Hihara, Y.K. Tokyo Metropolitan University, Tokyo, Japan. Temperature sensitivity of the suppressor of SD action in D. melanogaster.

Two lines of recombinant SD males with and without suppressor (Kataoka, Japan. J. Genet. 42: 327-337, 1967) were treated at low temperature (17°C, for 2 days, except for Exp. 1, treated for 1-3 days), at various stages of development. Treated males, within 24 hrs after imagination, were crossed to cn bw females for 3 days.

In males without suppressor, the greatest effect was seen in stages 4 to 5 (primary spermatocytes in the testes of the 3rd instar larvae or young pupae), showing remarkable reduction of k value (the proportion of SD bearing sperm) (Fig. 1). This result seemed to be consistent with that of Mange (Genetics 58: 399-413, 1968).

In contrast to this, the greatest effect in suppressor bearing males was seen at stage 7 (early spermatids in pupal testes), showing remarkable rise of k value in SDNH line (Fig. 2). But, cn-14 lines seemed to be not as sensitive as SDNH line.

The results suggest that the active stages are different between SD and suppressor genes.

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A systematic catalogue of world Drosophilidae.

There are attendant difficulties with the preparation of a catalogue of Drosophilidae. Apart from the vast volume of publications containing descriptions of new species from 1758 (Linnaeus) until today, the choice of content is not easy.

A check-list of names is the bare minimum, but is this enough? The forward looking systematist and the backward looking science historian may require rather more. The assaying of a taxon will engage the former; the development of that assaying will intrigue the latter. The 21st Century worker may use methods for the separation of species not used today.

Since taxa are separated according to their differences and grouped according to their similarities, would it not be useful to give references (at least the main ones) to where not only quantitative but also qualitative comparisons are made between species? Besides the usual morphological descriptions (including those of chromosomes), details of geographical distribution would be required by some workers; or breeding biology; or behaviour; or reactions to vapours or dusts. Biochemical differences will become increasingly used.

Normally the morpho-species is investigated for its reactions; or its composition; or its intimate relationships with other morpho-species. These investigations may themselves discover, and decide, a species and its relationships.

Therefore the most useful systematic catalogue would include references to the above particulars. But is it too much to expect?