Lee, Taek Jun. Chungang University, Seoul, Korea. Variations in sex-ratio of wild D. suzukii.

The collections of Drosophilid flies were made at various localities of Korea during a period from 1956 to 1965. D. suzukii was found to be widespread in Korea. A total of 3912 specimens of D. suzukii were captured in seventeen natural populations. The sex-ratio of males was higher than females in most of the collecting localities. The percentage of males in the entire sample of D. suzukii was 67.38. However, a conspicuously higher percentage (82.03%) of females was observed in 295 samples from Muju (Kucheondong) in August of 1962. The sex-ratio of D. suzukii varied with season and altitude. The data showed the percentage of females to increase in the fall. The males were abundant (87.6%) in the low altitude sites, while the females were abundant in the high altitude sites. At the high altitude sites the sex-ratio was approximately 1:1 ratio, based on collecting data from Mt. Kyelyong (827 m. high) in August of 1957. The same fact, abundance of females at high altitude sites, was also observed the next year (August, 1958) when the collections were made again at Mt. Kyelyong. This suggests that in summer the high altitude, lower temperature sites are more favorable for the deposition of eggs by the females of D. suzukii.

Iyengar, Shanta V. Louisiana State University. A reciprocal translocation involving the Y^{c}:bw^{+} chromosome and a second chromosome of D. melanogaster.

Among the IVth brood progeny of a 15-day old irradiated Y^{c}:bw^{+} D. melanogaster male and virgin females of the following genotype: y v;S Sp cn bw/Cy cn bw, a "white" eyed exceptional male with yellow body and Curly wings was found, the expected males being yellow vermilion and either S Sp or Cy. The exceptional males could result either from loss of the paternal X chromosome or the entire Y^{c}:bw^{+} or just the bw segment on it. On being mated to bw ♀♀ this male proved to be fertile and produced in repeated tests only Cy ♀♀ and Cy^{+} ♂♂ but no Cy^{+} ♀♀ or Cy ♂♂. In the F_2 generation Cy and Cy ♀♀ and ♂♂ were produced. The results from this and other genetic tests indicate a reciprocal translocation involving the ring Y and a second chromosome of the treated male presumably in a spermatid or possibly in an earlier germ cell. The breaks that affected the translocation were also responsible for the possible deletion of the bw^{+} segment of the Y^{c}:bw^{+} chromosome or mutation of the bw^{+} to the recessive condition. (This work was supported by a research grant from the Greater Baton Rouge and New Orleans Cancer Association.)

Seki, T., Y. Fukushi and H. Kikkawa. Osaka University, Japan. A close relationship between the color of puparium and β-alanine in some species of insects.

It has been found that black puparium mutants of insects such as Bombyx, Drosophila and Musca lack β-alanine in their puparium sheaths (Seki, DIS 36:115, 1962; Fukushi and Seki, Jap. J. Genet. 40:203-208, 1965).

Recently, Fukushi found that the black puparium mutant of Musca becomes brownish when β-alanine is mixed in the larval food in a concentration of about 0.4 M. Such induced brownish (normal type) puparia contain β-alanine, and the content increases as the color of puparium comes near the normal type.

However, an attempt using the ebony mutant of D. virilis gave a negative result (Kikkawa). This may be due to the reason that the ebony mutant of D. virilis seems to be very stable in its expression as compared with that of the black puparium mutant of Musca.