UV transmission through various clear films in mutation experiments

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Abstract
Clear films for UV mutation experiments

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Grecrter reproducibility could be achieved by the use of a microbalance. Serious deviations from logarithmic growth rates occurred if the mycelia clumped rather than remaining dispersed. Dry weights in the former case were as much a 20-40% lower than in the latter. The clumping pattern of growth was avoided by the removal of mycelial fragments from the conidial inoculum and by coating the inner surface of the culture flask with dimethyl-di-chlorosilicone.

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This technique basically follows that of Perkins (Neurospora NewsL. 9: 11) with the following modifications: (1) crosses are made on filter paper strips in tubes containing liquid Wester Kaard medium. The medium contains 0.2% sucrose, compared to the usual 2%. This drastically reduces condiation while maintaining high fertility, and the simultaneous introduction of each parent as a drop of conidial suspension. (This technique was introduced to A. J. F. G. by F. J. de Serres). (2) Low condiation and the use of filter paper permit the removal from the cross tube of all the perithecia. The paper can be cut up and placed on slides which ore held inverted on adjustable platforms over the agar collection slabs. Two models of platform have been used. (See figures on following page.).

Model I has been used extensively for the routine collection of hundreds of ascii. It consists of two tubing clamps (a), mounted on a plastic stand (b) with rapid-hardening epoxy glue. The inverted slide bearing the perithecia is placed across the top, and the slide bearing the agar collection block is placed across the two adjustable arms and racked up into close proximity to the dehiscing perithecia. Two such devices may be mounted back-to-back on each stand.

Model II is a more recent design and permits adjustment in two dimensions by the use of sliding plastic shelves (c). The shelves...