





# Control bollworm pest early for higher sorghum yields

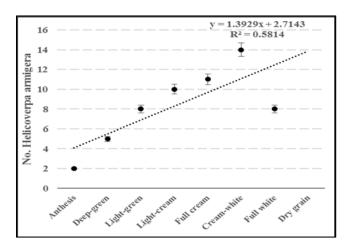
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## Introduction

Sorghum yield can be reduced by different factors which include rainfall amount, temperature regimes and soil fertility. Bollworm *Helicoverpa armigera* [Hubner] affects different Sorghum grain stages lowering yield. The highest damage occurs when grain attains high starch at soft dough stage as shown in the graph below. The higher the bollworm larvae on the panicle (flowering ear) the higher the grain yield loss.



Stages of grain formation



Check under-developing seeds

# Field pest surveillance

- Scout for bollworm larvae on the flowering ears
- Check out for the pest in at least 20% of the field

#### **Spray against bollworm**

- Once the presence of bollworm larvae is confirmed on the ears spray with an effective insecticide and repeat after 7 days
- Confirm the effectiveness of the insecticide from an extension officer or KALRO Crop health staff.
- Continue scouting the field to ensure there is no further attack from other insect pests or bollworm reinfestation



Severe bollworm attack at milk stage



Spray with insecticide on seeing one worm per ear

### Bird damage and harvest time?

- If there is threat of bird damage, harvest grain at soft dough and dry it in the open sun for 3-4 weeks
- Drying platform should be at least 50 cm above ground to prevent Aflatoxin contamination from soil
- The grain moisture content should be 11-12% before storage and can be confirmed with a moisture metre
- Store grain in gunny bags and dust with insecticide against weevils
- Or use non-chemical storage technologies (indigenous knowledge)
- If there is no bird damage threat, let the grain dry in the field and harvest when the grain is dry.

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