik, Y.K. University of Hawaii, Honolulu.  
Frequency of heterozygous inversions from  
a Korean population of *D. immigrans*.

In October, 1972, a collection of *Drosophila*  
was made at Yonsei University Forest, Seoul,  
at 300 feet. Daily mean temperature in the  
area was 15°C. In the sample of 369 flies  
taken, *D. immigrans* comprised the greatest frac-

tion (62%) and *D. bizonata* occurred in the next largest numbers (14%). There were eight other  
species of the same genus present.

The 135 larvae (one/female) of the wild *D. immigrans* females were examined cytologically

Larvae tested	No. of heterozygous inversions observed			No. of inversions per larva (S.E.)
	A	B	C	
135	9	14	1	0.18 ± 0.03
%	6.7	10.4	0.7	

for the types and frequencies of in-  
versions and the data are summarized  
in the table. The notations A, B  
and C are the same as in Brncic's  
(1955) data. The result is very sim-  
ilar to that in Japanese populations  
(Hirumi 1961; Toyofuku 1961), but  
strikingly different from those re-

ported from other widely separated geographic regions.

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providing the facilities which made this work possible.

References: Brncic, D. 1955, *J. Hered.* 46:59-63; Hirumi, H. 1961, *Jap. J. Genetics* 36:  
297-305; Toyofuku, Y. 1961, *Jap. J. Genetics* 36:32-37.

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Table 1. The incidence of sex linked recessive lethals induced  
in various experiments conducted.

Treatment	Brood A			Brood B			Brood C			N	L	%
	N	L	%	N	L	%	N	L	%			
Control	861	2	0.23	827	4	0.48	874	2	0.23			
30% Deuterium	214	4	1.86	440	1	0.22	500	1	0.20			
3000r γ rays	763	23	3.01	240	14	5.83	348	7	2.01			
30% Deuterium & 3000r γ rays	741	31	4.01	485	28	5.77	323	7	2.1			
	Brood D			Brood E			Brood F			Total		
	N	L	%	N	L	%	N	L	%	N	L	%
	891	4	0.45	764	-	-	783	2	0.25	5005	14	0.27
	212	1	0.47	99	-	-	15	-	-	1480	7	0.47
	955	11	1.15	883	5	0.57	582	1	0.27	3771	61	1.61
	519	15	2.8	557	1	0.18	338	2	0.59	2963	84	2.83

N = Total number of X-chromosomes scored

L = Total number of lethals recorded

Table 2.  $\chi^2$  values for the differences in sex linked recessive lethal  
frequency for the groups compared.

Group	BROODS						
	A	B	C	D	E	F	Total
Control vs 30% Deuterium	5.58	1.35	0.40	0.28	-	-	1.32
Control vs 3000r γ rays	20.01	17.4	8.51	1.93	2.67	0.83	45.43
3000r γ rays vs 30% Deuterium & 3000r γ rays	1.48	0.0	0.21	5.28	2.33	0.23	13.40

References: Hughes, A.N., E.H. Phillip and G.C. Becker 1963, *Genetics* 49:715; Konard,  
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