

SOUR ROT CONTROL

CATHERINE SAVAGE



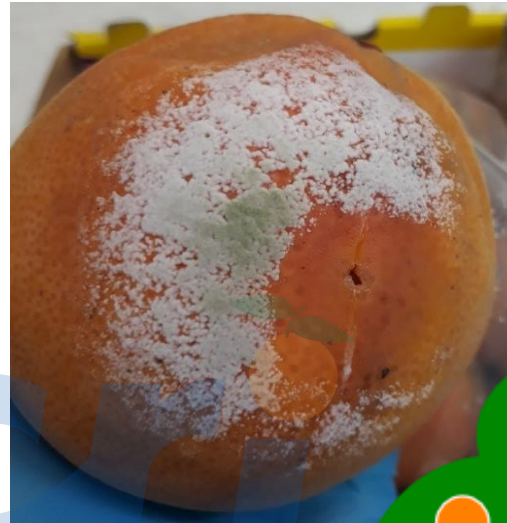
COVID = NO PACKHOUSE VISITS

- 2021 packhouse visits – please drop me an email or WhatsApp/Telegram
 - 072 327 0058
 - catherine@cri.co.za



SOUR ROT

- *Geotrichum citri-aurantii*
- LIKES:
 - Warm temperatures
 - Wet conditions
 - High humidity
 - Darkness (lives in the soil)
 - Other pathogens
 - Wounded fruit



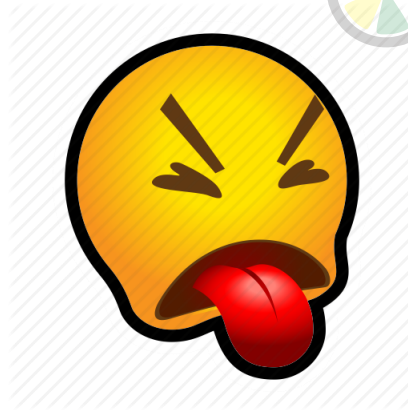
AT RISK FRUIT --->

SOUR ROT --->

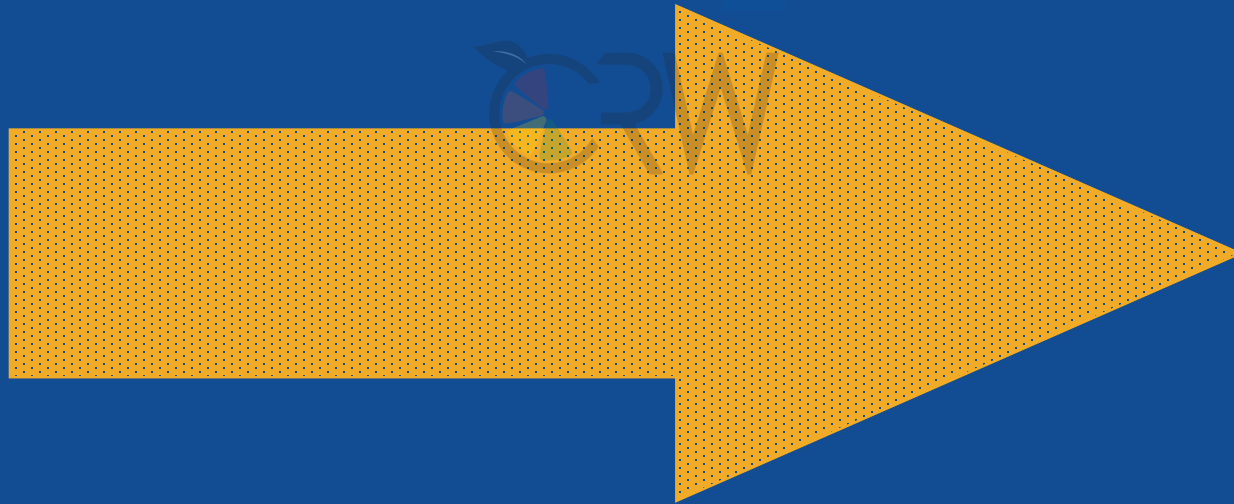


WHY WE HATE SOUR ROT

- Already bad situation... it's been raining, there is a wound or insect damage or creasing... and then... SOUR ROT HAPPENS!
- It's yucky
- The whole fruit is mushy
- It smells



POLL QUESTION?
IS SOUR ROT A MAIN DECAY
CONCERN FOR YOU?



