African Bollworm on Tomato

Recognize the problem
The African bollworm is a fat brown moth which flies at night laying eggs on plant parts. The yellowish-white eggs hatch into yellowish-white to reddish-brown caterpillars which feed on leaves, flowers and fruits. All caterpillars have a light stripe on each side of their body. The feeding on the fruit results in a watery untidy hole in the fruit, filled with faeces. The spoiled fruits ripen early, may drop off and are not saleable.

Background
Once inside the fruit the caterpillar completes development into a larva and becomes difficult to reach and control with insecticides. The bollworm likes hiding and feeding on other crops like maize and cotton or weeds. Bollworms can be killed or eaten by insects such us bugs, lacewings, and ladybird beetles.

Management
Non-chemical control
- Use a trap crop (e.g. African marigold) planted every 8 rows.
- Regularly look for presence of eggs and small caterpillars to control the pest early. Handpick small caterpillars before they enter fruit.
- Plant tomatoes away from cotton or maize crops.
- Remove and destroy infected fruit and infested plants after harvest. These may be composted or burnt to destroy the pest.
- Plough soil after harvesting to expose pupae to sunlight and natural enemies.
- Conserve natural enemies.
- Use the biopesticide Bacillus thuringiensis. This should be used before small caterpillars enter the fruit.

Chemical control
- Registered effective chemical products available against the African bollworm include Azadirachtin (neem), Bifenthrin, Deltamethrin, Indoxacarb, Lufenuron and Methoxyfenozide.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.