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Maximization of productivity in maize and field bean intercropping system with different row proportions and nutrient management

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field experiment was conducted during Kharif 2012 at Zonal Agricultural Research Station, VC Farm, Mandya in maize Aand field bean intercropping system with different row proportion and nutrient management practices. The results revealed that, application on nutrients based on SSNM produced significantly higher growth, yield components and kernel yield (82.96 q ha-1) of maize as compared to LCC (75.23 q ha-1) and RDF (71.23 q ha-1). Among the row ratios, significantly superior growth, yield components and kernel yield (78.09 q ha<sup>-1</sup>) of maize were recorded in sole maize followed by maize + field bean in 4:1 row proportion (77.68 q ha<sup>-1</sup>). Among the interaction, sole maize with SSNM recorded significantly superior growth, yield components and kernel yield (84.33 q ha<sup>-1</sup>) and it was on par with maize + field bean in 4:1 row proportion with SSNM (84.13 q ha<sup>-1</sup>). The net returns (Rs. 133606 ha<sup>-1</sup>), was superior in maize + field bean in 4:1 row proportion with SSNM while, the B:C ratio (5.26) in 4:1 proportion with LCC. Higher MEY was recorded in maize + field bean in 4:1 row proportion with SSNM (8972.6 kg ha<sup>-1</sup>). Further, Maize + field bean in 4:1 row proportion with SSNM accounted for maximum LER (1.27), ATER (1.16), and minimum aggressivity (0.024).

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