

## ORIGINAL ARTICLE

### **IN VITRO STUDIES ON ABIOTIC STRESS INDUCED RESPONSE IN THE MEDICINAL PLANT *BACOPA MONIERI* (L.) PENNELL**

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**Abstract:** *Bacopa monnieri* (L.) Pennell (Brahmi) is a plant that has been used for centuries in traditional Ayurvedic medicine and it has a long history as a medicinal plant in human civilization with diverse therapeutic applications specially focused on and treatment of neurological disease. Micropropagation by plant tissue culture is the widely used practical application of plant biotechnology, where new plant tissues are grown by transferring them into an in vitro condition later transferred to ex vitro environment. In the present study the cultured plants induced to grow under abiotic stress supplemented with salt (NaCl) stress (0.1 N) to observe the morphological changes within culture and also compare the different biochemical and molecular expression in stress induced and control plants.

**Keywords:** *Bacopa*, *in Vitro*, NaCl, abiotic stress, root, shoot and molecular assay, biochemical assay.