

## **Different nursery growing systems and growth media improved germination and seedling growth of fever tea (*Lippia javanica*)**

Ignatius Chagonda, Paul Chaibva, Nigel Ntini, Munyaradzi Gwazane, Blessing Ndaou, Wonder Ngezimana, Taurira Mtaita and Moses Mutetwa

### **Abstract**

An experiment was set up in a Completely Randomized Design (CRD) to examine the influence of nursery growing methods and growth medium on fever, tea germination, and seedling development. Two nursery growth methods (Conventional-CON and Float tray system FTs) and six different growing medium (pine bark, peat moss, coco peat, vermiculite, sand, and cattle manure) were used. ANOVA was used to compare treatment means, and means were separated using the Least Significant Difference (LSD) at a 5% significance level. The nursery growing method and growth material exhibited a strong interaction regarding the germination index, germination percentage, seedling height, leaf area, root length, density, and final crop stand. The float tray approach yielded the greatest germination index for peat moss and the lowest for cattle manure. In the float tray method, peat moss and coco peat had the highest germination percentages, whereas cattle manure had the lowest. Under the float tray technique, the tallest seedlings emerged in peat moss and the smallest in coco peat. Peat moss had the most leaf area in the float tray system, whereas coco peat had the least in the conventional technique. Peat moss in the float tray system had the highest root length density while coco peat in the conventional technique had the lowest. Peat moss in the float tray system had the highest final crop stand, whereas seedlings in the conventional and float tray systems had nothing. based on the findings, it is recommended that fever tea seedlings be grown on peat moss using the float tray method.

**Keywords:** Fever tea (*Lippia javanica*), herb, nursery, growing system, growth media, float tray, conventional system