

Regional status and what growers should do

The Invasive Fruit Fly, *Bactrocera invadens* (*B.i.*), if uncontrolled, could seriously affect fruit and vegetable production. It also could affect access to export markets. This is a grower's guide to what should be done to monitor and manage *B.i.*

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SUBTROP

KNOW THE STATUS OF YOUR REGION

All regions in South Africa are classified in terms of the status of *B.i.* as follows:

1. Absent – Regions where *B.i.* is considered absent based on official surveillance.

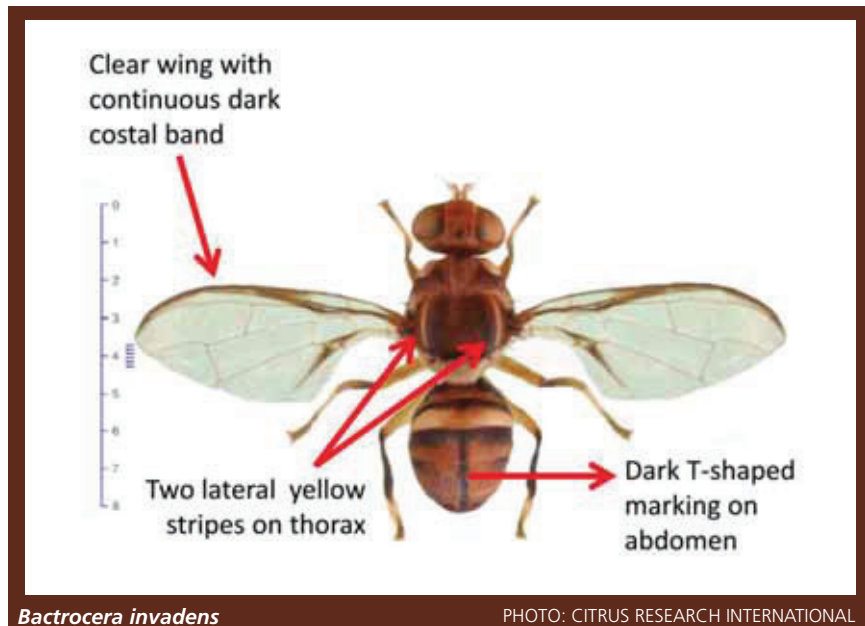
Regions which currently fall into this category: Western Cape, Eastern Cape, Northern Cape, Free State, Gauteng and KwaZulu-Natal.

In areas where *B.i.* is absent, growers should monitor and keep monitoring records.

2. Under eradication / control – *B.i.* has been detected and is under eradication or control in conjunction with the Department of Agriculture, Forestry and Fisheries (DAFF).

Regions which currently fall into this category: Most subtropical fruit production regions in Limpopo Province, Mpumalanga and Northwest, except the Vhembe District in Limpopo Province.

In areas where *B.i.* is under eradication, growers should adhere to the instructions of government quarantine orders.



Bactrocera invadens

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3. Present – *B.i.* occurs in the area and area-wide eradication is no longer viable.

The Vhembe District in Limpopo Province is currently the only area in South Africa where *B.i.* is classified as "Present". Production regions in the Vhembe district include Vivo, Waterpoort, Weiße, Musina, Louis Trichardt, Levubu / Soutpansberg and Thohoyandou.

In areas where *B.i.* is present, growers should:

- manage the pest to prevent crop losses; and
- take measures to ensure that fruit that is moved out of the area is not infested with *B.i.* in accordance with R110 of the Agricultural Pests Act.

WHEN THE REGION'S STATUS IS KNOWN, THIS IS WHAT GROWERS SHOULD DO:

1. Status: Absent

- Monitor with Methyl Eugenol and dichlorvos in bucket traps (1 trap/100 ha).
- Keep accurate trapping records, servicing traps every second week.

- Keep all suspect specimens collected in a vial and clearly label the vial with the PUC / trap number, host plant in which trap is hung and collection date.
- Report specimens trapped to the Subtrop Extensionist in the area.
- Apply measures for control of other fruit fly species present.

2. Status: Under eradication / control

- Adhere to orders issued by DAFF.
- **Increase trapping density on farms to 3-5 methyl eugenol baited traps/100 ha.**
- Carry out all other actions as described in "Status: Absent".
- Orchard sanitation.
- Aerial / ground GF 120 sprays if possible.
- Baiting in orchard with GF 120 (Protein Hydrolysate & Malathion can be used, but is not allowed for most export markets) or M3 bait-stations.
- Apply male annihilation technique (MAT) through the placement of MAT blocks at a minimum of 4 blocks/ha for at least 8 weeks.



BACTROCERA INVADENS, THE AFRICAN INVADER FLY, IS A QUARANTINE PEST OF ASIAN ORIGIN CAPABLE OF INFESTING VARIOUS COMMERCIAL FRUIT CROPS.

- If fruit is to be moved out of the quarantine area, apply for a removal permit according to instructions on order issued by DAFF.
- Eradication success needs to be verified with DAFF after a period of 8 weeks of no trap catches. DAFF will then verify that all MAT blocks are removed. Thereafter, monitoring must continue for a further 4 weeks. If, during this 4 week period, there are no further trap catches, DAFF will declare the eradication successful.

Status: Present

- Monitor with Methyl Eugenol and dichlorvos in bucket traps (2 to 4 traps/100 ha).
- Keep accurate trapping records, servicing traps every second week.
- Orchard sanitation.
- Baiting in orchard with GF 120 (Protein Hydrolysate [Hym lure] & Malathion can be used, but is not

allowed for most export markets).

- If *B.i.* is detected in bucket traps, hang out MAT blocks at rate of 4 to 8 blocks/ha. After 8 weeks, remove MAT blocks and continue monitoring. Only replace MAT blocks if you continue to catch *B.i.* in bucket traps. MAT blocks can either be nailed to poles or hung in trees.
- To move fruit out of the area where *B.i.* is classified as "Present", apply to DAFF for a removal permit. Contact persons: Mercia Rossouw, tel: 012 319 6333/6081, e-mail: MerciaR@nda.agric.za or DebraM@daff.gov.za.
- If a grower or a group of growers feel that they can keep an area of at least 5 km radius free of *B.i.*, they should contact Jan Hendrik Venter (Tel: 012 319 6384; janhendrikv@daff.gov.za) at DAFF to start a process to declare a Pest Free Place of Production.

OTHER USEFUL INFORMATION

Suppliers of monitoring traps and MAT blocks:

- Chempac (Pty) Ltd : 021 874 1055 / info@chemp.co.za
- Insect Science (Pty) Ltd: 015 307 1391 / info@insectscience.co.za
- River Bioscience (Pty) Ltd: 014 583 3464 / info@riverbioscience.co.za

Details to be supplied when reporting possible *B.i.* specimens trapped:

- PUC number.
- Trap number / orchard name or number.
- Date trap was serviced.
- GPS coordinates of the trap (if available).
- Host plants / commodity surrounding the trap.

Bactrocera invadens action plan:

South Africa's official plan for the management of *B.i.* is available on the home page of the Subtrop website: www.subtrop.net. 