



## RESEARCH PAPER

# Studies on effects of seed size on germination and seedling growth of *Elaeocarpus* and *Canarium* tree species

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**Abstract :** An investigation was undertaken on two medicinally important evergreen tree species of Western Ghats namely, *Elaeocarpus munronii* and *Canarium striuctum* to improve seed germination and enhance seedling growth in nursery. The seeds collected from two randomly chosen trees in each species were used for the study. In general seed germination was very poor in both the species. The maximum germination of 4.66 per cent was observed in *Elaeocarpus munronii* and it was 13.33 per cent in *Canarium striuctum*. Though big and medium size seeds recorded higher germination per cent than small size seeds in both the species studied, the seed size effect on germination was found to be non-significant. The results of the study revealed that seed size did influence seedling growth in both the species. Seeds of bigger size produced seedlings with higher values of shoot length, root length and collar diameter but their effect on dry matter accumulation was not significant. The effect of seed treatments on seedling growth was not noticed in *Elaeocarpus munronii* while seed treatment with sulphuric acid in *Canarium striuctum* showed slight but significant increase in shoot length, however, other growth parameters remained unaffected. The effects of seed size as well as of seed treatment on germination and seedling growth was found to be similar in both the trees species studied.

**Key Words :** *Elaeocarpus munronii*, *Canarium striuctum*, Seed size, Germination, Seedling growth

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