We have recently developed a successful method for recording the daily locomotoric activity of D. littoralis and its sibling species. A small thermocouple made of 2X0.l mm copper constantane is placed into a culture bottle horizontally and a piece of thin paper (10 x 7 mm) is mounted near the tip of the thermocouple. With a 1 mV recorder the temperature variations caused by the movements of flies inside the bottle have been recorded satisfactorily, when about 35 flies have been released into the bottle. In a smaller vial the recordings are far more pronounced, but it is difficult to tell true locomotion from slight movements. This method may be recommended as an extremely cheap way of recording insect locomotion.


Lefevre, G., Jr. San Fernando Valley State College, Northridge, California. A new symbol to distinguish insertional from reciprocal translocations.

David Perkins is introducing a special symbol to characterize insertional translocations for use by Neurospora geneticists. His proposal is joined by M.H. Rhoades for corn geneticists. Although C.B. Bridges established a special symbol for transpositions (T., shift of a chromosome segment from one place to another on the same chromosome), he did not differentiate between insertional and reciprocal translocations. After thorough discussion with Perkins, I am convinced that a useful purpose will be served by adopting his proposal. Henceforth, I shall use, and recommend that all Drosophila geneticists use, an arrow to replace the semicolon when symbolizing insertional translocations. For example, T(1;3)N264-58, the current symbol, would become T(1~3)N264-58, the arrow showing that a segment of X has been inserted in chromosome 3. The arrow symbol also emphasizes that the translocation is not reciprocal. A more complete symbol could be T(1~3L)N264-58. An insertion of autosomal material into X could be noted by T(3~1), which should be preferred to T(1~3), an alternative symbol. The simultaneous insertion of X into 3 and 3 into X could be symbolized T(1~3).

Transpositions should continue to be symbolized as before: for example, Tp(1)ct6al.

Maroni, G.P. University of Wisconsin, Madison, Wisconsin. A simple apparatus for the collection of large numbers of eggs.

Physiological and cytological studies in 3rd instar larvae require the rearing of larvae at a level of crowding that prevents excessive growth of microorganisms in the medium and insures the emergence of late 3rd instar larvae from the food onto the glass walls. When dealing with progeny of very infertile crosses, this concentration of viable offspring is impossible to obtain with the usual methods.

Several procedures for mass collection of eggs are known. We are communicating this one because we have found it both efficient and inexpensive. Forty or fifty pairs of flies are transferred to glass cylinders 30 mm O.D. and 95 mm in length, closed at the lower end with a cotton plug. The cylinders are then capped with the bottom of a small petri dish (we used Falcon plastic petri dishes 60 mm in diameter) with a small mound of food deposited at the center. The edge of the food serves as a glue to secure the plastic dish to the glass cylinder (2.5 ml of regular fly food at 60° C will consistently make a mound of the right size.

The cylinders are then inverted and after an egg laying period of 12 hours the dishes with food are replaced by fresh ones. Twenty-four hours later 1st instar larvae are collected and transferred to regular vials with food at a concentration of 100 larvae per vial. Large numbers of these cylinders can be handled with the same ease as regular vials.

In combination with starvation periods and short periods of egg laying this method can be used to obtain groups of synchronous larvae (J. Delcour, DIS 44:133).