

## P 08 Influence of different seed treatments and nursery media on germination of *Eclipta prostrata* seeds

Pradeepika N. G.J., 'PriyadarshaniN.D.N.2

<sup>1</sup>Graduate, Faculty of Agriculture, <sup>2</sup>Department of Crop Science, Faculty of Agriculture

This study was conducted to find out the most suitable seed treatment method to break dormancy and nursery media for the germination of Eclipta prostrata seeds. Two separate experiments were carried out; experiment one was selection of most suitable seed treatment method which comprised with four sub experiments namely, different water soaking treatments, alternative wetting and drying treatments, sulphuric and nitric acid treatments and gibberelic Acid treatments. Experiment two was to select the suitable nursery media for seed germination and seedling growth using five different growing media with 5 replicates. All the experiments were carried out using Completely randomized design with factorial arrangement where necessary. Result revealed that the highest germination percentage was observed in seeds treated with gibberelic acid (900 ppm in 14 hrs dipping period) (90%) followed by seeds soaked in water for 12 hrs (80%) and there were no significant ( $p \ge 0.05$ ) difference in seed germination between Gibberelic Acid and water soaking treatments compared to control (40%). Nursery media of cow dung: sand (1:1) showed a higher seed germination (77%) and significantly (P< 0.05) higher seedling height (5.84 cm) when compared to other treatments at four weeks after seed sowing. Therefore, *Eclipta prostrata* seeds soaked in water for 12 hrs could be used as most promising, economically viable seed treatment method and cow dung: sand (1:1) could be used as the most suitable nursery media to obtain a healthy and vigorous seedling of Eclipta prostrata.

**Keywords:** acid treatments, cow dung, germination, sand, water soaking