



To find out the time of lethal action and for the epigenetic characterization, the lethals were allowed to develop without cover. It was observed that they all die in larval condition, at different but specific age of their larval life. When the lethals were grouped on the basis of their duration of larval time, they could be divided into three groups which correspond with the respective complementation groups. the 1<sup>8</sup> group survived up to 7-9 days after hatching, the 1<sup>11</sup> group died within 12-16 days after hatching, but the 1<sup>1</sup> group showed a very sharp deviation from others by their survival time up to 25-29 days after hatching (Fig. 3). The length and weight of the uncovered lethal larvae were measured for each lethal and from this study different lethals in different groups could be again divided into three groups as obtained from complementation study.

These studies suggest a clear correlation between the complementation group and the epigenetic integrity of the lethal mutants.

Fig. 3. Epigenetic study of the lethals by finding the period of lethality in uncovered condition.

Bock, I.R. La Trobe University, Melbourne, Australia. A matter of priority.

Wheeler (1981 The Genetics and Biology of *Drosophila*, Vol 3A) proposed a number of new synonymies; among them, *D.hydeioides* was given as a synonym of *D.nigrohydei*.

The following statement is to be found on page 62 of GBD vol. 3b: "[Wheeler] does not recognize *hydeioides* and *nigrohydei* as distinct species. Since *hydeioides* has page priority in the publication in which both species were originally described, it, rather than *nigrohydei*, will be considered the valid name."

As the ignorance of ordinary taxonomic procedure revealed by this statement may not be confined to its author, it may be worthwhile to elaborate on the point concerned.

The International Code of Zoological Nomenclature governs the formation and emendation of all subspecific, specific, generic and family names within the animal kingdom. "The object of the Code is to promote stability and universality in the scientific names of animals, ...." (Code, Preamble), and adherence to the provisions of the various Articles ensures these simple objectives.

Nobody would dispute that synonymies are an inconvenience if not a curse, but given the level of activity on *Drosophila* species in many parts of the world, they cannot easily be avoided. In most cases, nomenclatural priority is simply established: the names

concerned have been published at different times and (with minor exceptions!--Code, Article 23) the "oldest available name" is the valid name of the taxon.

The situation is slightly more complicated where a single taxon has been described under two (or more) names in the same paper--or even in different papers within the same issue of a publication. The names in question are then "published simultaneously," and "their relative priority is determined by the action of the first reviser" (Code, Article 24). The name selected for conservation MAY be that with precedence of position in the work in which the species was described; but it need not be, and indeed the "first reviser" is advised (Code, Recommendation 24A) to select the name occurring later in the work if [for example] the species is already better-known by that name. As with all other provisions of the Code, there is no ambiguity; once the "first reviser" (Wheeler in the example cited above) has selected the name to be conserved and cited the other(s) as synonym(s), the matter is finalized.

Most significantly, there is no such thing as "page priority."

Stability in nomenclature will continue to be hindered as long as people merely follow their instincts or fancies in making taxonomic pronouncements. No more than simple adherence to the published rules of taxonomic procedure, on the other hand, is required for a universally stable system. Workers not wishing to bother themselves with details of the Articles of the Code can easily refer cases in doubt to a taxonomic specialist.

Boerema, A.C. and R.Bijlsma. University of Groningen, Haren, Netherlands. Viability of *Drosophila melanogaster* reared on 'natural' food.

Though little is known about the natural breeding sites of *Drosophila melanogaster*, it is thought to breed mainly on rotting and fermenting fruit. It might therefore be desirable in certain experiments to use these natural food sources instead of artificial

laboratory food media. This study was undertaken to measure the egg-to-adult survival of *D.melanogaster* reared on several kinds of natural food and in different conditions.

For the experiments females were allowed to lay eggs on 2% agar gels for 14 h after which the eggs were collected and cultured in the food vials, 100 eggs per vial. The experiment was performed on 5 different kinds of natural food: orange and grape (high sugar content), banana and potato (high starch content) and coconut (high fat content). The food was given to the flies in two ways: either big lumps of food were put into the vials (denoted as "pure food") or the food was ground in a blender and 400 grams were mixed with one liter agar solution (1.25% w/v) and this mixture was put into the vials (denoted as "agar-mixed food"). The latter procedure was tried because it allows easier handling of the food in experiments. Because fermentation may play an important role in nature the experiment was both performed with fresh food and with food that was seeded with some live bakers

Table 1. Mean egg-to-adult survival (%) on the different food media for both the "pure food" (A) and the "agar-mixed food" (B) experiment. Means are arranged according to decreasing survival. (All means sharing the same line are not significantly different at the 5% probability level (Tukey's test for multiple comparisons.)

A: "pure food"

orange +yeast	banana +yeast	coconut -yeast	orange -yeast	banana -yeast	coconut +yeast	grape +yeast	grape -yeast	potato +yeast	potato -yeast
91.2	69.9	66.1	49.6	44.9	21.4	3.2	0.7	no survival	no survival

B: "agar-mixed food"

banana -yeast	orange -yeast	orange +yeast	coconut -yeast	banana +yeast	potato -yeast	potato +yeast	coconut +yeast	grape -yeast	grape +yeast
71.7	55.6	45.6	22.1	20.0	14.7	7.7	3.3	2.0	1.4