

establishment, colonization and subsequent spread

- d) Mass trapping of ants for subsequent release in cotton fields heavily infested by bollworms for an immediate population suppression

**For successful management of cotton bollworms, AVOID**

- a) Use of chemicals near or where these ants are present
- a) Area-wide destruction of vegetation by either burning or cutting down trees not to destroy breeding sites and hiding places

**Conclusion**

The use of the predatory ants to biologically suppress bollworm populations results in increased net profits for the farmer. Besides, it is environmentally friendly and free from health hazards to humans and other non target organisms. However, the successful use of the predatory ants depends on the full corporation of the community concerned.

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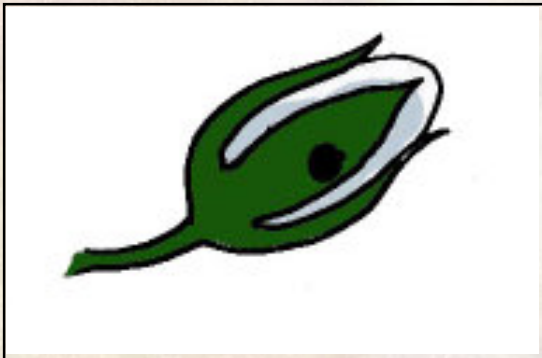
# Management of cotton bollworms using predator ants



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## Introduction

Insect pests are the most important production constraints in Uganda. American bollworms, Spiny bollworms and Pink bollworms are among the 10 insect pest feeding and damaging flower buds, flowers, young and maturing bolls causing abortions amounting to up-to 87% resulting to yield reduction and



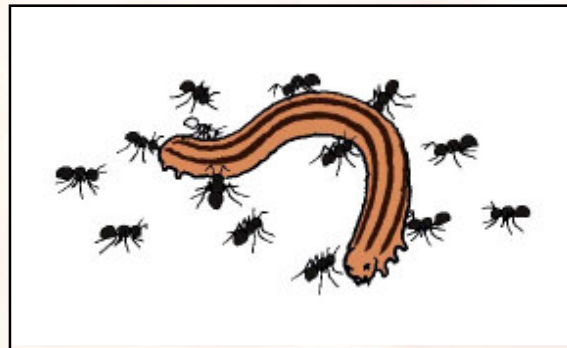
Aborted cotton flower bud as a result of American bollworm feeding damage

income for the farmer. Before discovery of ants, farmers used to spray with chemicals. However, these chemicals affect the surrounding. That is why research has come up with the use of black ants, a safer alternative for the control of cotton bollworms.

## Advantages

The predatory ants have the following advantages over farm chemicals

- a) Reduction in environmental risk hazards
- b) Elimination of food contamination
- c) Sale and/or consumption of pesticide free farm produce
- d) Sale of farm produce at premium prices
- e) The predatory ants are easy to bait and mass rear in homes by farmers
- f) Farmers' groups can be conveniently educated on the use of new technologies as they are developed
- g) Farmers do not spend money to purchase chemical applicators and therefore, saves on labour and time



American bollworm captured, killed and being transported to ants nest for food

- h) Farmers get maximum net profits from the premium prices

## Challenges

Successful implementation requirements to note

- a) A community based organization needs to agree on good environmental management practices
- b) Keep sugar, honey, fish and meat meals in closed containers to avoid ants feeding on them

## Methods of using the predatory ants

- a) Ant attracting crops like either beans, groundnuts and cowpeas that are host plants to aphids can be inter-cropped with cotton attract predatory ants early into cotton
- b) Introduction of ants from a place where they are existent to a new place. The ants should include males, females and workers
- c) Maintenance of surrounding to create favorable environmental conditions like breeding sites and hiding places for ants to allow good