

were mated or unmated from irradiation to the 5th or the 7th day after treatment. From this it was concluded that when males were unmated the sperm was reabsorbed and/or spontaneously ejaculated.

To explain the variations in the rate of dominant lethals, it was supposed that the variation fitted with different stages of spermatogenesis that were treated. In the first 5 days, sperm that was mature at treatment was used. In the next 5 days, sperm was used which was maturing (spermatid stage) at treatment. After the 11th day, sperm that was immature at treatment was used.

Later the frequencies of point-mutations (y, w, and sn), gynandromorphs, and hyperploid males were studied in the two periods 1-6 and 7-10 days after treatment. Wild-type males were irradiated (960 r) and mated to virgin y w sn females, two of each sex per vial. At the beginning of the 7th day the males were transferred to another 5 virgin females. The following data were obtained.

Days after treatment	Total females and gyn.	Point-mutations	Gynandromorphs	Hyperploid males
1-6	59856	8	35	12
7-10	47007	22	32	56

From this it is concluded that spermatids are more sensitive to irradiation than mature spermatozoa.

Mainx, F. Structural variety in wild populations of European species of the obscura group.

For some time I and my collaborators have been occupied with this problem. In a short time a paper will appear containing general statements and the salivary chromosome maps of D. subobscura, D. obscuroides, and D. amnigua. A second paper will deal with a qualitative analysis of the inversions in D. subobscura (Austrian, British, and other strains). Further current investigations deal with the selective value of inversions in artificial populations, with quantitative analysis of certain populations, with selection of inversions by inbreeding, and with X-ray-induced inversions in D. subobscura.

Makino, Sajiro, and Kanehisa, Takeharu A preliminary survey of the geographical distribution of Drosophila in Hokkaido, Central, East, and North.

The species of Drosophila so far collected from Hokkaido and their distribution are preliminarily listed below. For description, the island of Hokkaido was divided into four regions-- South,

	South	Central	East	North
<u>Amiota</u> sp.		+		
<u>Scaptomyza</u> sp.	+	+		+
<u>Hirtodrosophila</u> sp.		+	+	+
<u>H. cinerea</u> group	+			
<u>melanogaster</u>		+		
<u>auraria</u>	+	+	+	+
<u>suzukii</u>	+	+	+	+
<u>obscura</u> group		+	+	
<u>transversa</u>	+	+	+	+
<u>nigromaculata</u>	+	+	+	+

	<u>South</u>	<u>Central</u>	<u>East</u>	<u>North</u>
virilis	+	+	+	+
testacea	+	+	+	+
funeris	+	+	+	+
histris		+	+	
immigrans		+	+	
rufa		+	+	
repleta group			+	
melanica group			+	
macularis group			+	
robusta group	+	+		
sordidula		+	+	+
coracina		+	+	
busckii	+	+	+	
Mycodrosophila sp. grandis (?)			+	+

Makino, Sajiro and Kanehisa
Takeharu A monthly survey of
Drosophila in the City of
Sapporo, Hokkaido.

August, and IX = September.

Monthly collections of Drosophila have been
made in three different regions in the City
of Sapporo. The species so far observed
and their monthly appearance are as follows:
(V = May, VI = June, VII = July, VIII =

	<u>West</u>					<u>South</u>					<u>North</u>					<u>Total</u>
	V	VI	VII	VIII	IX	V	VI	VII	VIII	IX	V	VI	VII	VIII	IX	
auraria	145	300	426	315	109	-	41	246	437	27	-	16	50	91	18	2221
nigromacu- lata	115	80	229	196	-	-	-	195	44	-	-	-	12	5	-	866
transversa	-	-	16	19	5	-	-	28	6	21	-	-	-	-	2	97
immigrans	-	-	64	111	51	-	-	16	15	3	-	-	11	3	1	275
funeris	-	-	13	-	5	-	-	26	10	3	-	-	5	-	-	62
busckii	-	-	-	63	-	-	25	24	68	-	-	-	-	-	-	180
testacea	-	20	25	5	4	-	-	59	12	-	-	-	-	-	-	125
histris	-	-	6	-	-	-	-	-	5	-	-	-	-	-	-	11
coracina	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
melano- gaster	-	-	-	34	15	-	-	-	-	2	-	-	-	-	-	51
virilis	-	-	-	9	2	-	-	-	33	2	-	-	-	-	-	46
robusta gr.	-	-	-	51	-	-	-	-	4	3	-	-	-	-	-	58
rufa	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Scapto- myza sp.	-	5	-	-	-	-	-	9	-	-	-	-	-	-	-	14
Total	260	405	780	803	191	-	66	603	635	61	-	16	78	99	21	4008

Makino, Sajiro and Takada
Haruo A monthly survey of
Drosophila in the vicinity
of Otaru City, Hokkaido.

VI = June, VII = July, VIII = August, and IX = September)

Monthly collections of Drosophila have been
made in Otaru City and its vicinity,
Shioya, in Hokkaido. The species so far
observed and their monthly appearance are
listed on the following page: (V = May,