

B-76 Somaclonal variation in tissue cultured *Saintpaulia*

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Growing ornamental plants at home and work environments has become very popular in the recent past. *Saintpaulia* (African violets) is one such ornamental. Variations of this plant are prevalent.

Mass propagation of plants rapidly by tissue culture had been initiated in 1992 at the Royal Botanic Garden. In this study the effect of auxins and cytokinin on flower colour, leaf morphology were tested.

Leaf tissue was the explant used. Surface sterilization was in 15% clorox for 20 min and subsequently 5% clorox for 5 min. As determined in prior studies in 1992, culturing was carried out on a Murashige & Skoog medium substituted with the cytokinin BAP for the entire period of shoot initiation and hormone-free medium was used for rooting. In a parallel experiment, for the first 3 months the basal medium with BAP and subsequently a combination of BAP and NAA was used for shoot initiation. Rooting was done on a hormone-free medium.

Rooted plants were acclimatized in 4 different media, sand only, sand + leaf mould (1:1), coir only, coir dust + sand (1:1). Best results were obtained from leaf mould + sand (1:1).

Leaf tissues grown in the media substituted with BAP only showed direct shoot initiation and flowers were true to type. Tissues grown in a medium substituted with BAP and subsequently the combination of BAP and NAA showed variations in flower colour and leaf morphology. These variations were due to the presence of auxin NAA and the genetic make up of the plant.