

## Micropropagation of *Pelargonium odoratissimum* (L.) L'Her., Using Petiole and Leaf Explants

**Authors :** Mohammad Ali Aazami Mavaloo, Mohammad Bagher Hassanpouraghdam

**Abstract :** Intact leaves, leaf segments and petiole sections derived from nodal explants in vitro were employed for the optimization of *Pelargonium odoratissimum* micropropagation. MS and ½ MS media enriched with BAP (1, 1.5, 2 and 4.5 mg/l) and NAA (0.1, 1 and 1.5 mg/l) were the treatment combinations used for. With leaf segments, the lowest browning incidence, the greatest callogenesis and the highest number of shoots were obtained with the media containing 1.5 mg/L BAP and 1 mg/L NAA. Two mg/L BAP + 0.1 mg/L NAA hold the same results for petiole explants. Intact leaves showed the best results for the three before-mentioned traits with 1 mg/L BAP + 1 mg/L NAA. 0.2 mg/L NAA caused the highest rooting percentage and the greatest mean data for the number and length of the roots. Rooted plantlets were transferred to the pots containing 1:1 peat-moss and perlite. Acclimatization of the plantlets was followed by 90 percent of survival rate in the greenhouse.

**Keywords :** *Pelargonium odoratissimum*, micropropagation, BAP, NAA

**Conference Title :** ICAABAE 2018 : International Conference on Applications of Agricultural Biotechnology and Agriculture Engineering

**Conference Location :** Kuala Lumpur, Malaysia

**Conference Dates :** February 12-13, 2018