

## RESEARCH NEWS

### SEED LONGEVITY OF GROUNDNUT (*Arachis hypogae* L.)

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Groundnut is a major oil seed crop with 40% - 50% of oil content. This crop is widely grown in Sri Lanka as a *maha* crop in the dry and intermediate zones mainly under rain-fed condition. The annual extent of cultivation is about 7500 ha.

Non availability of good quality seeds is one of the major problems encountered by groundnut farmers. Majority of farmers purchase seeds from various sources while few use their own seed. Seeds are usually dried under direct sunlight due to which they lose viability within a period of 9-10 months. Thus seeds obtained from one harvest cannot be used in the next season since the period in between two groundnut cultivation seasons is about 9-10 months. It is therefore important to devise a simple mechanism which can be adapted by farmers to retain seed viability for more than 10 months.

An experiment was conducted at the Agricultural Research and Development Centre, Angunakolapelessa for three seasons from 1996 to 1998 to study the effect of fast drying under sun and slow drying under shade on seed viability of three ground varieties, Tissa, Walawe and Indi with the check variety Redspanish, under long term storage condition. Counts on percentage germination were taken at one month interval throughout the study period.

Results indicate that of the four varieties tested, Tissa was able to retain 100% germination up to 11 months under slow drying method. Percentage germination of this variety dropped to 70% after 9 months of storage under fast drying method. Similar results were obtained with variety Walawa. Percentage germination of the variety Indi remained 100% up to 10 months under slow drying method. However, under the fast drying method, germination remained 100% upto 9 months and drastically dropped to 10% during the next month. Percentage germination of the check variety Red Spanish remained 80% up to 9 months of storage under slow drying method while under fast drying method it dropped to 43% during the ninth month.

Results of this experiment clearly indicate that slow drying is a better method than fast drying to retain longevity of groundnut seeds until next planting season without losing viability. This method is more practical and can be easily adopted by farmers reducing seed cost and thereby increasing profits.