

Royes, J. The production of mosaic mutations in Neurospora crassa.

arginineless and methionineless anmycelial.

Nitrous acid, ultra violet light and X-rays have been used for producing recessive lethals in conidia of a balanced heterokaryon between A modification of Atwood's method showed that the

proportion of mosaics among mutations decreased from nitrous acid (77-87%) to UV (40%) to X-rays (28%). A substantial proportion of the X-ray induced mosaics and a smaller proportion of those induced by the other mutagens may have been derived from conidia with more than 1 amycelial nucleus (only lethals induced in such nuclei are detected). The excess of mosaicism, especially after treatment with nitrous acid, is attributed either to segregation of mutated and non-mutated strands in the treated chromosome or to delayed mutation. In most mosaics, and independent of the mutagen, the lethal sector was much smaller than one half; sectors comprising 20% or less formed between 70 and 78%. Possible reasons for this are being examined.