

## FRUIT THINNING, CANOPY MANAGEMENT AND NUMBER OF HARVESTS ON SEED QUALITY OF EGGPLANT (*Solanum melongena* L.)

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An experiment was carried out to determine the effect of fruit thinning, canopy management and number of harvests on seed quality of eggplant at Horticultural Crop Research and Development Institute at Gannoruwa during *Maha* 2012/2013. Four treatments namely, egg plants having 3 shoots and 4 fruits (T1), 3 shoots and 7 fruits (T2), 3 shoots and 10 fruits (T3) and a controlled treatment (without canopy management and fruit thinning-T4) were arranged in Randomized Complete Block Design (RCBD) with 3 replicates. Seed yield per plant, seed yield per fruit, germination percentage, seed viability, thousand seed weight, seedling fresh weight and shoot & root length of seedlings were measured using seeds extracted at physiological maturity. The highest values for germination (94.72%), seed viability (99.55%), thousand seed weight (5.15 g), seedling root length (5.2 cm) and seedling fresh weight (0.044 g) was recorded in T1. Those values except thousand seed weight were statistically not significant ( $P>0.05$ ) in T2. The lowest values were recorded in T4 for seed quality parameters. The highest seed yield per plant was recorded in T4, followed by T3, T2 and T1. The seed yield per fruit was highest in T1 followed by T2, T3, and T4. The possible number of harvest was highest in T4 followed by T3, T2, and T1. Irrespective of treatments the germination percentage and viability was reduced after 3 picks. This study indicates that the fruits in T1 and T2 found to be good for quality seed production in eggplant. But in terms of seed yield advantage T2 would be better to be adopted than T1 in Sri Lankan conditions.

**Key words:** Canopy management, Fruit thinning, Germination, Seedling vigour, Seed yield