HOW TO CONTROL SOUR ROT

- FUNGICIDE CONTROL
- THE ROLE OF WATER SANITISERS
- CULTURAL/PHYSICAL PRACTICES



GUAZATINE



- An incredibly powerful fungicide against sour rot
- Used in the drench, bath/flooder or wax (pre-formulated waxes ONLY)
- Since EU effectively banned the use of guazatine (MRL = 0,05 mg/kg), we have struggled with alternative control methods

PROPICONAZOLE



- Brought out to “replace” guazatine but not as strong and needs to be applied sooner than guazatine to be effective
- Risk of cross –resistance for imazalil
- Can be used in the drench and bath/flooders
- WHAT’S HAPPENING WITH THE EU MRL?
- HOW WILL WE CLEAN THE RESIDUE OFF THE LINE?

PROPICONAZOLE – EU MRL



- The decision has been taken to stop propiconazole in the EU
- The final dates will be communicated soon after which we will have a grace period of 180 days (6 months) for fruit containing propiconazole to be sold
 - After that date NO PROPICONAZOLE RESIDUE WILL BE TOLERATED
 - If you use PPZ in the beginning of the season, be very sure that all fruit treated will be sold by the cut-off date – beware of Covid delays!!

PROPICONAZOLE – EU MRL



- TO BE SAFE, it is best to AVOID PROPICONAZOLE in the packhouse from this season on – the latest you can risk it is April
- Only use propiconazole if you are 100% SURE you will be able to clean the residues or will be packing for a different market
- Information will be distributed as it becomes available
- We'll see what will be the of influence Brexit



MARKET MRLs

- PAUL HARMAN
 - 082 880 7933
 - ph@cga.co.za

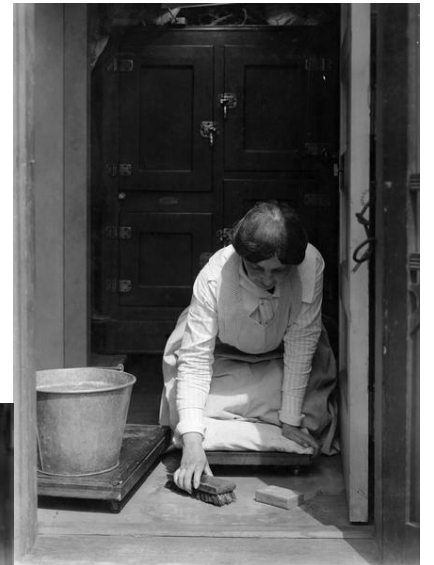


- REMEMBER:
Always comply to the **South African** MRL when it is lower!

Chemical	RSA	General export tolerance	Codex	Canada	USA	Japan	Korea
Guazatine	5.0	0.05	5.0	0.1	None	None	5.0
Propiconazole	6.0	9.0 (0.1)	10.0, 4.0 ¹⁹	8.0	8.0	8.0	8.0

