

Sheng, T. C. A case of high frequency of nature-occurring phenocopies of *Drosophila*. DIS 18:55-56 (1944)

In a restricted locality in the vicinity of Meitan, Kweichow, China, about 1400 *D. melanogaster* flies were caught within a period of three weeks

in the Fall of 1941. Among them 184 individuals showed various kinds of simulating mutants affecting such bodily parts as bristles, wing, eye, and others. The individual abnormal fly was allowed to inbreed for two or three generations, and in no case was it found to breed true, though abnormal ones of one kind or another might be obtained. There were, however, 20 males showing yellow-colored body, which was found to be inherited as a sex-linked recessive, presumably homologous to the well-known yellow-body gene of the species.

As regards these simulating mutants, which may be referred to also as phenocopies, some of them bore close resemblance to the expression of some of the known authentic mutants. What causes the occurrence of such a high frequency of phenocopies in nature is as yet unclear. The plausible explanation may be that its inherent special genetic constitution renders this strain of *D. melanogaster* more susceptible to environmental changes.