

Expanding Flower Colour Variation in *Gladiolus* Through Mutation Breeding and Tissue Culture

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To expand flower colour variation in *Gladiolus* mutation breeding using gamma radiation was adopted. By using radiation with a strength of 100 GY on bulbils of *Gladiolus*, six times more colour variation was observed. All variants showed pink or white chimeric features in their flower stalks. The ovaries of chimeric plants were cultured in vitro on an agar medium with NAA and BAP added. After callus induction, they were transferred to a regeneration medium, supplemented with BAP (Fig. 1). Uniform flower colour was achieved by regeneration of ovary callus from chimeric parts (Fig. 2).

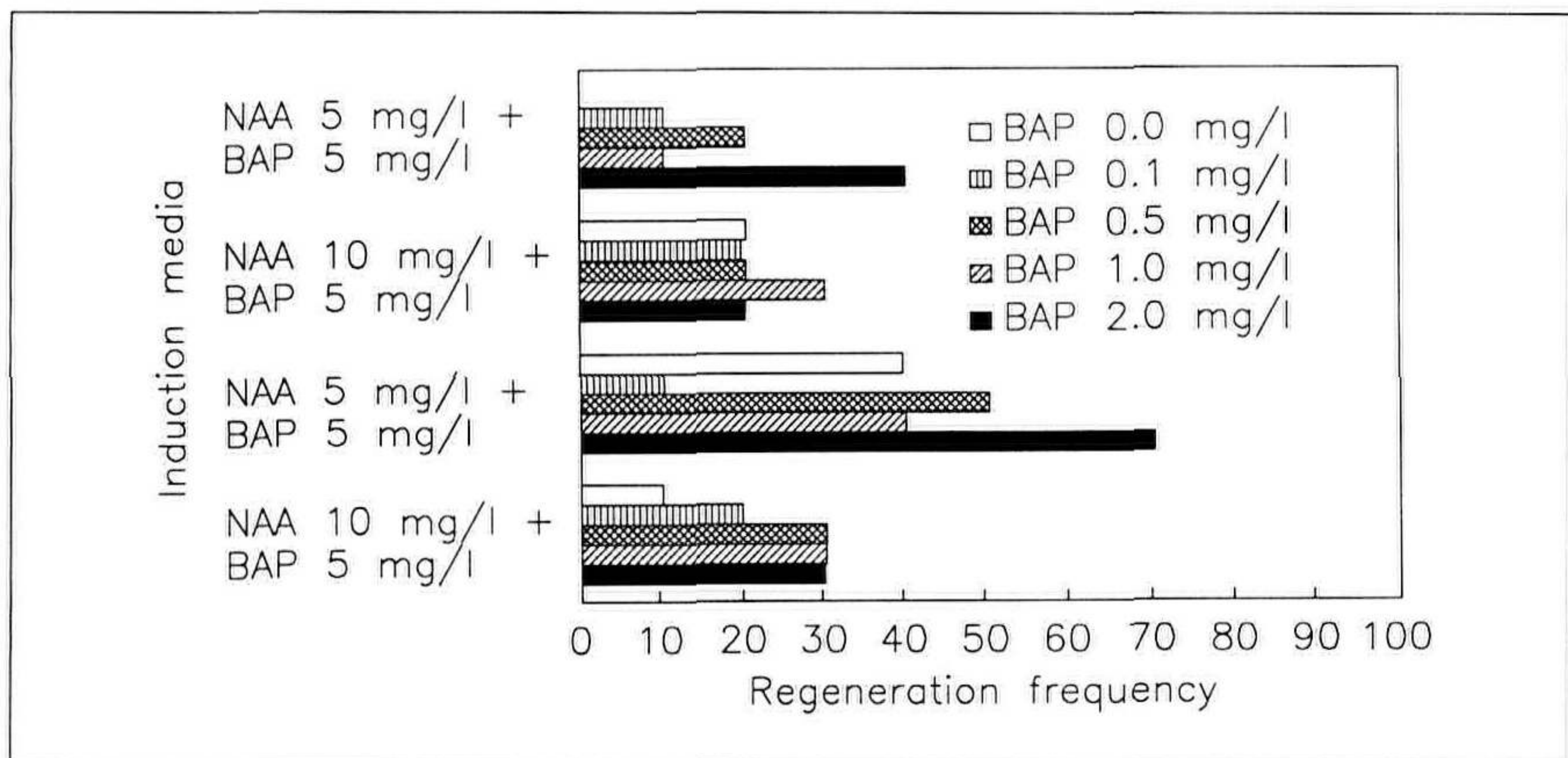


Figure 1. Effect of the condition of callus induction and BAP concentration on the regeneration frequency in tissue culture of ovaries from young flower buds of *Gladiolus*.



Figure 2. Regeneration of young shoots from ovary-derived callus.