Effect of different concentrations of BA on shoot proliferation of brahmi (*Bacopa monnieri*)

A.V. KHARDE*, R.T. TIDKE, N.M. MASKE, T.B. CHAVAN AND Y.N. WARKAD
department of Plant Biotechnology, M.G.M. College of Agricultural Biotechnology, AURANGABAD (M.S.) INDIA

ABSTRACT

Effect of different concentrations of BA in combination with IAA was observed on shoot bud proliferation from nodal explants, obtained from aseptic cultures of Brahmi (*Bacopa monnieri* Linn.) and effective protocol is described for rapid and large scale *in vitro* propagation of the valuable medicinal herb, *Bacopa monnieri* (L.) Pennell. This was achieved on MS solid medium supplemented with BA (1µM) showed multiple shoot (25) within 15 days of inoculation, when IAA (0.2 µM) was added shows 40 shoots per each explant. Elongation of shoots and subsequent root induction were achieved on the same proliferation medium only. On an average, within a period of three subcultures single nodal explant will produce 64000 shoots, respectively thereby favoring the economics of the cost of the materials and time factors. The regenerated plants resembled the mother plants in general habit without any morphological variation. A very simple one-step procedure for *in vitro* propagation of *Bacopa monnieri* has been established. This protocol can be used to generate foundation stocks of elite planting material for large scale cultivation.

Key words: *Bacopa monnieri* Linn., Growth regulators, Shoot Proliferation, *In vitro* multiplication.