

Bennett, Jack. 1999. An inexpensive, simple etherizer for classroom use. *Dros. Inf. Serv.* 82: 126.

An inexpensive, simple etherizer for classroom use.

**Bennett, Jack.** [reprinted from DIS 33: 178, 1959].

A simplification of an etherizer reported by Lloyd L. Arnold (*Amer. Biology Teacher* 19: 248-251) has proved very useful in the student and research laboratory. It consists of a polyethylene bottle of the type used to dispense catsup, mustard, or salad dressing, which has a long (3 cm) pointed spout with a small (approx. 1 mm) hole in the end. The bottle is loosely packed with cotton, 5 cc of diethyl ether is added (sufficient for several hours' use), and the cap and spout are replaced. In use, the vial or bottle containing flies is gently inverted and the spout is carefully inserted past the cotton plug; ether vapor is expelled into the vial or bottle by pressing the sides of the etherizer. CAUTION: Remove spout before releasing sides of the etherizer or the flies may be drawn into the etherizer. When the flies succumb they fall on the cotton plug, which can then be removed and the flies shaken off for examination. The polyethylene bottles cost about 25 cents (and are often thrown away by restaurants and housewives), and are virtually unbreakable. They require much less ether than most other types, and are adaptable to almost any type of container, including the polyethylene population cages.

Hinton, Claude W. 1999. Use of the  $w^{vc}$  chromosome in class laboratories. *Dros. Inf. Serv.* 82: 126-127.

Use of the  $w^{vc}$  chromosome in class laboratories.

**Hinton, Claude W.** [reprinted from DIS 32: 173, 1958].

Several phenomena rarely encountered in undergraduate genetics laboratories can be easily demonstrated in simple crosses involving the unstable  $w^{vc}$  ring chromosome (*Genetics* 40: 951-961), for example,  $w^{vc}f / y w$  females by  $y v f / Y$  males. As a consequence of elimination of the  $w^{vc}$  chromosome, gynandromorphs are frequently encountered among the progeny; those gynandromorphs mosaic in the head may be used to illustrate gene hormones. Exceptional males are also abundant among the offspring; and, although many of these are the result of  $w^{vc}$  loss, others are due to primary nondisjunction. This phenomenon is also responsible for exceptional (non-forked) females occurring in the progeny. Position-effect variegation is manifested by the eye pigment of the parental females but not in the F1  $w^{vc}$  females; the effect of the Y chromosome in suppressing position-effect variegation is demonstrated by the exceptional females' phenotype. To insure maintenance of instability, multiple lines of the stock must be carried and selected frequently.