

*Drosophila mojavensis* baja Mettler 1961. DIS 38:57-58  
*Drosophila neonasuta* Sajjan and Krishnamurthy 1972. DIS 48:56-57\*  
*Leucophenga neoangusta* Godbole and Vaidya 1977. DIS 52:24  
*Stegana subexcavata* Vaidya and Godbole 1977. DIS 52:55-56  
*Zaprionus paravittiger* Godbole and Vaidya 1972. DIS 48:135-136

\*Starred species were later described again in another journal.

In my opinion, *Drosophila* taxonomists should not publish new species descriptions in DIS--at least until it is formally recognized as a "publication". Further, it is not wise to include new names in articles of a non-taxonomic nature. The Code provides that a new name may be valid if accompanied by a "description"; but a complete, thorough description is not required--the simplest descriptive remark may be enough to validate a new name (e.g., describing the chromosomes, some electrophoretic patterns, etc.). *Drosophila* workers have a rather poor reputation in systematic circles, having used new, unpublished names without regard to the International Code.

Regretfully, the writer is an expert on this subject, having made more than a few of such errors!

Wijsman, E.M. University of Wisconsin, Madison, Wisconsin. The effect of ether on mating behavior in *D. simulans* y w.

In setting up some experiments which involved matings between virgin females and their brothers in *D. simulans* y w, I encountered considerable difficulty with sterility. I decided to test the possibility that the ether that I

was using as an anesthetic was causing this sterility.

I established pair matings using virgin females and their brothers separated by ether, CO<sub>2</sub>, or aspirator (no anesthesia), and placed the vials at 25°C. Two weeks later I scored the vials as fertile or sterile. As can be seen in Table 1, ether had a very strong effect on fertility. The hypothesis that anesthesia had no effect on fertility was tested using a 1-tailed Fisher's exact test. Comparison of ether and no anesthesia gave  $p < 0.000001$ . CO<sub>2</sub> vs. no anesthesia gave  $p = 0.18$ , which is not significant.

Table 1. Number of vials which were either fertile or sterile when parents were exposed to different types of anesthesia.

Anesthesia	Fertile	Sterile
Ether	4	56
CO <sub>2</sub>	18	8
None	21	4

To determine which of the two sexes was sterilized I repeated the experiment using only one sex which had been exposed to ether. When only the male had been anesthetized high sterility resulted. Anesthetized females mated to non-anesthetized males were fertile.

To determine the cause of sterility I dissected the testes to check for motile sperm and watched the males court females. Males were isolated for 3-4 days after collection with either ether or an aspirator and then placed in empty vials with 3 aged virgin females. Those which had been collected without ether showed normal courtship behavior;

those which had been exposed to ether showed virtually no courtship behavior. Dissection of the testes showed motile sperm. Thus in this strain of *D. simulans*, ether seems to produce almost complete, permanent, behavioral sterility in the males.

Williams, J.M. University of California, Santa Cruz, California. Tumorigenesis in *D. melanogaster* bearing the temperature-sensitive mutation *shibire<sup>ts1</sup>*.

The imaginal discs of *Drosophila* are single-layered secretory epithelia (Bodenstein 1950; Poodry and Schneiderman 1970) which resemble the ascinar units of vertebrate exocrine glands. This feature has been exploited along with the convenience of in vivo culturing meth-

ods (Hadorn 1963) to characterize the initial morphological and ultrastructural changes occurring in the eye-antenna imaginal disc of *D. melanogaster*.

A temperature-sensitive mutation, *shibire<sup>ts1</sup>* (Poodry et al. 1973) in *D. melanogaster*