

possible to collect all molted mouthparts. The absence of a set of discarded mouthparts, in addition to the first and second instar sets and those in the pupa cases, proves the absence of an extra instar. Any mouthparts which might be overlooked in this inspection can be recovered by melting the medium and filtering through a small cone of filter paper, on which the mouthparts can be located under the binocular. The writer has used this method to demonstrate that heterozygous Mw has three instars only. The case of giant is being investigated, with substitution of finely strained banana agar for the S 101 medium.

Cochrane, Flora. Eye colors of *D. pseudo-obscura*,

A histological study of wildtype and seven eye color mutants of *D. pseudo-obscura* at various stages in develop-

ment has been made.

Sepia affects pigment during the late phase of pupal development and during adult life. The influence is a chemical one due to which all of the eye pigment eventually becomes yellow and brown. The actual amount of pigment is probably not reduced.

Eosin suppresses the formation of part of the pigment granules throughout pupal development but does not appear to influence them chemically. Purple affects the rate of production of red pigment. Purple² retards the formation of red so little as to make purple² almost indistinguishable from wildtype; only in combination with vermilion or orange is the effect of purple² obvious. Purple³ retards the production of red considerably, and purple¹ to such an extent that few red granules are present at emergence but many appear in older flies. Vermilion and orange suppress the entire early phase of pigment development but allow the late phase to proceed as in wildtype.

In a culture resulting from a pair mating of eosin (w^e) flies three ♂♂ were found which had slightly pigmented eyes. This color which was found to be allelomorphic to w^e was called buff (w^{bf}). By mating buff ♂♂ to wildtype ♀♀ buff ♀♀ were obtained in the F_3 . The eyes of buff ♀♀ contain more pigment than those of the ♂♂.

Crew, F.A.E. and R. Lamy. The Px inversion in *pseudo-obscura*.

The sex-linked character, Plexus, which much resembles the autosomal character called smoky by Dobzhansky, has been found to

be associated with a very small inversion between y and w, and is not necessarily connected with the larger inversions on the X-chromosome described by other writers (Dobzhansky, Tan, Koller) though the larger inversion existed originally in the px stock. It is uncertain whether the mosaics that occur in px matings are connected with the large inversions or with the px inversion proper.

The crossing-over data on which a former hypothesis of the size of the Px inversion was based, was considered on the assumption that the order of the genes was y v sn (Lancefield). It appears that the order is y sn v, and hence crossovers regarded as doubles were really singles. In heterozygous Px the crossing-over values observed are:

y Px	.15	}	12692
Px w	.15		"
y sn	.6	}	2943
sn v	.2		"
v dy	.1		"

Crew, F.A.E. and R. Lamy. Notes on Nomenclature.

It would seem that the naming of mutations is a task that can no longer be safely left to the individual. It is possible that the time has now arrived when a Nomenclature Committee should be instituted.

These remarks are provoked by the fact that in a recent paper (Genetics, 21, 1) Mr. Tan arbitrarily renames our "short₄", calling it "incomplete"; thus brushing aside the reasons for our choice.

It has been suggested that mutations which are phenotypically indistinguishable should be described by the same name, the numbers of the chromosomes carrying their genes being added as distinguishing marks. To us, at least, this seemed to be a reasonable and useful practice. Our "short" which was phenotypically indistinguishable from Lancefield's sex-linked short, was named, therefore, "short₄".

We had no hesitation in accepting Dr. Dobzhansky's and Mr. Tan's re-numbering of the linkage groups, since the numbering previously employed by ourselves was purely chronological and could only be regarded as temporary. But to rename short₄ is quite a different matter, for there seems no valid reason for doing so.

De Marinis, Frank and A. H. Hersh. Temperature effect on bar-eyed mosaics.

White mosaics of bar-eyed flies raised at 20° C. conform to the relative growth function in regard to the quantitative relation between the red and white facets, as was shown previously for similar mosaics raised at 25° (Hersh, 1934

Science, 80:547). There is practically no shift in the value of a, but b is much lower at 20° than at 25°. For further comparison a series of similar mosaics at 30° is being collected.

Howland, R. B., E. Glancy and B. Sonnenblick. Development of larval wing-thoracic discs on implantation in *D. melanogaster*.

Implants of the dorsal mesothoracic disc from mature larvae of various mutant types have been made in wild type hosts of the same age. The donors used were *ey^D/ci^D*, *D3*, *ss*, *f B*, *sn³*, *sc*, *y sc*, and an extreme form of *H²*. The disc gives rise to the wing, half-thorax and half-

scutellum. These regions are distinct in the implant. It is possible to identify the thoracic and scutellar bristles in