

ing penetrance and expressivity, utmost attention is usually given to temperature, and the nutritional aspect is almost always ignored. The following yeasts were used and are presented in a series decreasing in the ability to aid in the formation of tumors: Hansenula anomala, Pichia membranaefaciens, Candida sorbosa, Nadsonia fulvescens, Debaromyces globosus, Hansenula saturnus, Torulopsis utilis, Rhodotoryla gracilis, R. glutinis, and Geotrichium. Penetrance was less when the above yeasts were compared to Saccharomyces cerevisiae (Baker's yeast) on cornmeal-molasses medium. D. melanogaster can live exclusively on a nonfermenter yeast, Pichia membranaefaciens.

Moriwaki, D., Okada, T., Ohba, S., and Kurokawa, H. Drosophila species belonging to the "obscura" group found in Japan.

In the summer of 1951, we were able to collect about 800 flies (females about 160), belonging to the "obscura" group of Drosophila, at several localities in Hokkaido (Akkeshi and five others) and one locality in the northern district of

Honshu (Mt. Hakkada). Although it still remains undecided whether these flies form one species or more, they are believed to belong to the "obscura" rather than to the "affinis" subgroup.

Having compared them with ten species of the "obscura" subgroup, namely pseudoobscura, persimilis, miranda, obscura, subobscura, obscuroides, tristis, bifasciata, alpina, and ambigua, mostly according to descriptions seen in the literature, we found that the several characteristics, such as color of mesonotum, male sex-combs, male genitalia, and karyotype, of this species, if it is one, were mostly similar to the descriptions of D. obscura Fallen.

On the other hand, the "obscura" species of Sweden described by Fallen (1823) may be identified as "subobscura" as proposed by Buzzati-Traverso (1949) on the evidence that D. subobscura is numerically prevalent at Esperöd (Sweden) and has the wider geographical distribution in continental and insular Europe among species of the "obscura" group. The "obscura" species of Moscow described by Frolova & Astaurov (1930) has a karyotype of either "A" (♀: V-shape 4, Dot 1) or "B" (♀: V-shape 3, Rod 2, Dot 1), either of which differs from the karyotype of D. subobscura showing Rod 5 and Dot 1. Then the Swedish obscura, provided that it should be considered as being subobscura, seems to be different from Moscow obscura. Moreover, the karyotype of the present species in Japan coincides with the "A" type, one of the two types of the Moscow obscura.

At any rate, D. obscura is an uncertain species, as pointed out by Buzzati-Traverso in DIS-23 ("What is Drosophila obscura?"), and the identification is very difficult. But it is desirable to decide early to which species the name "obscura" should be given, in order to establish the synonymization.

Mossige, Jeanne Two new jaunty mutations.

This laboratory has had one stock containing j, namely, b j pr cn. On Oct. 18, 1949, one sv<sup>2</sup> male was found in sv<sup>2</sup>

stock with curled wings. This proved to be an allele of j. On May 5, 1950, several sc cv v f flies in sc cv v f stock were also found to have curly wings and these too were j. The occurrence of two new spontaneous j mutations in the same laboratory within such a short space of time seems remarkable, as only two alleles have been reported previously. Contamination would seem to be impossible as the stocks where the mutations were found showed no irregularities and if contamination had come from b j pr cn then the other markers should also have been found. Moreover the first mutation has been kept in combination with sv<sup>2</sup>, which again should have been found in