Cutting Edge
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A team effort is needed for the control of citrus black spot in the Eastern Cape

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There was once again a significant increase in the number of orchards infected with citrus black spot (CBS) the past season. The disease has now spread to all parts of the Sundays River Valley (SRV), with the majority of producers delivering fruit to SRCC having at least one CBS interception. While CBS has been prevalent in lemons and Valencia types in the Eastern Cape, and mostly confined to the lower Sundays River Valley (Addo side), this season has seen a spread of CBS to the upper valley (Kirkwood side) and a dramatic increase in infected Navel orchards. Similar reports were also received from rejections in the Gamtoos river valley. This increase can largely be attributed to favourable weather conditions for CBS as well as insufficient control measures, especially with certain cultivars or orchards receiving no preventive fungicide treatments. CBS management in the Eastern Cape will have to improve to prevent a repeat of this season's CBS-rejections, to ensure sustained citrus supply to CBS sensitive markets and importantly not to jeopardise future market access to these markets.

Control options for 2008/9 season

CRI has been using volumetric spore traps in the northern regions since 1970 to determine the exact timing of CBS ascospore releases with good results. Not only do spore traps help to determine the onset of the first releases, but also the intensity and duration of the ascospore releases as well. A volumetric spore trap has been installed in the Addo region for the coming season to determine the necessity for late season CBS sprays and the exact timing of the first ascospore release in the SRV. Growers will be informed as soon as the onset of the first spore releases has taken place.

With CRI's intiative, benomyl (Benlate) and its breakdown product, carbendazim, have once again been approved for use on citrus in South Africa. This is very good news as it is an excellent product and is also relatively inexpensive. The withholding period for Benomyl has, however, been increased to 120 days on oranges and 90 days on all other cultivars (it used to be 14 days). This will not have any major impact on growers in the SRV as the timing of its application will be during early to mid summer.

Growers are advised to take the following aspects into consideration when designing spray programmes for control of CBS:

1. All citrus cultivars destined for export to CBS-sensitive markets must be protected.
2. Fruit should be protected from mid-October for at least 90 days after petal fall.
3. Sprays should be applied at medium cover to ensure adequate deposition of fungicides on fruit and leaves in order to prevent CBS infection of fruit and also to manage the CBS epidemic.
4. When applied alone, contact fungicides should be applied at 4-week intervals, whereas systemic compounds (benzimidazoles or strobilurins) in registered combination with contact fungicides can be applied at 6-week intervals.
   a. Registered contact fungicides = mancozeb (200 g), copper oxychloride (200 g) or copper hydroxide (200 g (WP) / 350 ml (SC)) as well as the same fungicides at reduced rates (100 g) with 100 ml Sporekill
   b. Registered systemic fungicides = various benzimidazoles and strobilurin compounds
   c. For more information about all registered products earmarked for spraying, refer to the label. Use fungicides as per label recommendations to ensure adequate protection as well as prevent fungicide resistance build-up. However, remember that any pre-harvest interval on the label refers to fruit sold in South Africa.
5. For details of products and timing in SRV, refer to SRCC circular no. 12/2008.

Fungicide resistance

Even though CBS has not developed resistance towards the benzimidazoles in the Eastern Cape citrus production areas, there is always a possibility that fungicide resistance can develop due to the frequent use of benzimidazoles and strobilurins. If growers do detect any CBS lesions on the fruit next year, samples should immediately be taken and couriered to CRI's Diagnostic Centre for fungicide resistance tests.

Snykant

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'n Spanpoging is nodig vir die beheer van sitrusswartvlek in die Oos-Kaap

