

# Desmodium intercrop of maize to control Striga

## Recognize the problem

*Striga*, also called "witch weed", is 5 to 30 cm high and has orange-pink flowers. It grows in close contact with maize, sorghum or millet. It is seen about 2-3 weeks after maize emergence. It attaches itself to the roots of the crop and sucks water and nutrients out of the crop to use for its own growth. Attacked maize plants lose colour and leaves dry. Plants may be stunted over entire fields, or field areas.

## Background

*Striga* is a parasitic weed which "bewitches" maize, millet and sorghum; hence the local name "witch weed". The weed grows and multiplies fast. It produces small sticky seeds which can remain in the soil for over 20 years. *Striga* seeds can only germinate when they sense the presence of a host crop, from which they suck food.

Silver leaf desmodium (*Desmodium uncinatum*) is a fodder legume that can be intercropped with maize to control *Striga*. Desmodium produces substances which cause the *Striga* seeds to die soon after germinating, so that they will not damage the crop.

## Management

- Plant certified maize seeds, because all grains used for sowing should be free of weed seeds.
- Obtain Silver leaf Desmodium legume seeds from reputable sources such as Golden Valley Agriculture Research Trust, Zambia
- Plant maize first using recommended spacing as per agro ecological region. In region 1&2, 90cm between rows and 25 cm between plants; in region 3, 75cm between rows and 25cm between plants.
- Once the maize has been planted, sow a row of Desmodium in between the two rows of maize.
- Alternatively, plant *Desmodium* between the rows of maize at 2:1 row arrangement at 45cm between rows of maize and 30-45cm between plants.
- Follow the usual recommended agronomic practices of maize.
- Desmodium can be used as fodder for livestock as well as for soil fertility improvement, and nitrogen fixing. Leaves and stems can be ploughed under after maize harvest, or they can be cut and kept as hay for dry season feeding to livestock.
- If *Striga* does develop, remove the flowers to prevent seeds from being produced

*Striga* parasitic weed causing stunting of maize. (Photo by Hakizamungu Leon)



Scientific name(s) > *Striga spp.*

The recommendations in this factsheet are relevant to: Zambia



Authors: Albert Mate  
Self Help Africa  
tel: +260 977 428480 email: albert.mate@selfhelpafrica.net

Edited by Plantwise.