

Number of supernumerary bristles variable. Found in offspring of 24 ♀♀, 6 strains with variable degrees of penetrance.

High frequencies of *cvl* and *sv* phenotypes have been found in all populations investigated. *tdc* and *shsc* phenotypes have not been described from natural populations of *D. subobscura*. Phenotypes similar to *esc* were found in Greek populations (Pentzos da Ponte et al. 1967).

The extremely low occurrence of the newly described phenotypes (*tdc*, *shsc*, *esc*) in F_2 cultures and the difficulty of detecting them presuppose the idea that these types might not be specific for the populations in Switzerland; perhaps their presence or absence reflects different intensity of observation.

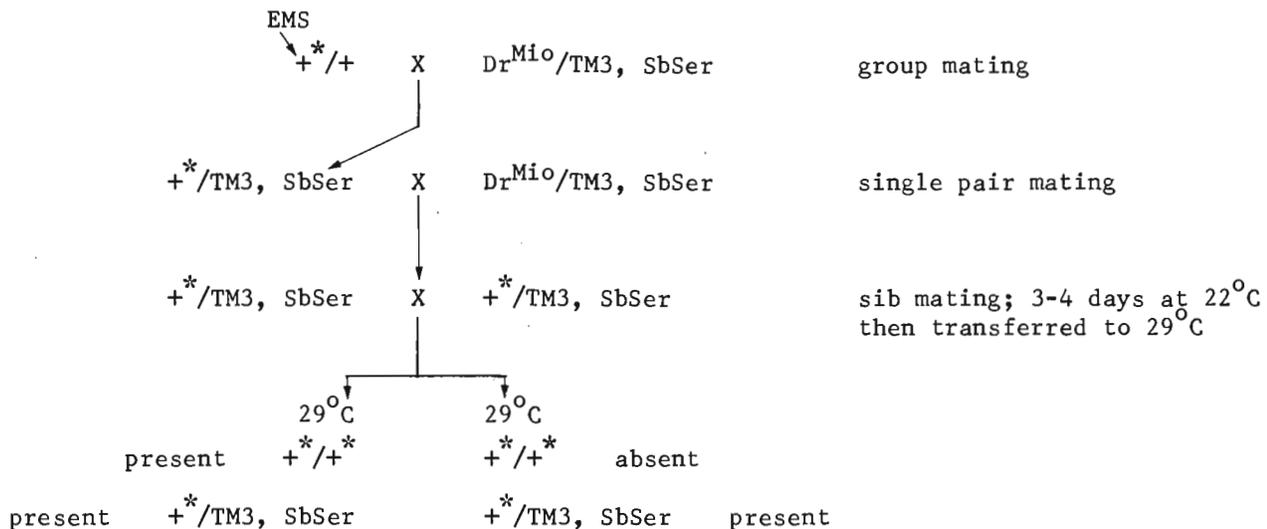
References: Burla, H. 1967 DIS 42:66; _____ 1968 DIS 43:76-78; Gordon, C. 1936 J. of Genetics 33:25-60; Gordon, C., H. Spurway and P.A.R. Street 1939 J. of Genetics 38:37-90; Pentzos-Daponte, A., E. Boesiger and A. Kanellis 1967 Thessaloniki physikomathematikes scholes 10:133-159; Prevosti, A. 1951 Genetica Iberica 3, 1/2:37-46.

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Fattig, W.D. and W.L. Rickoll University of Alabama in Birmingham, Alabama. Isolation of temperature sensitive mutants of the third chromosome of *D. melanogaster*.

A screening procedure for the detection of recessive temperature sensitive lethal mutations on the third chromosome of *Drosophila melanogaster* has been devised and tested. Oregon-R (Oak Ridge) males were treated with ethylmethane sulfonate (EMS) according to the method of Lewis

and Bacher (DIS 43:193, 1968), and mated according to the following diagram.



Recessive temperature sensitive lethality was indicated in those crosses in which both homozygous and Stubble Serrate progeny were present at 22°C, but only Stubble Serrate progeny were present at 29°C.

All stocks in which these results were observed were retested to confirm their temperature sensitive lethality. Crosses between the heterozygous Stubble Serrate progeny and between the homozygous progeny were incubated at 22°C and 29°C and subsequently scored for the production of homozygous progeny. Some of the mutant stocks obtained from the original isolations were sterile when homozygous. In these cases crosses between the heterozygous Stubble Serrate progeny incubated at 22°C and 29°C were scored for the production of homozygotes. Those retests in which homozygotes were produced at 22°C but were completely absent at 29°C resulted in the classification of the mutant stocks as confirmed recessive temperature sensitive lethals.

Two separate isolations series were done using different concentrations of EMS. In the first isolation series (0.025 M EMS) 4.7 per cent of all chromosomes tested (235) were confirmed temperature sensitive lethals, and in the second isolation series (0.005 M EMS) the recovery frequency was 4.0 per cent of all chromosomes tested (251).