A Correction of a Previous Report Concerning Insecticide-resistance in Drosophila

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non-diapause larvae appeared in great number in long - day light.

We shall now turn to the influence of temperature on the termination of diapause. As will be seen in Table 2, when the diapause larvae kept at 25° after rearing in the out-door fluctuating temperature from mid- November to mid-January of the following year, the moth emergence occurred in a short time. As to the completion of diapause in the case of larvae incubated at 25° after exposing to low temperature of 5° during period from one to three months, they are also susceptible to the temperature with this range. In both instances, the percentage of recovery from diapause increased with the lengthening of treatment at the low temperature. As shown in Fig 3, when the percentage emergence is plotted against the duration of low temperature a typical sigmoid curve is secured between these two items. No noticeable difference appeared between the first brood and second one in the progress of diapause breaking.

Finally, an observation was made in the batch kept continuously in the various temperatures of -2, 0, 2, 5, 17, 20, 25 and 30° during 55 days respectively, and then confined at 25° for three months. It should be considered from Table 2 that although temperatures of about 0-20° are the range requiring the termination of diapause, about 5° is the most favorable condition for the ending of it. However, rapid morphological development may occur at about 25°. It is to be deeply regretted that unfortunately a high mortality of larvae appeared because of fungous or bacterial diseases in the present experimental course.

A Correction of a Previous Report Concerning Insecticide - resistance in Drosophila.
Toshiki Hiroyoshi (Department of Genetics, Faculty of Science, Osaka University). Received Oct. 29, 1957. Botyu-Kagaku 22, 378, 1957.

By estimating the content of iron in adult flies of various strains of Drosophila melanogaster, the author reported the following conclusions in a previous paper (Hiroyoshi, T., 1955. The correlation between resistance to insecticides and Fe-content in Drosophila melanogaster. Botyu-Kagaku, 20, 103), viz., first, flies resistant to insecticides such as DDT, BHC etc., always contained more iron than those of non-resistant flies; second, the greater content of iron in the resistant flies seemed to be controlled by a dominant gene for resistance located on the right arm of the second chromosome.

However, further experiments conducted by the author have revealed that the iron content of the flies is not so great as it has originally been reported, and that the clear-cut correlation between the level of resistance to insecticides and the iron content of the flies does not really exist. Furthermore, the author is compelled to believe that the erroneous outcome reported in the previous paper is due to an intentional trick made by a technical assistant who helped in the original investigation. Recently, as it was found that the assistant was a psychopathia, he was removed from the laboratory.

For this reason, the author wishes to rescind the results reported in the previous paper and requests that those results are not to be cited hereafter, and he further wishes to express his apology for this regrettable occurrence.