

INFLUENCE OF SEED STORAGE CONDITION ON SEED MOISTURE CONTENT AND GERMINATION IN *IMPATIENS TALBOTII* HOOK.

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Abstract: Lesser known species *Impatiens talbotii* is a rare, endangered endemic ephemeral restricted to the northern part of central Western Ghats. Life of *I. talbotii* will terminate within six months. In the present study, species is studied to understand its seed viability upon storage which will accounts in species conservation. Seeds were stored at four different relative humidity regimes in two different temperatures. Study revealed that there was a gradual decrease in seed moisture as well germination attributes in all the storage condition upon storage period. Seeds stored under ambient humidity at cold temperature maintained reliable moisture content and germination till the end of storage period. Significantly high germination per cent, rate of germination, seedling length and seedling vigour index was observed in seeds stored in cold temperature than the seeds stored in ambient temperature. Higher germination of 83 per cent was observed in seeds stored at ambient RH under cold temperature and least germination of 3 per cent was observed in seeds stored at 90-95 % RH under ambient temperature after 30 days of storage. After 180 days of storage the high vigour of 1890 was observed in ambient RH under cold storage and low vigour of 83 was noticed in seeds stored at 90-95% RH under ambient temperature. Seed storage at ambient humidity in cold storage is best storage condition to *Impatiens talbotii* for long term storage.

Keyword: *Impatiens talbotii*, Relative humidity, Moisture content, Temperature

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