Recognize the problem
The African stalk borer is also called maize stem or stalk borer, or sorghum stalk or stem borer. Its caterpillars feed on maize, sorghum and pearl millet. The caterpillars are light or dark violet to pinkish white and about 1 to 2 ½ cm. The caterpillars feed in the leaf hearts (leaf funnels) at the vegetative crop stage. The damage is visible as yellowish and dying leaf hearts. Later, larvae bore into the stems. The boring tunnels are seen when you slice the stems. Later, stalk borers also tunnel into grains.

Background
The damage comes from the caterpillars feeding on young leaves inside crop stems. After feeding, they pupate in the lower stems, and stay there for a while. Then, they emerge as moths that lay eggs onto the crops. Caterpillars hatch from the eggs and start feeding again. *Tephrosia* plants have a toxin, which is called tephrosin which poisons insects. It can be extracted into water, and sprayed. *Tephrosia* sprays are environmentally friendly and affordable. Extracts from dried *Tephrosia* leaves are more effective than from fresh leaves.

Three weeks after planting, begin inspecting maize plants once per week. Continue inspecting plants until flowering. Look for holes in leaves and dead leaf hearts. Consider carrying out *Tephrosia* sprays when 3 – 10% of young plants are damaged. If the caterpillars are already inside the stems, then they are protected from sprays so it is important to spray when the young caterpillars are visible.

Management
- Collect 2 baskets of *Tephrosia* leaves and dry them in the sun
- Grind 1 kg of dry *Tephrosia* leaves (1/2 to 1 basket).
- Soak the ground up leaves in 5 litres of water for 2 hours
- Boil the mixture for 30 minutes and allow to cool
- Sieve the mixture
- Add a bit of bar soap or simple liquid soap (10 grams or 1 to 2 tablespoons) to help the solution to better spread when sprayed.
- Add 5 litres of the solution directly into a sprayer
- Spray the affected crop around and onto the leaf funnels for 2 – 3 seconds per plant (walking speed) in the evening or morning
- The results are expected within a week
- Caution should be taken not to spray/dispose of the *Tephrosia* into bodies of water as the plant extracts are poisonous to fish

Scientific name(s) > *Busseola fusca*

The recommendations in this factsheet are relevant to: Zambia

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