





KALRO/NAVCDP Programme Factsheet No.068/2024

MANAGEMENT OF BANANA THRIPS

Pest name: Thrips

Other crops: French beans, tomato, avocado, citrus, onions, garlic



Healthy banana Source: Ngugi, CN, 2024 KALRO



Silvery patches on banana fingers Source: Ngugi, CN, 2024 KALRO



Silvery patches on the fruits later turn brown patches and crack Source of Photo: Scot Nelson https://www.flickr.com/photos/ scotnelson/27755734515/in/photolistlb53fPlhFoSP

\mathcal{D} escription of the pest

- Polyphagous and particularly found on bananas
- Small (1.5 mm long), slender, brown insects
- · Lay tiny eggs into the plant tissue
- Larvae are pale yellow or white in colour and hatch 7 - 8 days, normally have a black globule of excrement at the end of the abdomen. This stage lasts about 10 days then drop down into the soil to pupate. Adults emerge within 7 - 10 days thereafter.

Symptoms

- Silvery patches that turn brown on the fruits.
- Cracking of skin of heavily infested fruit that results

in fruit rot making; reduced marketability.

Conditions prevailing that contribute to infestation

Hot and dry weather conditions encourages rapid increase of thrips population.

- High temperatures, promote rapid reproduction resulting into proliferation of about five to eight generations per year.
- · Prefer tight plant spaces.
- Male flowers presence after fruit setting.

Conditions that contribute to pest reduction

Cold and moist weather conditions



Management Strategy

The following management options are recommended:

Cultural practices:

- Crop monitoring from flowering and tapping flowers on a white paper to establish thrips presence.
- Use pest free/ certified planting materials.
- Keep the banana field free of weeds.
- Use of polythene bags to cover the bunches.
- Field sanitation including;
 - Disposal of old pseudo-stems to avoid pest build-up.
 - Volunteer banana plants and old neglected plantations destruction.
 - Removal of the male floral parts 8-11 days after fruit setting.
- Establish a hedge around the orchard e.g. Tephrosia spp.
- Use of appropriate spacing and stool management to create unfavorable climate for thrips.

\mathcal{E} iological methods

- Conserve natural enemies e.g. lacewings, ladybird beetles and predatory bugs.
- Organic vegetable oil e.g. CODACIDE OIL.

Chemical management:

Spray application using.

- Spinosad.
- Alpha cypermethrin e.g. DEGREE 100 EC, SUPREMO 100 EC, ALPHA-MED 100 EC.
- Acetamiprid + Bifenthrin e.g. ACETASTAR 46 EC.
- Spot spray with pyrethrin.
- Deltamethrin (Decis 2.5 EC®).
- Pirimiphos-Methyl (ACTELLIC 25EC®).

Note: Agro-chemicals should be used in consultation with professional practitioners and considering existing cautionary/safety measures, particularly the manufacturer's instructions.

Compiled by: Kinyua Zachary., Ruth Amata., Ceciliah Ngugi and Lusike Wasilwa

Edited by: Ngugi, C.N., Gathambiri, C.W., Nyasani. O. J. and Otieno A.S.

Design and Layout: Nogrecia Mnene

Disclaimer: The content of this publication is for general information to banana farmers and technical staff only and no person should act, or fail to act on the basis of the information herein without professional advice from crop health experts affiliated to Kenya Agricultural and Livestock Research Organization (KALRO).

For more information, Contacts:

Director General

Kenya Agricultural & Livestock Research Organization, Kaptagat Road, Loresho Nairobi Kenya P.O. Box 57811, City Square, Nairobi, 00200, Kenya

Email: info@kalro.org

Safaricom: +254 722206986/722206988; Airtel: +254 733-333-223/4/733333299/4