B26 PRODUCTIVITY OF CORN - MUNG BEAN INTERCROPPING SYSTEMS

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Intercropping is practiced in order to increase the productivity of land. An experiment was conducted at the Agricultural Research Station at Maha-Illuppallama during Maha (1983/'84) and Yala (1984) seasons with corn at 50,000 and 60,000 plants/ha., planted in 120 and 150 cm rows and mung bean with 133,000 and 266,000 plants/ha. planted between corn rows were tested in all combinations to find out the adaptability of the system to the Dry Zone of Sri Lanka. Three different nitrogen levels of 30, 60, and 90 kg/ha. were also applied.

Grain yield of intercropped corn (1838 kg/ha.) was significantly lower than that of sole cropped corn (2239 kg/ha.) during the wet season. This effect was not observed during the dry season. Row spacing did not significantly affect corn yield in the wet season, while in the dry season, the highest corn yield was obtained with 120cm rows and N application of 90 kg/ha. irrespective of the population. Grain yields of intercropped mung beans planted in 120cm rows was greater than those planted in15 cm rows.

Intercropping produced protein and energy 350 kg/ha. and 7,800 k.cal/ha., respectively, in the wet season, and 625 kg/ha. and 12,000 k.cal/ha., respectively, in the dry season. Intercropping gave a gross income as high as Rs.12,000 and LER above 1.25 in both cropping seasons.

Reference

Willey, R.W. (1979). Intercropping : its importance and research needs. I. Competition and yield advantages. *Field Crop Abstracts* 32 (i): 1 - 10