

# TWO SPOTTED STINK BUG

**Background** Two spotted stink bug is the dominant stink bug in South African macadamia orchards. It is a native species and occurs throughout the year, however, it is particularly prevalent during summer. It is a significant pest of macadamia, causing both early and late stink bug damage, and is present in all main growing regions in South Africa. The cost of nut damage caused by stink bugs in South Africa is estimated at 200 million ZAR per annum.

## Scientific name

*Bathycoelia  
distincta*

## Family

Pentatomidae

## Insect type

Sap sucking

**Biology** Female two spotted stink bugs deposit eggs on the nuts, leaves, branches and main stems of macadamia trees. Once the eggs have hatched and the nymphs have reached a certain developmental stage, they penetrate the macadamia nut with their stylets and feed on the sap. The adult stage can fly and may either remain in the macadamia orchard or relocate to an alternative host, such as mango, avocado, pecan, litchi, granadilla, ginger or kei apple.

**Description** The eggs are round, approx. 1.5 mm in diameter and occur in clusters of around 14. They are cream coloured and prior to hatching the eyes of the nymph become visible through the egg case. There are five nymphal stages, ranging from 2.5 mm to 9 mm in length. Young nymphs have dark blue and red spots on their abdomen, which fade as they develop. The body colour also changes from cream to light green. Adults are green with a yellow rim around their abdomen. They are approx. 18 mm long and have distinct white spots on the top corners of their scutellum.





## Symptoms

- Early and late stink bug damage
- Necrotic lesions or white feeding marks
- Premature nut drop

IRAC groups and biological control registered for stink bugs in South Africa

### IRAC groups

- 1B - Organophosphates
- 2B - Diamines
- 3A - Neonicotinoids
- 9B - Pyridine azomethine derivatives

### Microbial

Broadband

\* Rotate between IRAC groups to avoid resistance



**Life cycle** The entire life cycle takes between 49 - 70 days to complete, depending on temperature. Under laboratory-controlled conditions ( $25 \pm 2^\circ\text{C}$ ,  $20 \pm 5\%$  relative humidity, 16L:8D photoperiod) two spotted stink bug can undergo up to 8 generations per year.



## References

SAMAC. (2020). Macadamias: Information on products registered under Act 36 of 1947 for specific use in South Africa. Retrieved from <https://www.samac.org.za/wp-content/uploads/2020/06/Macadamia-Registered-Products-June-2020-1.pdf>

Schoeman, P.S. (2013). Phytophagous stink bugs (Hemiptera: Pentatomidae; Coreidae) associated with macadamia in South Africa. *Open J. Anim. Sci.* 3, 179-183.

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