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“Development on the margin”

## Assessing the Effects of Storage of Shea Seeds on Germination and Seedling Growth in the Northern Region of Ghana

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### Abstract

The Shea nut tree is an indispensable multipurpose tree that provides several local and commercial products such as fruits, oil, pomade, candle and soap. It is also very important in the pharmaceutical industry for the manufacture of drugs. In spite of its numerous advantages in Ghana and elsewhere, the propagation of the tree is still in the wild and has not been fully domesticated. This study was therefore conducted to assess the potentials of establishing shea nut tree by seed. The objectives of the study were to assess the influence of storage of seeds after collection on the germination, the influence of the period of storage on germination and to determine whether percentage germination and seedling growth vary with geographical locations. Three villages were randomly selected in three districts for seeds collection. The villages were Nabogu, Yipala and Tuya. In each location, two stands of shea trees separated by at least 2–5 km were considered. Within each stand three trees (families) with fruits were sampled. The study revealed that the length of time of storage of shea seeds before sowing affected the percentage germination. Seeds sown without storage had the highest percentage germination which declined with increase in length of storage to 25 % after eight days of storage. However, germination percentage showed no significant difference among the locations. The study rather showed significant difference in shea seedling growth among the locations. Seedlings from Nabogu were significantly taller than seedlings from Yipala. However, seeds from Yipala were not significantly different from seeds from Tuya. The study recommends that, for high germination of shea seeds, seeds should be sown as soon as possible after collection. Also Nabogu seeds are preferred for its fast seedlings growth.

**Keywords:** Germination, seedling growth, shea tree