



# Update on the status of *Bactrocera invadens* in South Africa

Since January 2013, specimens of *Bactrocera invadens* (*B.i.*) were detected in several areas in the northern parts of South Africa, including areas where the pest was previously eradicated in 2012. The currently affected local municipalities are Musina, Mutale, Makhado, Thulamela, Greater Giyani, Greater Letaba, Greater Tzaneen, Greater Tubatse, Maruleng, Mogalakwena, Lepelle-Nkumpi, Bushbuckridge, Mbombela, Nkomazi, Umjindi, Ramotshene Moiloa and Rustenburg.

**Aruna Manrakhan and  
Vaughan Hattingh**

CRI, ON BEHALF OF *BACTROCERA INVADENS* STEERING COMMITTEE,  
13 MARCH 2013

*Bactrocera invadens* is now considered to be present only in specified areas in South Africa which are subject to official control that may include eradication or classification of

such areas as areas of low pest prevalence. *Bactrocera invadens* is absent in other specified areas, verified by means of surveillance.

1. **For affected places of production (Production Unit Code [PUC] and/or farms) with continuous trapping records that demonstrated *B.i.* freedom prior to January 2013**, freedom from *B.i.* can be regained by eradication actions following procedures contained in the national *B.i.* action plan<sup>1</sup> (accessed at <http://www.citrusres.com/market-access>). The decision to eradicate *B.i.* to establish pest freedom in a place of production should be communicated to DAFF (contact person: Jan-Hendrik Venter – [JanHendrikV@nda.agric.za](mailto:JanHendrikV@nda.agric.za); 012 319 6384) for auditing purposes and subsequent declaration of pest status. All control actions in a place of production would be undertaken by the producer. DAFF could support control actions, should materials be available. Eradication actions, which include a combination of male annihilation treatments using methyl eugenol (ME) and protein bait treatments, should be applied for eight weeks following which male annihilation treatments should be removed and monitoring with ME baited traps continued for a period of four weeks. Protein bait treatments should, however, still continue

for host crops which are close to harvest. If no further *B.i.* flies are caught during the four weeks after the eradication treatment, *B.i.* can be declared eradicated in the place of production. During eradication actions and the four-week post treatment period, the density of ME baited traps should be increased from 1 to 3-5 per km<sup>2</sup>. Once eradication is attained, the density of ME baited traps can be decreased back to 1 per km<sup>2</sup>. It is important for growers to keep all records of trapping and pest control procedures. Verification of pest freedom would be done through official surveys by DAFF in the form of inspections. Maintenance of a pest free place of production inside an affected local municipality may require the establishment of a buffer zone surrounding the place of production. In the buffer zone, permanent *B.i.* control can be maintained through a combination of male annihilation treatment and protein bait treatments.

2. **For affected places of production (PUCs and/or farms) where eradication is not an option and *B.i.* freedom is not restored**, *B.i.* will have to be managed during the season as for other fruit fly pests, to meet current export regulations of zero tolerance of live fruit fly larvae in a consignment. The current

B.I. WILL HAVE TO BE MANAGED DURING THE SEASON AS FOR OTHER FRUIT FLY PESTS, TO MEET CURRENT EXPORT REGULATIONS OF ZERO TOLERANCE OF LIVE FRUIT FLY LARVAE IN A CONSIGNMENT.

protein bait application programme for local *Ceratitis* flies would also be applicable to *B.i.*. However, the additional use of male annihilation treatments using ME is required to effectively control *B.i.*. Monitoring for *B.i.* using ME baited traps should continue in all places of production as per the trapping guidelines<sup>2</sup> (accessed at <http://www.citrusres.com/market-access>) and national action plan<sup>1</sup> (Annexure 2). In Annexure 2 of the *B.i.* action plan, a density of 2-4 ME baited traps per km<sup>2</sup> is recommended in production areas where the pest is present, to determine pest population level. It is important for growers to keep all trapping records.

3. **For pest free areas or pest free local and district municipalities,** surveillance monitoring of *B.i.* per PUC must continue. Each PUC must have at least one ME baited trap for monitoring of *B.i.*. ME traps should be serviced every week or fortnight as per the trapping guidelines<sup>2</sup>. Male annihilation treatments using ME must not be used as a precautionary control method for the pest inside the pest free place of production, since this will decrease sensitivity of the ME-based surveillance system. In

the pest free areas, the response for survey, containment and eradication following a find of *B.i.* will follow the national Bi action plan<sup>1</sup>.

Any suspicious specimen collected during surveillance and eradication programmes in a place of production, should be placed in a closed plastic vial. The vial containing the suspicious specimen should be labelled as follows: Date of collection, PUC number, trap number and collector. This **should be reported immediately** to the relevant surveillance co-ordinator or to DAFF.

The identification of the specimen should be verified by experts nominated by the *Bactrocera invadens* Steering Committee. The results of the identification must be conveyed to DAFF.

#### References

1. Manrakhan A, Venter J-H and Hattingh V. (2012) Action plan for the control of the African Invader fruit fly, *Bactrocera invadens* Drew Tsuruta and White. Department of Agriculture, Forestry and Fisheries, Republic of South Africa Pretoria.
2. Department of Agriculture, Forestry and Fisheries. (2012) Trapping guidelines for surveillance of *Bactrocera invadens* in fruit production areas, pp. 12. <sup>ST</sup>

#### CONTACT DETAILS FOR THE CO-ORDINATORS ARE AS FOLLOWS:

- Citrus – Aruna Manrakhan  
aruna@cri.co.za, 013 759 8000
- Deciduous fruit, including grapes – Leslie Brown  
Leslie@fruitgro.co.za, 082 853 1471
- Subtropical fruit – Wilna Stones  
Wilna@subtrop.co.za, 015 307 3676
- Small and new fruit crops – Elrita Venter  
elrita@alternafruit.co.za, 082 346 2577
- All other fruit and vegetable crops – Department of Agriculture, Forestry & Fisheries – Jan-Hendrik Venter,  
JanHendrikV@nda.agric.za, 012 319 6384.



#### NEWS FROM FRUIT SOUTH AFRICA



## Fruit SA's Ethical Trading Standard (SIZA) gains momentum

**Derek Donkin**  
SUBTROP

A number of years ago, when UK retailers were each planning to start their own ethical trading audits, their plans were opposed by Fruit South Africa which insisted that there be a single standard, as growers could not afford to have a multitude of different audits from different retailers. Consequently, Fruit SA has developed a single, South African ethical trading standard known as SIZA (Sustainability Initiative ZA).

SIZA is now starting to gain momentum with membership numbers on the increase. At the time of going to press, total SIZA membership numbers stood as follows:

Producers:	240
Pack houses:	37
Exporters:	13
Importers:	1
Retailers/Industry associations:	6
Total:	297

SIZA not only reduces the cost to the grower in terms of number of audits - the actual cost of a SIZA audit is also significantly lower. Typically, a SIZA audit will cost around R8 000, whereas a retailer's audit costs around R15 000!

Visit [www.fruitsa-ethical.org.za](http://www.fruitsa-ethical.org.za) and sign up as a SIZA member. For further information, contact Fruit SA's Ethical Trading Coordinator, Colleen Chennells, e-mail: [chennell@iafrica.com](mailto:chennell@iafrica.com), Tel: 082 3763 453 <sup>ST</sup>