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Abstract
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This technical note is available in Fungal Genetics Reports: https://newprairiepress.org/fgr/vol2/iss1/21
Mitchell, M. B. Storage of culture media in polyethylene bags. Polyethylene bags of the sort sold for home freezing of foods have been found very convenient for packaging agar slants, agar plates, or even tubes of liquid media, which are kept on hand, stored under refrigeration. No rack or other support is needed for tubes. They may simply be packed into the bags whose tops are then secured. Thus refrigerator space is conserved and evaporation of water from media is much more effectively retarded than by wrappings of foil or waxed paper. The bags may be re-used repeatedly. Petri dishes should be placed upright and tubes should be plugged with non-absorbent cotton to prevent contaminants from being carried inside the vessels by condensed moisture which has been in contact with external surfaces. ---Biology Division, California Institute of Technology, Pasadena, California.

Mücke, D. A method for storing conidia of Neurospora. 2.84 g Na₂SO₄ (anhydrous) are stirred with 1.2 ml of an enriched conidia-suspension. The pulp of crystals is then stored under sterile conditions at +4°C. For use a complete Neurospora culture-medium is inoculated with some of the crystals and incubated at 25°C. Viability was good for a period of more than 3 years, maintaining the original biological qualities of the Neurospora strains (wild-type; biochemical mutant strains). ---Physiological Chemistry Institute, University of Rostock, Rostock, Germany.

Pittenger, T.H. Special growth tubes for the study of transport of growth factors and other phenomena. When a auxotrophic mutant such as nic-2 is used in certain in compatible heterokaryotic combinations, the nic-2 strain may grow for long distances in the growth tube before ceasing to grow. This is not observed with nic-2 homokaryons under similar conditions. This growth, except at the very proximal end of the tube where a mixture of conidia has been placed, appears from certain criteria, except growth on minimal, to be homokaryotic. This is assumed not only because of the dark brown accumulation in the media characteristic of this mutant when grown on submaximal amounts of the growth factor but also because conidial plating fails to disclose the presence of anything except the nic-2 strain. Such observations prompted a reexamination of the studies of Ryan et al., Am. J. Bot. 30: 784, 1943 concerning the extent of the translocation of various compounds in the mycelium of Neurospora. For this purpose a special type of growth tube, an improved design of one originally used by Pittenger and Atwood, was constructed; subsequently such tubes have been found to be equally useful in other experiments. With the hope that others may find it adaptable to other problems, a brief description of the growth tube is presented, along with some preliminary results illustrating its use.

This growth tube was originally designed to help determine indirectly whether a mycelium of an auxotrophic mutant growing on supplemented medium could translocate enough of the essential growth factor from such a medium to enable the organism to continue to grow for an extended time, on minimal medium. The growth tube consists of two 20 mm. diameter pyrex glass tubes united by a 24/40 standard taper ground glass interchangeable joint (Corning No. 6540). The distal end of the inter portion of the ground glass joint is partially sealed to provide a partition between the two sections of the tube when the joints are united. The glass partition prevents contact of the media present in the proximal and distal ends of the growth tube, but the small horizontal opening in the upper portion of the partition permits the mycelium to pass readily from one section of the tube to the other. To facilitate sampling of conidia and for aeration, the tubes are equipped with sampling ports along the upper surface. These are made of 10 mm. diameter tubing, 30 mm. high and are spaced at 4-6 inch intervals along the length of the tube. The proximal portion of the tube is approximately nine inches long and the distal portion, 20 inches long, but length may vary with different types of experiments. The opposite ends of the finished tube are bent at a 45° angle.

Observations relating to the efficiency of transport to growth factors essential to auxotrophic mutant strains can be made in such tubes. The growth factor required by the mutant strain is added to the proximal section of the tube, along with 3% agar solidified Fries medium and 1.5% sucrose. To the distal portion of the tube is added the same medium without the growth factor. The glass partition prevents the