

Schroeder, A. L., F. J. de Serres and M. E. Schupbach\*

A new ultraviolet-light-sensitive mutant in Neurospora, *uvs-6*.

A new UV-sensitive mutant in Neurospora, *uvs-6* (ALS35), has been isolated using the cr rg replica-plating method of Schroeder (1970 Mol. Gen. Genet. 107: 291). As shown in the Table, this mutant maps between *cr*: crisp and *al-2*: albino-2 in the right arm of linkage group I.

The mutant is about 3.3 times more sensitive to UV than is wild type at the UV doses required to reduce both wild-type survival and *uvs-6* survival to 37%. A plot of log of per cent survival vs. UV dose gives an exponential curve for *uvs-6* and a multi-hit curve for the wild type. The mutant is also about 8-fold more sensitive to  $\gamma$ -rays than is wild type at the  $\gamma$ -ray doses required to reduce both wild-type survival and *uvs-6* survival to 37%.

Zygote genotype and recombination (%)	Parental combinations	Singles Region I	Singles Region II	Doubles Regions I + II	Total progeny and percent germination	Marker isolation numbers																												
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">I</td> <td style="text-align: center;">ii</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;"><i>uvs-6</i></td> <td style="text-align: center;">+</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;"><i>cr</i></td> <td style="text-align: center;">+</td> <td style="text-align: center;"><i>al-2</i></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">11.2</td> <td style="text-align: center;">6.2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	I	ii						+	<i>uvs-6</i>	+					<i>cr</i>	+	<i>al-2</i>					11.2	6.2						40	7	3	0	80	8123
I	ii																																	
+	<i>uvs-6</i>	+																																
<i>cr</i>	+	<i>al-2</i>																																
11.2	6.2																																	
	26	2	2	0	80%	ALS35																												
						15300																												

■ ■ -Genetics program, Washington State University, Pullman, Washington 99163; Biology Division, Oak Ridge National Laboratory, \*\* Oak Ridge, Tennessee 37830; and University of Tennessee-&k Ridge Graduate School of Biomedical Sciences, Oak Ridge, Tennessee 37830. (\* Postdoctoral investigator supported by subcontract No. 3322 from the Biology Division of Oak Ridge National Laboratory to the University of Tennessee. \*\* Operated by the Union Carbide Corporation for the U.S. Atomic Energy Commission.)