

Productivity and Economic Benefits of Maize-Gliricidia Intercropping

Background

- Extensive grazing and the use of crop residues for cooking energy are major drivers of land degradation in semiarid areas.
- Poor soil health and unreliable precipitations limit crop production and increase susceptibility to climate change
- High costs of inputs, especially mineral fertilizer, undermine farmers' efforts to sustain crop production and improve land productivity

Objectives

- To evaluate productivity and profitability of Gliricidia-based intercropping systems promoted for land rehabilitation
- To validate promising Gliricidia-based technologies with farmers using the mother-baby trial approach.

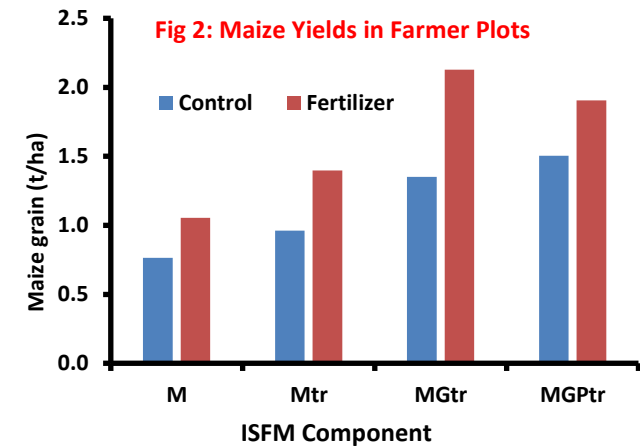
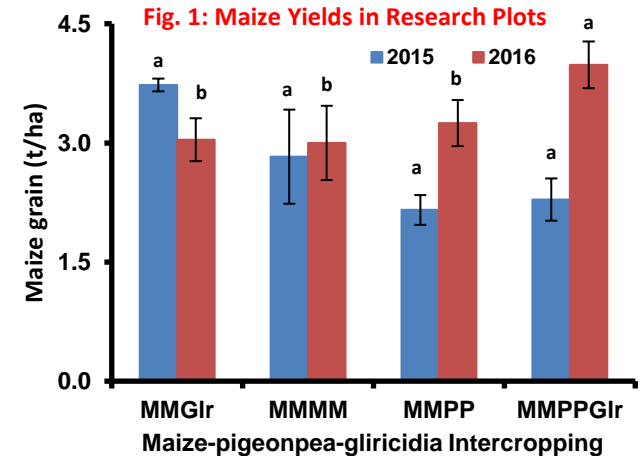
Results

- Increased yield and economic benefits in maize intercropped with gliricidia and/or pigeonpea (Tables 1; Fig. 1 & 2)
- Accounting for fuelwood supply increase economic and environmental benefits gliricidia intercropping systems



Table 1: GM and BCR in Farmer plots

Technology	GM	BCR
Maize	75	1.2
Maize-tied-ridge (TR)	143	1.6
Maize-Gliricidia-TR	1216	4.5
Maize-Gliricidia-PP-TR	1451	5.5



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