



FRUIT PIERCING MOTH WARNING

by
Dr Sean Moore
CRI – Port Elizabeth

In a study currently being conducted by Rhodes University and CRI in the Eastern Cape, what are considered to be very high numbers of fruit piercing moth, *Serrodus partita*, (Fig. 1) are being caught in banana-baited traps in Satsuma orchards. This is particularly so in the Sundays River Valley. This is interpreted as **a warning of potentially even higher numbers of moths and consequent damage to Satsuma fruit.**

The piercing moth penetrates the fruit with its proboscis and sucks up the juice. This results in a clear penetration hole with an underlying dry area in the fruit tissue where the fruit juice has been removed. After a few days the damaged area turns yellow and can become infected by fungi and the fruit later drop. Severe infestations can lead to significant crop reduction. Additionally, if fruit is harvested shortly after being pierced, it will appear to be healthy and will only begin to decay during packing or transportation.

Currently, the only way in which the fruit piercing moth can be controlled is by the erection of a barrier of mercury-blended lamps on the down-wind side of the orchard, or preferably around the entire orchard. Very specific recommendations

must be followed in order to achieve meaningful results with this method. These can be found in the CRI Production Guidelines or obtained from the author of this article.

Satsuma growers are encouraged to inspect orchards each evening – ideally between 8 pm and 10 pm. Early maturing Satsumas, such as Miho Wase, are likely to be affected first. If an infestation of fruit piercing moths (NOT fruit sucking moths, such as *Achaea lienardi* (Fig. 2)) is found, growers can consider the erection of the deterrent lights. Even if this is not done, growers will at least be warned of the post-harvest decay potential for fruit from an infested orchard.

It is very important to note that no chemical option is considered to be effective for use in orchards. These moths are extremely hardy to chemical pesticides. In addition, fruit piercing moths do not remain in an orchard for more than one night. Any subsequent infestation is a result of a new wave of migrating moths.

For more details, consult CRI's Production Guidelines, available on the CRI website for members. Cutting Edge no. 83 of April 2009 can also be consulted. Any further queries or requests for more detailed technical information in regard to this article can be addressed to Dr Sean Moore, CRI: seanmoore@cri.co.za.



Figure 1. The fruit piercing moth, *Serrodes partita*. Note the diagnostic three black marks at the base of the forewing, forming a triangle.

Figuur 1. Die vrugtesteekmot, *Serrodes partita*. Let op die kenmerkende drie swart merke op die basis van die voorvlerk, in die vorm van 'n driehoek .



Figure 2. The fruit sucking moth, *Achaea lienardi*. This moth cannot damage healthy fruit, but will often feed on fruit that has already been damaged, including damage by fruit piercing moth.

Figuur 2. Die vrugtesuigmot, *Achaea lienardi*. Hierdie mot kannie gesonde vrugte beskadig nie maar sal gereeld op vrugte voed wat alreeds beskadig is, insluitend vrugtesteekmot skade.



VRUGTESTEEKMOT WAARSKUWING

deur
Dr Sean Moore
CRI – Port Elizabeth

In 'n studie wat tans deur Rhodes Universiteit en CRI in die Oos-Kaap uitgevoer word, word hoë getalle vrugtesteekmot, *Serodes partita*, (Fig. 1), tans in lokvalle met piesanglokaas in Satsuma boorde gevang. Dit is veral die geval in die Sondagsrivervallei. Hierdie word beskou as 'n **waarskuwing van moontlike hoër vangstes en dus skade vir Satsuma vrugte.**

Die vrugtesteekmot penetreer die vrug met sy monddele en suig die sap. Hierdie veroorsaak 'n duidelike penetrasie gat met 'n droë kol onder die skil waar die vrugtesap uitgesuig is. Na 'n paar dae word die beskadigde area geel en kan met swamme besmet word, wat tot vrugval lei. Hewige besmettings kan beduidende oesvermindering veroorsaak. Bykomend, as vrugte geoes word kort nadat hulle gesteek is, sal vrugte gesond voorkom en sal eers gedurende die pak of vervoer proses begin bederf.

Die enigste manier wat die vrugsteekmot tans beheer kan word, is deur die oprigting van 'n skerm kwiklampe aan die wind-af kant van die boord, of verkieslik rondom die hele boord. Spesifieke aanbevelings moet baie noukeurig gevolg word met hierdie metode om doeltreffende afwering van die motte te

kry. Dit kan in the CRI Produksie Riglyne, of van die outeur van hierdie artikel verkry word.

Satsuma produsente word aangemoedig om boorde elke aand – verkieslik tussen 8 nm en 10 nm – te ondersoek. Vroeë rypwordende Satsumas soos Miho Wase sal heel waarskynlik eerste geaffekteer word. As 'n besmetting van vrugsteekmotte (NIE vrugtesuigmotte soos *Achaea lienardi* NIE (Fig. 2)) gekry word, kan produsente die oprigting van afwerende ligte oorweeg. Selfs as dit nie gedoen word nie, moet produsente bewus wees van die na-oes bederfpotensiaal van vrugte van 'n besmette boord.

Dit is baie belangrik om kennis te neem van die feit dat geen chemiese opsie as doeltreffend of geskik vir gebruik in boorde beskou word nie. Hierdie motte is baie gehard teen chemiese insekdoders. Boonop bly vrugsteekmotte nie langer as een nag in 'n boord nie. Enige daaropvolgende besmetting is as gevolg van 'n nuwe golf van migrerende motte.

Vir meer besonderhede, raadpleeg CRI se Produksie Riglyne wat op CRI se webblad vir lede beskikbaar is. Daar word ook verwys na Snykant nr. 83 van April 2009. Enige verdere navrae of versoeke vir meer tegniese inligting in verband met hierdie skrywe kan gerig word aan Dr. Sean Moore, CRI: seanmoore@cri.co.za.