



Alert: Important Citrus Black Spot Control Principles for orchards potentially exposed to early rain-related CBS infection risk prior to commencing with fruit protection sprays

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The Citrus Black Spot Risk Management System (CBS-RMS) for export of citrus (excluding Tahiti limes) to the European Union (EU) has been implemented to comply with the European Union's phytosanitary measures. One of the requirements is that fruit destined for the EU must be protected from CBS infection from the onset of the fruit infection period until the end of the fruit susceptibility period. Fruit protection is therefore recommended from mid-October for all citrus types (excluding Tahiti limes). The start of the required fruit protection period may be earlier in a particular year when rainfall, that results in >12 hours fruit or leaf wetness after 80% petal fall, occurs.

The ongoing CBS interceptions in the EU are a serious concern for the industry and places the industry's continued access to this critical market at risk. At the Department of Agriculture, Land Reform and Rural Development's (DALRRD) Annual Citrus Export Co-ordinating meeting held in Port Elizabeth on 12 November 2020, DALRRD emphasized the importance of ensuring full and effective implementation of the CBS-RMS to avoid serious consequences. Concerns were raised about reports of early October rain in some of the production areas and that the first sprays might not have been applied before the first CBS infection periods. DALRRD indicated that during the orchard verification process, special attention will be given to the application of the chemical control program to ensure protection of fruit from CBS infections.

In the event of an orchard potentially having been exposed to early rain-related CBS infection risk, prior to commencing with the fruit protection sprays, there are the following options of risk mitigation:

1. In CRI's Cutting Edge (No 304) it was indicated that the two systems recognized by the DALRRD to determine the risk associated with CBS, in cases where there are timing gaps in the spray programme, are CRI-PhytRisk and CBS ascospore

trapping data (QMS and Laeveld-Agrochem). The same applies to situations where there was possibly early rain-related CBS infection risk, prior to the start of fruit protection sprays.

2. Fungicides with a curative (kick-back) action could have been applied within 3 to 28 days after the CBS infection period, depending on the curative action of the specific systemic fungicide used. In cases where Benzimidazoles (benomyl, carbendazim) were applied in response to such rain-related early infection risk situations, evidence of benzimidazole susceptibility will be required by DALRRD when evaluating the spray programme. This means that the result of a benzimidazole resistance laboratory test is required for the PUC. This is in line with the Cutting Edge (No 304) recommendation that resistance to this fungicide group should be monitored regularly. Ideally the benzimidazole resistance tests should pre-date this season, but in-season testing is still possible at the CRI Diagnostic Centre (DC) in Nelspruit, if CBS symptomatic fruit is available for testing.
3. If the orchard was exposed to such early rain-related CBS infection risk and risk mitigation options (1) or (2) could not be met, the orchard should be withdrawn from registration for export to the EU, to protect the producer and the broader industry from the risk of CBS interceptions.

Additional important principles to keep in mind regarding chemical fruit protection are:

1. Keep to the registered spray interval as given on the label of the fungicide product.
2. When applying systemic fungicides (Benzimidazoles and strobilurins) apply only with oil or other adjuvant as indicated on the product label.
3. For fungicide resistance management, apply systemic fungicides with a chemically unrelated fungicide (e.g. copper fungicides or mancozeb) as indicated on the product label.
4. Spray equipment must be calibrated to ensure proper coverage of fruit and leaves (medium cover spray).

This Cutting Edge is aimed at assisting the industry to effectively mitigate the risk of CBS interceptions and avoid putting the entire industry at risk.



Waarskuwing: Belangrike Sitrus Swartvlek (SSV) Beheerbeginsels vir boorde wat moontlik aan vroeë reën- verwante SSV-infeksie-risiko blootgestel was voor die begin van vrugbeskermingsbespuitings

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Die Sitrus Swartvlek risikobestuurstelsel (CBS-RMS) vir die uitvoer van sitrus (uitgesluit Tahiti-lemmetjies) na die Europese Unie (EU), is geïmplementeer om aan die fitosanitêre vereistes van die EU te voldoen. Een van die vereistes is dat vrugte wat vir die EU bestem is, teen SSV-infeksies beskerm moet word, vanaf die aanvang van die vrugbesmettingsperiode tot aan die einde van die vrugvatbaarheidsperiode. Beskerming van vrugte word dus vanaf middel Oktober vir alle sitrustipes (uitgesluit Tahiti-lemmetjies) aanbeveel. Die begin van die vereiste vrugbeskermingsperiode kan vroeër in 'n spesifieke jaar wees wanneer reënval, wat tot > 12 uur van vrug-of blaarnatheid na 80% blomblaarval kan lei, voorkom.

