

Brasted, Adair Multiple effect
of "engrailed" in *D. melanogaster*.

The mutation "engrailed" in *D. melanogaster* was described by Eker in 1929 (*Hereditas* 12:217). He enumerated two of its effects: (1) a longitudinal split in the scutellum extending anteriorly from

the posterior border, and (2) shorter, broader and more thin-textured wings than in wild-type flies, with numerous abnormalities in venation. A third, hitherto unreported effect, discovered in October 1937 by Dr. Curt Stern, is the production of an extra sex-comb on the lateral side of the first tarsal joint, directly opposite to the normally present sex-comb. This extra sex-comb has fewer, more irregularly arranged teeth than the normal, and is considerably more sensitive to environmental variations. Its size has been found to vary inversely with temperature. The "split scutellum" was reported in DIS-7:20 as a new mutant (spc), due to erroneous labelling of a stock. It is now obvious, however, that this condition is one of the multiple effects of "engrailed".

Crew, F.A.E. and Rowena Lamy
Mosaics.

Mosaics of *D. pseudo-obscura* carrying autosomal as well as X-chromosomal markers were obtained, and it was found that the autosomal characters as well as the sex-linked ones were expressed in the excep-

tional regions, indicating that these were haploid for the whole chromosome complement. As the other mosaics obtained from the Plexus strain (v. DIS-8) were also probably haplo-diploid, their normality as to sex is explained, since haploid tissue has been shown to be female (Bridges 1925). Three male mosaics obtained in the same strain are clear cases of double-nuclear fertilization.

Gershenson, S. Investigation of
genetical processes in wild popula-
tions of *Drosophila*.

An extensive work along this line has begun during the summer and autumn of 1937 in a locality near Kiev (USSR). This work involves not only a complete genetical and cytological analysis of

wild populations of two species (*melanogaster* and *busckii*) but also experiments on natural selection, rate of reproduction in nature etc., and an analysis of a number of ecological questions connected with the main subject. The work is to be carried on during several years.

Gershenson, S. *Drosophila* species
near Kiev.

The following species of *Drosophila* have been collected by the writer in Kiev and its suburbs during August-October 1937: (1) *melanogaster* (*fasciata*) (2) *obscura* (not *pseudo-obscura*)

(3) *busckii* (4) *phalerata* (5) *funebria* (6) *Spinulophila* (*Drosophila*) *immi-grans* (7) *Parascaptomyza disticha* (8) *maculata* (new species, name provisional). The first five species are numerous; 6 and 7 are rare; *D. maculata* is very rare. Most individuals of *D. melanogaster* and all of *Parascaptomyza* caught in nature were infected with the nematode *Chondronema* (family *Anguillulidae*, sub-family *Sphaerulariinae*).