

	<u>Otaru City</u>					<u>Shioya</u>					Total
	V	VI	VII	VIII	IX	V	VI	VII	VIII	IX	
auraria	+	+	+	+	+	+	+	+	+	+	394
nigromaculata	+	+	+	+		+	+	+			177
transversa	+	+	+	+	+	+	+	+	+		
sordidula				+		+	+	+			9
immigrans			+	+	+				+	+	120
funnebris				+	+						5
repleta					+					+	8
melanogaster				+	+					+	206
virilis				+	+					+	7
testacea					+					+	4
suzukii					+					+	30
buskii					+					+	11
histrio										+	1
robusta group										+	3
Amiota sp.										+	2
Total	27	53	89	120	197	38	71	88	102	192	977

Makino, Sajiro and Kanehisa.
Takeharu Some notes on a
 heritable tumor found in D.
virilis.

Individuals having a tumor-like outgrowth
 in the head and thorax regions were found
 in outbreeding stocks of the wild strain
 of D. virilis collected in Sapporo,

Hokkaido. It occurred in 53 specimens

out of 1224 individuals under observation. In general, the tumor-like out-
 growth was observed to develop especially in individuals showing abnormali-
 ties in the wings and others. Results of inbreeding with the tumor-bearing
 flies are listed below. The frequency of tumor-bearing individuals tends to in-
 crease with the generation of inbreeding. (Temperature: 20°-27° C.)

	Indv. with tumor		Tumor indv. with bodily abnor.		Normal indv.		Indv. with bodily ab- normalities		% of tumor indv.
	♀	♂	♀	♂	♀	♂	♀	♂	
F ₁	37	32	41	26	48	74	27	22	43.8
F ₂	40	27	4	10	22	24	7	8	58.0
F ₃	37	10	8	9	4	0	0	2	91.0
F ₄	202	132	16	22	17	30	3	13	92.0

Meyer, Helen U. Evidence of
 the unsplit condition of
 interphase chromosomes.

A Notch mutant had been induced in a
 pole cell of a male embryo by treatment
 with ultraviolet (irradiated in the
 polar cap stage in a nitrogen atmos-

phere, in which, however, it was kept for only 7 minutes). Breeding analy-
 sis showed that in addition to this lethal in the X chromosome, lethals had
 also been induced in both second chromosomes of the same pole cell. This
 cell proved to be the only primordial germ cell which was furnishing func-
 tional sperm, as evident from the fact that all female-producing sperm
 derived from this male transmitted the Notch in the X chromosome and all
 sperm analyzed transmitted one or the other of the two second-chromosome
 lethals (depending on which homologue of the second chromosome had been re-
 ceived, as shown by markers present).

This case allows the following conclusions to be drawn: (1) Since