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**FLORAL ABNORMALITIES INDUCED BY COLCHICINE  
ON *IMPATIENS BALSAMINA***

Blasam is an attractive ornamental plant, popular with gardeners because of its bright flowers and easy cultivation. Floral modifications induced by chemicals like chloral hydrate, colchicine etc. produce flowers with larger size and novelty in the shape and colour which are important horticultural attributes. Seeds of *I. balsamina* with a germination of 85% were used for the experiment. Both seed treatment and seedling treatment with colchicine were done. The concentrations used were 0.1 and 0.2% for 12 and 24 hours of duration. Seedling treatment with 0.2% colchicine for 24 hours yielded plants with floral variations. The modifications were found only in the floral morphology. The treated plants produced large abnormal flowers with two to three whorls of petals having two to five spurs while the flower in control were single-spurred. In a few cases, the entire terminal bud was modified into a large brightly coloured floral rosette with petaloid leaves, stamens and carpels. Pollen sterility was very high in these flowers. As these abnormalities decreased progressively from the second generation and were completely lost by the fifth, the variation may be due to physiological disturbances rather than gene mutations and may be explained as dauer modification.

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