

EFFECT OF METHODS OF STORAGE ON SEED

VIABILITY OF TEA IN DARJEELING, INDIA

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ABSTRACT

Viability and longevity of seeds depend on the inherent characteristics of species, development stage, dehydration rate and the conditions under which they are stored. Tea (Camellia sinensis L.) seeds are considered of recalcitrant performance, because they are highly hydrated and they cannot withstand intensive desiccation. The objective of this study was to measure the effect of packing type and storage period on tea seed germination in Darjeeling. The moisture content of freshly harvested seeds varied between 68 to 75 %. The highest and lowest germination was attained in seeds stored in wet sand and multiwall paper lined wooden box, respectively. It was observed that with reduction in moisture content there was reduction in the germination percentage in all the treatments. A high initial moisture content and proper manipulation of these environmental factors for prevention of moisture loss from seed will ensure longer viability of the seeds. Results revealed that the maintenance of seed viability from 97 to 49% may be achieved up to eight months when stored in wet sand under darkness in Darjeeling.

KEYWORDS: Darjeeling, Germination, Moisture Content, Seed, Storage, Tea, Viability

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