

it was determined that the absence of color in genetically white first instar larvae is due to the absence of granules, either yellow or white, from the walls of the malpighian tubules. These observations were made on larvae dissected in Ringers' solution.

Kaliss, Nathan. The larval expression of the gene for yellow.

While observing male zygotes, 24 hours or older, that were deficient for the loci yellow and achaete, it was noticed that the mouth armature was yellow,

as distinguished from the pale gray or black mouth parts of non-deficient wild-type eggs. Examination of genetically yellow late zygotes and first, second, and third instar larvae showed that the mouth armature was brown-yellow as contrasted with the black of non-yellow animals. The color darkens progressively with age.

The accuracy of this distinction was tested in the following manner:

1. From the cross $y\ w^{\text{♀}} \times +^{\text{♂}}$, 40 first instar larvae were selected as phenotypically wild-type by their mouth parts. From these larvae 39 adults were recovered: 25 $+^{\text{♀}}$, and 14 $+^{\text{♂}}$. From the same cross 39 first instar siblings were selected as having yellow mouth parts. From these larvae 38 imagoes, all yellow, white males, were recovered.

2. From the cross $w/\text{In-49}, y\ Hw^{\text{♀}} \times +^{\text{♂}}$ 19 second instar larvae were selected as yellow. These were recovered as 19 In-49, y Hw males.

3. A large number of 3rd instar larvae from the crosses ($y\ ac$)-B/In-49, $y\ Hw^{\text{♀}} \times +^{\text{♂}}$, and $w/\text{In-49}, y\ Hw^{\text{♀}} \times w^{\text{♂}}$ were put on a slab of food. After they had worked through the food for half an hour, and presumably had become thoroughly mixed, 15 non-yellow and 15 yellow larvae were segregated. From the 15 non-yellow larvae, the following 15 imagoes were recovered: 4 wild-type ♀ ; 5 white ♀ ; 6 white ♂ . From the 15 yellow larvae, 14 imagoes were recovered: 3 In-49, y Hw ♀ ; 3 y Hw B ♀ ; 8 In-49, y Hw ♂ .

It is interesting to note that Muller's classification of the mutation yellow as hypomorph is borne out by the appearance of the mouth armature in the hemizygous eggs deficient for the loci yellow and achaete. In these zygotes the armature is yellow. Miss Katherine B. Brehme has independently discovered the larval expression of the yellow locus while working on attached-X yellow larvae.

Komai, T. Collection of *D. simulans* from Japan.

In December 1936, *D. simulans* has been collected by Mr. K. Daido from Titizima and Hahazima of Ogasawara Islands (Long.

142° E.; Lat. 26-28° N.). This may be the first record of capture of this species from Asia.