Rotation of rice to control rice hispid beetle

Recognize the problem
Rice hispid beetles (Simomo in Lozi) are small, shiny, blue-black and 4-5 mm long. Their body has many tiny spines. Both the adult and the larvae damage young rice plants. Adult beetles feed on the green leaves and larvae mines into the leaves. Due to the damage young rice plants wither and die. This can reduce yield up to 40% in direct planted rice, while in transplanted rice, it can damage the nursery up to 100%.

Background
Rice damage by rice hispid beetles is very common at seedling stage in rice monoculture cropping system. The pest only feeds on rice and related plants. Therefore, it is important to rotate rice with crops like beans, sun hemp, cowpeas. Crop rotation reduces pest infestation by breaking down its life cycle. Crops grown in rotation with rice are not eaten by the rice hispid beetles so they die because of lack of food. Also, female adult beetles like to lay eggs in grasses; so absence of grassy crops in the field will prevent egg laying.

The technology is a three rotation system with 1 season rotation break.

The technology works very well in both upland and lowland rice.

Management
- After rice harvest in May and June prepare land for planting vegetables.
- Plant beans not later than July.
- Use a hand hoe to till the land
- Leave the cultivated land for one week to dry to make breaking of soil clods easy.
- After 1 week break the clods and remove weeds to have a fine seed bed.
- Plant at space of 50 -75 cm between rows and 8-10 cm apart within the row.
- Plant 8-10 kg per hectare (35 to 40 Kg per hectare) of beans (Kabulanketi, Carioca, Solwezi rose etc).
- Harvest the beans by October and let the land to fallow from October to late December.
- Bury the beans crop residues to clear the field for rice planting.
- Use a hoe or plough to till the land.
- Remove weeds and break the big soil clods to have a fine seed bed.

The recommendations in this factsheet are relevant to: Democratic Republic of the Congo, Malawi, Tanzania, Zambia

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