Performance of two mung bean varieties under different spacing and fertilizer levels in low country dry zone

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Green gram or Mung bean (*Vigna radiata* L. wilczek) is a crop grown in the Dry and Intermediate zones of Sri Lanka. The national average yield (0.88 t /ha) of mung bean is low when compared to the potential yield (2-2.5 t /ha). Therefore, in an attempt to improve the farmers yield levels a three factor factorial experiment in Randomized Complete Block Design (RCBD) was conducted at the Agricultural Research Station, Thirunelvely during *Yala* 1993 and *Maha* 1993/1994. In this experiment two cultivars namely "Type 77" and "IPBM 79-13-45", two spacing (30 cm x 8 cm and 45 cm x 8 cm) and three fertilizer levels of N,P,K (30, 0, 0 kg/ha : low level; 30, 40, 30 kg/ha : medium level and 30 , 80 , 60 kg/ha : high level) were evaluated. The results revealed that the recommended cultivar "Type 77" gave significantly higher yield (2.07 t/ha.) when compared to the new cultivar IPBM 79-13-45 (1.81 t/ha.). However, no significant differences were found in yield under different spacing and fertilizer levels. The pod length and the hundred seed weight were significantly high in the cultivar "IPBM 79-13-45" than those in the cultivar "Type 77". Therefore, the results showed that the recommended cultivar "Type 77" is significantly high yielding than the other cultivar. It is also evident that the wider spacing (45 x 8 cm) could also be used to reduce the cost of seeds and to make the cultural operations easier.

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