

## **Effects of Different Potting Media and 6-Benzylaminopurine (BAP) on Propagation of Heen Bovitiya (*Osbeckia octandra* L.) stem cuttings.**

Madukokila UAAD<sup>1\*</sup>, Wijethunga HS<sup>2</sup>, Senarathane MMDJ<sup>2</sup>, Rihan MH<sup>1</sup>,  
Mubarak ANM<sup>1</sup>

- 1 Department of Biosystems Technology, Faculty of Technology, South Eastern University..
- 2 Seethawaka Wet Zone Botanic Garden Awissawella.

Heen Bovitiya (*Osbeckia octandra* L.) is an endemic plant species to Sri Lanka which has been widely used in traditional medicine in managing of Diabetes mellitus. This plant is also important as and under-utilized ornamental flowering herb propagated mainly through seeds and rarely by vegetative means. Hence, it is vital to develop a mass propagation protocol by employing stem cutting and to generate uniform planting materials for commercial needs. Therefore, this experiment was carried at the plant nurseries of Seethawaka (agroecological zone) botanic garden to evaluate the effects of different potting media Benzylaminopurine (BAP) on rooting of stem cuttings. Trials were conducted with three different types of potting media (Factor 1) of sand (T1), sand : soil at 1:1 (T2) and soil : sand : charcoal 1:1:1 (T3). Then, BAP solution (Factor 2) was prepared (5mg/l of concentration) and first half was sprayed in solution form (L1), where as remainder treatments stem cuttings bases were dipped with hormone slurry (L2). Experiments were arranged in factorial CRD manner with thirty replicates and response were collected after two weeks of planting. The results indicated that hormone application and potting media had significant interactions on the production of shoots per stem cutting ( $P < 0.05$ ) although, less with the root traits ( $p > 0.05$ ). Overall, T5 produced significantly higher the number of shoots ( $7 \pm 0.38$ ) along with root numbers ( $6 \pm 0.18$ ) and root length ( $7 \pm 0.2$ cm), suggesting that the potting media soil: sand (1:1) application with BAP spray produced best response than the other treatments.

Key words – Heen Bovitiya (*Osbeckia octandra* L.) Potting Media, stem cuttings