

**COMPARISON OF PERFORMANCE OF COMMON BEAN VARIETIES
FOR VEGETABLE AND SEED PRODUCTION
IN THE UP-COUNTRY INTERMEDIATE ZONE OF SRI LANKA**

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Bean (*Phaseolus vulgaris* L.) is an important vegetable crop grown in some of the agro-ecological regions of the country to produce green vegetable and seeds. The agronomic and economic implications related to growing bean crop for vegetables and seed are not well documented. Therefore, present study was conducted at the Agriculture Research Station, Rahangala (IU_{3d}) during 2018 *Yala* season, to evaluate the performance of different pole bean and bush bean varieties grown for vegetable and seed production under Up-country Intermediate Zone (UCIZ) conditions. Study was carried out in a Randomized Complete Block Design (RCBD) with three replicates. Pole bean varieties, *viz.* Cora- black (CB), Capri (CP) and Bandarawela green (BWG) and bush bean varieties, *viz.* Sanjaya (SJ) and Top crop (TC) were tested. Phenological data had no significant difference ($p < 0.05$) for both pole and bush bean varieties. Among pole bean varieties, CP recorded the highest fresh pod yield ($11.7 \pm 0.726 \text{ tha}^{-1}$), number of pods per plant and individual fresh pod weight and they were not significantly different with BWG. CP recorded the highest pod length ($18.6 \pm 0.156 \text{ cm}$) and BWG recorded the highest pod girth ($4.0 \pm 0.013 \text{ cm}$). Bush bean varieties were not significantly different in fresh pod yield, seed yield and quality related parameters. Marketable seed yield was significant among varieties and the highest values were recorded in CP ($1.32 \pm 0.042 \text{ tha}^{-1}$) and TC ($0.96 \pm 0.006 \text{ tha}^{-1}$). In conclusion, CP and BWG varieties of pole bean and SJ and TC varieties of bush bean are the best varieties for green pod production under UCIZ conditions. Moreover, CP and TC are the best varieties for seed production in pole bean and bush bean respectively. According to the cost analysis, seed production in the pole bean was more profitable (54%) than in the bush bean.

Keywords: Bush bean, Marketable seed yield, Pole bean, Seed production, Vegetable production