cates that the sterility in *J. grandiflorum* may be due to genic causes. Dasgupta and Sharma[7] reported normal meiosis in male sterile *J. pubescens*. However, meiotic abnormalities like univalent formation, laggards, multiple pole formation and abnormal cytokinesis observed in this study may also be responsible for sterility in this species.

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AN EASY METHOD OF PRESERVING CULTURES OF ASPERGILLI AND PENICILLA

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MAINTENANCE of fungal cultures in the living state by repeated subculturing involves the risk of variation, and contamination, sometimes resulting in loss of strains. Dry preservation may greatly minimize these risks and this can be achieved by dispersing dry spores/mycelium in soil or silica gel. There are reports[1] where the cultures left to dry in the laboratory have retained viability for periods varying from 15 to 50 years[1].

In the present investigation, on storage moulds of wheat and maize, dry spores of various species of *Aspergillus* and *Penicillium* were obtained by the method described by Cropsey *et al*[2].

Cellophane discs (80 mm diam) were placed in petri dishes, wrapped in brown paper and sterilized in an autoclave at 1.1 kg cm^2 for 20 min. The sterile cellophane discs were laid asceptically on gelled salt malt agar (SMA) containing 7.5% sodium chloride, 2% malt extract and 2% agar, prepoured in 90 mm diam petri dishes. The surface of the cellophane discs was then evenly inoculated with suspension of spores in sterile water from two week-old-cultures of *Aspergillus amstelodami, A. candidus, A. flavus, A. fumigatus, A. terreus, A. nidulans, A. niger, A. ochraceus, A. tamarii, Penicillium citrinum, P. notatum, P. funiculosum* and *P. oxalicum* grown on SMA. Two replicates for each isolate were kept. The inoculated plates were incubated at 25°C for two weeks. By this method the mycelial growth remained confined to the medium, while the conidiophores and conidia were produced on the exposed cellophane surface. These cellophane discs were then lifted along with the conidial mass and dried between the sterile blotters for three days at room temperature (27–35°C) which were then aseptically placed in sterile butter paper envelopes, sealed in polyethylene bags and stored at 10–12°C.

The cultures thus stored in May 1973 were tested for viability initially after 1 year and subsequently after every 2 years till June 1984. Viability was again tested in June 1987 i.e. after 14 years, all were found viable vigorously growing. *Aspergillus candidus* gave better sporulation when compared to the culture of the same maintained by periodic transfer during this period.

The method described is easy, less cumbersome and requires very little storage space and at the same time quite effective in retaining the viability and maintaining the purity of the cultures.

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EFFECT OF MERCURY ON *PISTIA STRATIOTES*

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EFFECT of mercury on *Pistia stratiotes* L. shows that all the treatments, except up to 1 ppm, decreased Hill reaction activity of chloroplasts over control data. But up to 1 ppm of the metal, there was no significant change in the variable over control (average control value : 224 μmol 2, 6-dichloroindophenol reduced/mg chlorophyll/hr). Mercury concentrations above 1 ppm were toxic to the plant. The inhibitory effects (about 99% of control) were pronounced with the treatment of 20 ppm of mercury tested.