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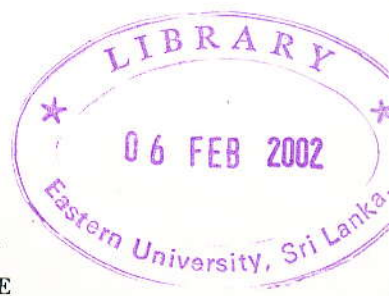
PRELIMINARY INVESTIGATION ON FRUIT SET, SEED SET AND GERMINATION OF BITTER GOURD (*Momordica charantia* L.)

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Abstract

The experiment was carried out to investigate the fruit set, seed set and germination of hand pollinated bitter gourd (*Momordica charantia*.L.), variety Thinnavelly white.

The experiment for this study was carried out in the division of Agricultural Biology of Eastern University Sri Lanka, Vantharumoolai, located in Eastern Sri Lanka, during the period of May to October 2001. Treatments included once a day hand pollination with/without open condition, twice a day hand pollination with/without open condition and open pollination (control).

The treatments were arranged in a Randomized Complete Block Design (RCBD) with eight replicates. Measurements and observations were made on fruit length, fruit girth, number of seeds per fruit, fruit weight at harvest, seed weight, and germination and emergence rate under laboratory conditions.

Pollen viability was found to decline with the advancement of time of the day. Over 75 percent viability was observed at 7.30a.m and almost zero percent at 11.00a.m. This is an important factor to be considered when hand pollination is practiced.

Pollination in general affects the fruit characters such as fruit length, girth, and weight at harvest, number of seeds, and seed weight. Significant differences were found among treatments for these characters. The hand pollinated fruits showed improvement in fruit length and girth, weight of fruit, number of seeds and seed weight.

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