



Mealybug and South Korea

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Last season the South Korean inspector expressed great concern about the level of mealybug rejections. In response, CRI issued Cutting Edge 268 to alert growers to vigilantly control mealybug and to thoroughly inspect fruit destined for sensitive markets, to ensure that no mealybug infested fruit is presented for export to such markets. Unfortunately, on completion of the season, the inspector remained concerned about the levels of mealybug and South Africa was cautioned to correct the situation. This was strongly communicated to the industry at the Annual DALRRD Citrus coordinating meeting in Nelspruit (13 November 2019). DALRRD indicated that a PUC strike system will be implemented for mealybug interceptions to protect the programme if the problem continues.

The start of the 2020 South Korean exports was delayed because a South Korean inspector could not travel to South Africa due to the Covid-19 pandemic. DALRRD made arrangements with South Korea to be able to conduct the port inspections without the South Korean inspector, but cautioned the industry that South Korea will intensify on-arrival inspection in South Korea. DALRRD also notified that all consignments with mealybug (any species) will be rejected during port inspection. The reasons given were: 1) putting a consignment on hold in the port pending mealybug identification causes problematic logistical bottlenecks, and 2) detection of mealybug infested fruit during on-arrival inspections in South Korea will jeopardise the programme.

Regrettably, after the first week of port inspections this year, the rate of mealybug interception is again problematically high. DALRRD, PPECB, CGA, FPEF and CRI have discussed urgent actions to protect the programme. This Cutting Edge is aimed at advising on actions that growers and packhouses must take. **The future of the South Korean programme is in jeopardy, unless growers and packhouses dramatically reduce the incidence of mealybug infested fruit being presented for port inspection in the South Korean export programme.**

Growers should do the following:

- Be very selective about the orchards they present for South Korea. **No orchards with any notable mealybug infestation**

at the time of harvest must be included in the programme.

- This must be determined by **regular scouting** in orchards, as prescribed in the CRI IPM guidelines for mealybug (www.citrusres.com) and as reminded in Cutting Edge 268.
- A late season corrective spray must be applied if necessary, bearing in mind that this is not a panacea i.e. sprays at this time cannot be expected to be more than about 60% effective.
- **Within the last two weeks before harvest an orchard inspection for mealybug infestation should be conducted.** This should be conducted as per normal scouting but due to the critical importance of this inspection, fruit should be removed from the tree, the **calyx must be lifted or removed from the fruit** (inspecting both on the underside of the calyx and on the fruit) and a magnifying glass must be used.

Packhouses should do the following:

- **On first delivery of fruit from an orchard to the packhouse, inspect a sample of 100 fruit** for mealybug. Inspection should also be conducted under the calyx of the fruit and a magnifying glass must be used. If the fruit are Navel oranges, inspection must also be conducted inside the navel-end if there is any sign of residues or sooty mould on the fruit. This must be done by slicing the navel-end open, piece by piece.
- **Online graders and sorters must be alerted and trained to look specifically for mealybug infested fruit**, including any signs of sooty mould, on the packing line and to diligently remove any fruit suspected of being infested. Graders and sorters must immediately report excessive findings.

PPECB will ensure that their packhouse inspections are strictly conducted with a zero tolerance for mealybug.

If there is not rapid and dramatic improvement in our performance in this programme, there is a risk that a strike system on PUCs may be imposed by DALRRD and there is a possibility that the South



Korean authorities could even suspend the programme.

For any further queries contact Dr Sean Moore (seanmoore@cri.co.za).



Witluis en Suid-Korea

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Verlede seisoen het die Suid-Koreaanse inspekteur ernstige kommer oor die vlak van witluis-afkeurings uitgespreek. In reaksie hierop het CRI Snykant 268 uitgereik om produsente te waarsku om witluis doelgerig te beheer en om vrugte wat vir sensitiewe markte bestem is, deeglik te inspekteer om te verseker dat geen witluis besmette vrugte vir uitvoer na hierdie markte aangebied word nie. Ongelukkig was die inspekteur na afloop van die seisoen steeds bekommerd oor die hoeveelheid witluis, en Suid-Afrika is gewaarsku om die situasie reg te stel. Dit is duidelik aan die bedryf tydens die jaarlikse DALRRD Sitrus koördineringsvergadering in Nelspruit (13 November 2019), gekommunikeer. DALRRD het aangedui dat 'n PUC-“strike” stelsel vir witluis-onderskeppings geïmplementeer sal word, ten einde die program te beskerm, sou die probleem voortduur.

