Berg, R.L., U.S.S.R. 190121, Leningrad F-121, pr. Maklina 1, kv.6. A further study of the rate of "abnormal abdomen" (aa) in geographically isolated D. melanogaster populations. A simultaneous rise in the rate of abdominal segmentation abnormalities designated as abnormal abdomen (aa) was observed in geographically isolated populations of D. melanogaster in 1968 and especially in 1969 (Berg 1972a). Segregations in the progeny of hundreds of aa males and females individually crossed with non-

aa flies proved the predominant role of heredity in the etiology of this fly disease (Berg 1972b). The hypothesis was put forward that the selective values of mutant genes responsible for the abnormality is changing on a global scale. Investigation of 12 populations during 1970 and 1971 substantiated this view, since enormously high rates of aa were observed in each of the twelve populations. In 1972 the study of the phenotypical polymorphism in some of the previously studied populations was repeated and several "new" populations investigated (Table 1). The hypothesis of the global increase of aa rates is substantiated by the high frequency of the aa phenotype observed in 1972 in 13 populations. During the last five years 20 populations were studied and the aa phenotype was abundant in all of them.

References: Berg, R.L. 1972a DIS 48:67-69; Berg, R.L. 1972b DIS 48:67.

Table 1

Concentration of abnormal abdomen phenotype in geographically isolated populations of Drosophila melanogaster in 1972

Population		Collection date	Males			Females		
			n	number	%	n	number	%
Moscow District	Kashire	11 - 13.IX	1297	70	5.4	549	56	10.2
Transcarpathians	Goriani*	18.1X	1115	80	7.9	402	139	34.6
	Khust*	22.1X	790	73	9.2	879	341	38.8
Crimea	Nikita Botanical Gardens	28.1X	749	64	8.6	541	233	43.1
	(Magarach)	•						
Kuban	Gelendzhik*	6.X	665	96	14.4	878	442	50.3
Transcaucasus	Kutaissi	14.X	333	36	10.8	683	26 8	39.2
	Dilizhan	18.X	274	90	32.5	288	130	45.1
	Erevan	19.X	504	73	14.5	500	275	55.0
	Burakhan	21.X	382	83	21.7	302	144	47.7
Middle Asia	Alma-Ata conserve factory	9.XI	378	47	12.4	543	280	51.5
	Alma-Ata winery	10.XI	517	62	12.0	458	266	58.1
	Frunze	30.X	628	83	13.2	49.2	193	39.2
	Przhevalsk*	4.XI	445	37	8.3	462	130	28.1
	TOTALS	11.IX-10.XI	8077	894	11.1	6977	2897	41.6

Populations designated * were studied for the first time.

Garcia-Bellido, A and P. Ripoll. Centro de Investigaciones Biológicas, C.S.I.C., Madrid, Spain. A mwh⁺ duplication on the tip of the first chromosome. Three independent Dp(1:Y:3)M1-3 have been recovered by X-radiation (3000r) of premeiotic stages of the spermatogenesis in T(Y:3)P6, mwh⁺ ve⁺ (62 A-B, Lewis 1972, DIS 48:188)/sc⁸ Y^S X, y⁺ KS y cv v f;mwh ve males. Genetically, the duplication mwh⁺ on the tip of Y^S X chromosome

locates distal to KS factors. Dp(1:Y:3)M males are viable and fertile over a Y^L chromosome. Homozygous females though, appear to be lethal. The allele mwh⁺ of the Dp does not variegate in nullo-Y males.