Control of thrips on cowpea

Recognize the problem
The cowpea flower thrips or African bean flower thrips are shiny, black, slender, small-winged insects that feed on flower buds and flowers. During the pre-flowering period, nymphs and adults may damage the terminal buds. However, the main damage is on the flower buds and flowers.

Attacked flower buds become brown and eventually fall off, leaving behind dark red scars. Damaged flowers are distorted and malformed. They change colour and may fall off early, with the result that pods are not formed. If pods do begin to form and become infested, they will be malformed.

Background
The insect’s life cycle takes 14-18 days. Eggs are laid in flower buds and nymphs feed on the plant, causing extensive damage. Pupae develop in the soil.

Management
• Dig and level to destroy/kill the thrips in the soil.
• Heat from the sun kills the pupae that have been exposed on the soil surface after ploughing and harrowing.
• Look for resistant/tolerant varieties (e.g. Slipea 1, 2 and 3). Such cowpea varieties can be obtained from SLARI.
• Plant early maturing varieties (e.g. Slipea 1, 2 and 3). Early maturing varieties escape the period of heavy attack.
• Early planting is desirable (second & third week in September).
• Thrip populations are reduced when cowpea is mixed with other crops like maize or sorghum.
• Spray with neem leaf extracts. Grind leaves, weigh 200 g and add 1 gallon of water, then stir the solution well before spraying. Spray in the morning or evening. Do not use dirty or contaminated water.
• Spray insecticide (e.g. chlorpyrifos—WHO class II) at 70 mls/gallon of water depending on climatic condition and farm size. Apply early in the morning or in the evening. Do not use dirty or contaminated water. Do not spray the crop at least 1-2 weeks before harvest.

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.

Scientific name(s) > Megalurothrips sjostedti

The recommendations in this factsheet are relevant to: Sierra Leone

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