Die aanvang van die 2020-uitvoere na Suid-Korea is vertraag omdat 'n inspekteur van Suid-Korea nie weens die Covid-19 pandemie na Suid-Afrika kon reis nie. DALRRD het met Suid-Korea reëlings getref sodat die hawe-inspeksies sonder die Suid-Koreaanse inspekteur uitgevoer kan word, maar het die bedryf gewaarsku dat Suid-Korea die inspeksies met aankoms in Suid-Korea sal verskerp. DALRRD het ook kennis gegee dat alle besendings met witluis (enige spesie) tydens die hawe-inspeksie afgekeur sal word. Die redes hiervoor is: 1) 'n besending wat op “hold” in die hawe geplaas word hangende 'n witluis-identifikasie veroorsaak problematiese logistieke knelpunte, en 2) die opsporing van witluis besmette vrugte tydens die aankoms-inspeksies in Suid-Korea, kan die program in gevaar stel.

Ongelukkig, na die eerste week van inspeksies in die hawe hierdie jaar, is die tempo van witluis-onderskeppings weer problematies hoog. DALRRD, PPECB, CGA, FPEF en CRI het dringende aksies bespreek om die program te beskerm. Hierdie Snykant is daarop gemik om advies te gee oor die aksies wat produsente en pakhuis moet neem. **Die toekoms van die Suid-Koreaanse program is in gedrang, tensy produsente en pakhuis die voorkoms van witluis besmette vrugte wat vir hawe-inspeksies vir die Suid-Koreaanse uitvoerprogram aangebied word, drasties verminder.**

Produsente moet die volgende doen:

- Wees baie selektief oor die boorde wat hulle vir Suid-Korea aanbied. **Geen boorde met enige sigbare witluis besmetting ten tye van die oes mag by die program ingesluit word nie.**
- Dit moet bepaal word deur **gereelde “scouting”** in boorde, soos in die CRI IPM-riglyne vir witluis (www.citrusres.com) voorgeskryf en soos deur Snykant 268 uitgelig.
- 'n Laat-seisoen korrektiewe bespuiting moet toegedien word, indien nodig, met inagneming dat dit nie 'n wondermiddel is nie, dit wil sê dat daar nie op hierdie tydstip verwag kan word om meer as 60% doeltreffend te wees nie.
- **Binne die laaste twee weke voor oes moet 'n boord inspeksie vir witluis besmetting gedoen word.** Dit moet soos normale “scouting” gedoen word, maar as gevolg van die kritieke belang van hierdie inspeksie, moet vrugte van die boom gepluk word, **die kelk moet opgelig of van die vrugte verwyder word** (inspekteer beide aan die onderkant van die kelk en op die vrug) en 'n vergrootglas moet gebruik word.

Pakhuis moet die volgende doen:

- **Met die eerste lewering van vrugte van 'n boord aan die pakhuis, inspekteer 'n monster van 100 vrugte vir witluis.** Inspeksie moet ook onder die kelk van die vrug gedoen word en 'n vergrootglas moet gebruik word. As die vrugte nawels is, moet die inspeksie ook binne die nawel-end gedoen word as daar enige teken van oorblyfsels of roetskimmel op die vrug is. Dit moet gedoen word deur die nawel-end oop te sny.
- **Paklynggradeerders en sorteerders moet attent gemaak word en opgelei word om spesifiek vir witluis besmette vrugte,** insluitend enige tekens van roetskimmel op die paklyn te kyk, en nougeset enige vrug wat vermoedelik besmet kan wees, te verwyder. Gradeerders en sorteerders moet onmiddellik rapporteer as daar baie besmette vrugte gevind word.



PPECB sal toesien dat hul pakhuis-inspeksies streng uitgevoer word, met 'n nul-toleransie vir witluis.

As daar nie 'n vinnige en drastiese verbetering in ons prestasie in hierdie program is nie, bestaan die risiko dat DALRRD 'n “strike” stelsel teen PUC's gaan instel, en die moontlikheid dat die Suid-Koreaanse owerhede die program selfs kan opskort.

Vir enige verdere navrae, kontak vir Dr Sean Moore (seanmoore@cri.co.za).