

126/B

Evaluating the efficiency of capsicum (*Capsicum annum* L.) intercropped with bushitao (*Vigna unguiculata* L.) in sandy regosol

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Capsicum (*Capsicum annum* L.) and bushitao (*Vigna unguiculata* L.) are the two important vegetable crops throughout the year in the Eastern region of Sri Lanka and also both are compatible crops for intercropping. Evaluating cropping system is an important to select superiority over the existing system adapted by the framers in terms of biological productivity and economic potential. Therefore, an experiment was conducted to evaluate the efficiency of capsicum (*Capsicum annum* L.) intercropped with bushitao (*Vigna unguiculata* L.) at Agronomy farm, Eastern University, Sri Lanka. Capsicum and bushitao were selected as base and intercrop respectively. The experiment was laid out in a Randomized Complete Block Design with five treatments and four replications. Treatments were capsicum as a sole crop with the spacing of 40 cm × 40 cm (T1), bushitao as a sole crop with spacing of 40 cm × 15 cm (T2), capsicum (60 cm × 40 cm) with bushitao (60 cm × 40 cm) in alternative rows (T3), 30/60 cm paired row planting of capsicum with one row of bushitao between two pairs of capsicum (T4) and 25/70 cm paired row planting of capsicum with two rows of bushitao between two pairs of capsicum (T5).

The results revealed that land equivalent ratio was superior in all intercropping combinations compared with monocropping. It ranged from 1.43 (T4) to 1.63 (T5). Cost of cultivation was high in intercropping as compared to monocropping. Among intercropping, it was high in T5 (Rs 2,24,401 /ha) and low in T4 (Rs. 2,21,305 /ha). However, net return (Rs 11,95,045/ha) was high in T4 due to high capsicum yield (6.20 t/ha) followed by T3 (Rs 11,76,622/ha). Return per rupee invested was high in T1 (9.43) followed by T4 (6.83). In case of monetary return, it was high in T3 and T4 (1.09). This experiment suggests that 30/60 cm paired row planting of capsicum with one row of bushitao between two pairs of capsicum (T4) would be the most productive and profitable system in sandy regosol.

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