deur

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Daar was weereens 'n betekenisvolle toename in die aantal boorde wat geinfekteer was met sitrusswartvlek (SSV) die afgelope seisoen. Die siekte het versprei na al die gebiede in die Sondagsriviervallei en die meerderheid van die produsente wat vrugte aan die SRSK lewer het elk ten minste een onderskepping gehad weens SSV. Alhoewel die siekte vroeër meestal in die suurlemoen en Valencia tipes in veral die laer Sondagsriviervallei (Addo area) voorgekom het, het die siekte die afgelope seisoen ook versprei na die hoër liggende gebiede in die vallei (Kirkwood area) en veral onder die Nawel boorde is 'n dramatiese toename in die siekte waargeneem. Soortgelyke afkeurings is ook ontvang van boorde in die Gamtoos riviervallei. Dié toename kan grootliks toeskryf word aan die gunstige weerstoestande vir SSV asook onvoldoende beheermaatreëls veral met sekere kultivars of boorde wat geen voorkomende behandelings ontvang het nie. SSV bestuur in die Oos-Kaap moet verbeter word om soortgelyke afkeurings vir die komende seisoen te verhoed, om sodoende die volhoubare lewering van sitrus aan SSV sensitiewe markte te verseker en ook om nie die marktoegang aan die markte te beïnvloed nie.

Beheeropsies vir die 2008/9 seisoen

CRI maak gebruik van volumetriese spoorvangers sedert 1970 om die presiese tyd wanneer askospoorvrystelling plaasgevind het, te bepaal met goeie resultate. Nie net help spoorvangers om die eerste askospoorvrystellings te bepaal nie, maar ook die intensiteit en durasie te bepaal. 'n Volumetriese spoorvanger is in die Addo area geïnstalleer dié seisoen om die noodsaaklikheid van laat SSV behandelings asook om die aanvang van die eerste askospoorvrystelling te bepaal. Kwekers sal in kennis gestel sodra die eerste spoorvrystelling plaasgevind het.

Met CRI se inisiatief, is benomil (Benlate) en sy afbraakproduk, carbendazim, weereens goedgekeur vir die gebruik op sitrus in Suid-Afrika. Dit is goeie nuus omrede dit 'n uitstekende produk is en is ook relatief goedkoop. Die weerhoudingsperiode vir carbendazim is verhoog tot 120 dae op lemoene en 90 dae vir al die ander kultivars (dit was voorheen 14 dae). Dit sal geen impak hê op kwekers in die SRV nie, omrede die toediening gedurende die vroeë mid-somer sal geskied.

Kwekers word daarop gemaan om die volgende aspekte in berekening te bring wanneer spuitprogramme vir die beheer van SSV beplan word:

1. Alle sitrus kultivars wat bestem is vir uitvoere na SSV sensitiewe markte moet behandel word.
2. Vrugte moet beskerm word van mid-Oktober vir ten minste 90 dae na blomblaarval.
3. Bespuitings moet toegedien word as mediumdekbespuitings om voldoende bedekking van swamdoders op die vrugte en blare te verseker met die oog op goeie SSV beheer op die vrugte en ook om die epidemie te bestuur.
4. Wanneer kontakdoders alleen toegedien word, moet die 4-week spuitintervalle gehandhaaf word, terwyl sistemiese swamdoders (bensimidazole en strobilurine) in geregistreerde kombinasies met kontakswamdoders met 6 week intervalle toegedien word.
   a. Geregistreerde swamdoders = mancozeb (200 g), koperoksichloried (200 g) of koperhidroksied (200 g (BP)/350 ml (SK)) asook dieselfde swamdoders teen geregistreerde dosisse (100 g) met 100 ml Sporekill.
   b. Geregistreerde sistemiese swamdoders = verskeie bensimidazole en strobilurines.
   c. Vir meer informasie aangaande die geregistreerde produkte wat geoormerk is vir bespuiting, bestudeer die etikette. Gebruik swamdoders soos voorgestel word op die etikette om voldoende beskerming asook die opbou van swamdoder weerstand te verhoed. Onthou dat enige vooroes interval op die etiket verwys na vrugte wat verkoop is in Suid Afrika.
5. Vir meer detail oor produkte en tye van toediening, sien SRSK se omsendbrief no. 12/2008.

Swamdoderweerstand

Alhoewel SSV nog nie weerstand ontwikkel het teen die bensimidazole in die Oos-Kaap nie, is daar altyd die moontlikheid dat dit wel kan gebeur a.g.v. die voordurende gebruik van

beide bensimidazole en strobilurines. Indien kwekers vermoed dat SSV ontwikkel het weens weerstandsontwikkeling, moet vrugmonsters onmiddellik na CRI se diagnostiese sentrum gestuur word vir weerstandstoetse.