

Hadorn, Ernst. Pseudo-  
pupae. This term is suggested to be used for all cases where only a more or less normal puparium is formed within which no development of the imaginal discs occurs. Such pseudopupae are for instance formed by "lethal-giant" larvae and by hybrid males of *D. melanogaster* and *D. simulans*. Formation of pseudopupae in normals can be experimentally induced by injecting mature "ring-glands" into immature larvae. Pseudopupae may vary in their form. The best developed ones are like normal pupal cases, the poorest show only a hardening and darkening of the larval skin.

Hollander, W. F. B1  
thorax alleles. The mutants  $bx^W$  and  $bx^D$  were both discovered in one female. Nothing like bithorax had ever been observed in the stocks before. Other bithorax stocks were obtained from Cold Spring Harbor, namely those containing  $bx$ ,  $bx^{34e}$ , and  $bx^d$ . The following phenotypes were obtained in the various hybrids:

$bx/bx^{34e}$  = nearly wild type, slight development of metathorax.

$bx/bx^d$  = wild type.

$bx/bx^W$  = nearly wild type, but some overdevelopment of metathorax, often asymmetrical.

$bx/bx^D$  = same as  $bx^D$  alone.

$bx^{34e}/bx^d$  = wild type.

$bx^{34e}/bx^W$  = blend

$bx^{34e}/bx^D$  = rounded, flat, wing-like halteres, but not very large. Otherwise wild type.

$bx^W/bx^d$  = wild type

$bx^W/bx^D$  = oval, flat, winglike halteres, fairly large; little if any metathoracic development; flight not vigorous, but possible.

$bx^d/bx^D$  = same phenotype as  $bx^d$  homozygous.

From the above results, I have concluded that these five factors are alleles, with no seriation of effect. No attempts have been made to analyze the salivary gland chromosomes.

Just, G. and F. Steinger. Natural selection in *D. melanogaster* (normal-winged and vestigial) on the isle Greifswalder Oie.

The investigations on selection under natural isle conditions (DIS-7, p.91) are continued on the isle Greifswalder Oie. They were also begun in the part Gellen of the isle Hiddensee.

Kaliss, Nathan. Determination of the color of malpighian tubules in larvae.

Poulson has shown that the pigment of the malpighian tubules appears in zygotes that are 20 hours old. With a magnification of 440x, the color can be seen to be due to the presence of discrete yellow spherical particles located in the walls of the tubules. With a magnification of 1500x