Die voortdurende SSV-onderskeppings in die EU is 'n ernstige bron van kommer vir die bedryf en plaas die bedryf se voortgesette toegang tot hierdie belangrike mark in gevaar. Tydens die Departement van Landbou, Grondhervorming en Landelike Ontwikkeling (DALRRD) se jaarlikse Sitrus Uitvoerkoördineringsvergadering wat op 12 November 2020 in Port Elizabeth gehou is, het DALRRD die belang beklemtoon om die volledige en effektiewe implementering van die CBS-RMS te verseker om ernstige gevolge te voorkom. Kommer is uitgespreek oor berigte van vroeë Oktober-reën in sommige produksiegebiede en dat die eerste bespuitings moontlik nie voor die eerste SSV-infeksieperiodes toegedien is nie. DALRRD het aangedui dat daar tydens die boordverifikasieproses spesiale aandag gegee sal word aan die toepassing van die chemiese beheerprogram om die beskerming van vrugte teen SSV-infeksies te verseker.

In die geval van 'n boord wat moontlik aan vroeë reën-
verwante SSV-infeksie-risiko blootgestel was voordat daar met die vrugbeskermingsbespuitings begin kon word, is daar die volgende opsies om risiko te bestuur:

1. In CRI Snykant (No 304) word die twee stelsels gelys wat deur DALRRD erken

word om die risiko verbonde aan SSV te bepaal, in gevalle waar daar gapings in die spuitprogram is, naamlik CRI-PhytRisk en SSV-askospoorlokvaldata (QMS en Laeveld-Agrochem). Dieselfde geld vir situasies waar daar moontlik vroeë reën-
verwante SSV-infeksie-risiko was voor die aanvang van vrugbeskermingsbespuitings.

2. Swamdoders met 'n kuratiewe (kick-back) werking kon ook binne 3 tot 28 dae na die SSV-infeksieperiode toegedien word, afhangende van die kuratiewe werking van die spesifieke sistemiese swamdoder wat gebruik is. In gevalle waar Benzimidazole (benomyl, karbendasim) in reaksie op sulke reën-
verwante situasies met vroeë infeksie-risiko's, toegedien was, sal DALRRD bewyse van vatbaarheid vir benzimidazole benodig tydens die evaluering van die spuitprogram. Dit beteken dat die resultaat van 'n benzimidazole-weerstand laboratoriumtoets vir die PUC benodig word. Dit is in lyn met die aanbeveling van Snykant (Nr. 304) dat die weerstand teen hierdie groep swamdoders gereeld gemonitor moet word. Ideaal gesproke moet die weerstandstoets teen benzimidazole voor hierdie seisoen gedoen gewees het, maar in-seisoen toets is steeds by die CRI Diagnostiese Sentrum (DC) in Nelspruit beskikbaar, indien SSV simptomiese vrugte beskikbaar is om te toets.
3. Indien die boord aan sulke vroeë reën-
verwante SSV-infeksie-risiko's blootgestel was en **daar nie aan risiko-
bestuursopsies (1) of (2) voldoen kan word nie, moet die boord van registrasie vir uitvoer na die EU onttrek word**, ten einde die produsent en die breër bedryf teen die risiko van SSV-onderskeppings te beskerm.

Ander belangrike beginsels wat in ag geneem moet word rakende die chemiese beskerming van vrugte, is:

1. Hou by die geregistreerde spuit-interval soos op die etiket van die swamdoder aangedui.
2. Wanneer sistemiese swamdoders (benzimidazole en strobilurine) toegedien word, dien slegs met olie of ander byvoegmiddel soos op die produk-etiket aangedui, toe.

JOU HEFFING WERK VIR JOU – PRODUSENTE SE HEFFINGS WORD AANGEWEND OM DIE AKTIWITEITE VAN DIE CRI TE BEFONDS



3. Vir die bestuur van swamdoderweerstand, dien sistemiese swamdoders met 'n chemies nie-verwante swamdoder toe (bv. Koper swamdoders of mankoseb), soos op die produk-etiket aangedui.
4. Spuittoerusting moet gekalibreer word om goeie bedekking van vrugte en blare te verseker (medium dekbepuiting).

Hierdie Snykant is daarop gemik om die bedryf te help om die risiko van SSV-onderskeppings effektief te bestuur en om te verhoed dat die hele bedryf in gevaar gestel word.