Objectives of the trial:
1. Assess the impact of contrasting crop rotations in response to the addition of farm yard manure and green manure grown on site.
2. To promote integration of organic and mineral fertilizers as a means to restore the productivity of degraded soils.

The following technologies are tested every season:
- Nitrogen (N) and/or phosphorus (P) mineral fertilizer (optimum level of application from 0 to 90 kg/ha)
- Farm yard manure 4 ton/ha (FYM)
- Crop residue (R) maize stover 2 ton/ha
- Tephrosia (T) – a fast growing leguminous shrub that is incorporated into the soil
- Micronutrients
- Lime application
- Cropping systems
  - Continuous maize (M-M)
  - Rotation with Tephrosia (M-T)
  - Intercrop with soya bean (Intercr)
  - Soybean and maize

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize grain yield – all treatments (2004-2014)

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the farm to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.

Maize-Tephrosia rotation plus farm yard manure and without crop residue addition produced the highest maize grain yields per season. The treatment (circled above) looks like a good option for farmers. However, over two seasons the same treatment did not produce high enough yields to match those of continuous maize-maize cropping. Therefore dedicating only a small portion of the field to Tephrosia for a split M/T-M rotation could prove more profitable for farmers.