

Abstract

Evaluation of Mungbean Varieties for Northwest Cambodian Lowland Rice Systems [†]

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Abstract: Small-scale agriculture is the economic, social and cultural foundation of Cambodian rural communities. Crop diversification is not widespread in these traditionally rice-producing smallholder farms. Rice monoculture has led to a decline in farm productivity and farming household income. Mungbean is emerging as a high-value opportunity for crop diversification in smallholder farms in north-west Cambodia. However, its expansion is being constrained by the low quality of varieties available to farmers. This study aims to evaluate the locally available varieties with others from Cambodia and the region by comparing the varieties' agronomic and economic characteristics. The varieties from Cambodia, CMB-3 and CARDI-Chey, had superior agronomic and quality characteristics compared with the varieties available to farmers. This was reflected in the price estimate and income of both varieties which had the highest gross margins. Hence, the varieties currently available to farmers are unsuitable for continued cultivation in the modern mungbean production environment.

Keywords: Mungbean production; variety evaluation; smallholder; Cambodia

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