

Effect of media and genotype on tissue culture of Strawberry (*Fragaria X Ananassa* Duch.)

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Two genotypes of garden strawberry (*Fragaria x ananassa* Duch.) viz. Festival and Sweet Charlie were subjected to MS medium supplemented with 32 different concentrations and combinations of phytohormones viz., 2, 4-D, BAP, KIN, IAA, IBA and NAA by using five explants namely meristem, shoot tip, leaf, nodal segment and Floral bud. Genotype and explant specific responses were obtained for callogenesis, caulogenesis and rhizogenesis on different compositions of MS medium. The callus formation was achieved for all explants of both genotypes on MS medium containing different concentration of 2, 4 -D (1.0, 2.0, 3.0 and 4.0 mg/l-1). The nature of the callus was friable. Shooting was induced on MS medium containing BAP and KIN as sole and also in combinations. The maximum number of shoots was obtained with nodal segment explants on MS medium containing BAP (1.5mg/l-1) in combination with KIN (0.5mg/l-1) in both genotypes. The single shoots were transferred for rooting on MS Basal medium. The regenerated plantlets were transferred to plastic pots containing a mixture of sterilized sand and compost (3:1). Thus, a comprehensive micropropagation protocol was developed for the two genotypes of strawberry.

Biography

Vandana has completed her M.Sc. (Agriculture Biotechnology) at the age of 24 years from Rajendra Agricultural University, Pusa. She has published several research papers in National and International journals and has also presented some research papers in national seminar/conferences.