B-147: Effect of storage conditions and length of storage period on germination of cinnamon seeds

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Cinnamon (*Cinnamomum verum* Presl) is the most important crop among the export agricultural crops. Although the easiest and most widely adopted method of cinnamon propagation is by seeds, seedling method of crop establishment is facing problems due to rapid decrease of seed viability after harvesting. Therefore, this experiment was conducted at Cinnamon Research Station in

Thihagoda in the view of developing a suitable method for cinnamon seed storage.

Ripe cinnamon berries harvested from Cinnamon Research Station in July 1997 were depericarped and washed thoroughly. Seeds were divided into 6 samples and stored for the periods of 1 week, 2 weeks, 3 weeks, 4 weeks, 5 weeks and 6 weeks respectively. Each sample was subdivided into 10 sub-samples and 10 treatment combinations were imposed with 2 storage conditions of open storage and closed storage, and 4 storage media of air dried river sand, air dried coconut shell charcoal, air dried sawdust, air dried paddy husk ash along with no medium. Treatments were arranged in RCBD with split-plot with 3 replicates.

First sample of seeds was planted after 1 week storage period and the rest of the samples were planted after subsequent storage periods up to 6 weeks respectively. Seed germination percentage was estimated weekly.

According to the results, cinnamon seeds stored with air dried sawdust medium under closed storage showed the highest germination of 94.4% even after 6 weeks storage period. Similarly closed storage without any medium (93.9%) along with air dried river sand medium (92.8%) neared highest germination percentage obtained from air dried river sand. This suggests that cinnamon seeds can be stored under closed storage with sawdust or river sand medium or even without a medium.