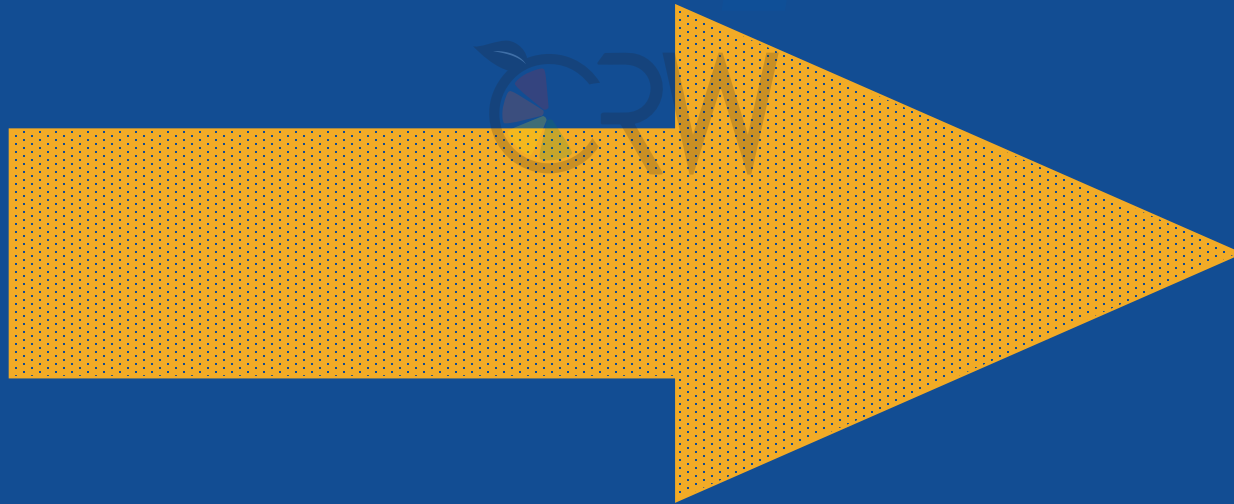
PROPICONAZOLE – CLEANING THE LINE

- If you have used propiconazole on your line and you want to export to the EU in 2021, you will need to:
 - Change any contaminated brushes
 - Clean and SCRUB the line with oxidising agents. There are commercial residue stripping products available.
 - Send the fruit over the line for residue analysis before exporting



POLL QUESTION?

WILL YOU USE PROPICONAZOLE IN 2021?



SANITISERS

- Sanitisers play an important role in removing spores present on the surface of the fruit and in the drench/wash water
 - USE THEM! It helps prevent new infections!



SANITISERS

SANITATION!!!

play an important role in
on the surface of the fruit

- USE THEM! It helps prevent

removing spores present
wash/wash water

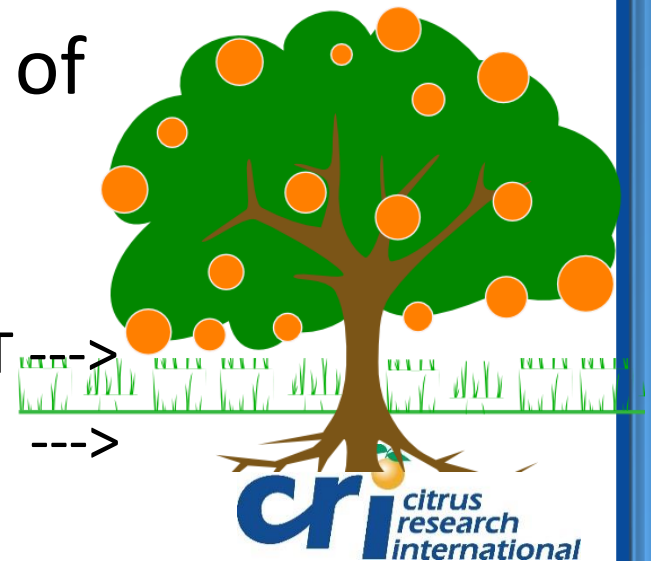
**SANITISE BEFORE
ENTERING THE SHOP
PACKHOUSE!!!**



CULTURAL & PHYSICAL CONTROL

- The spores ARE in the soil, you can't get rid of sour rot, you can only lower the chance of your fruit rotting
- ORCHARD SANITATION – take away the source of new spores
- SKIRTING – prevent low hanging fruit getting infected from the soil

AT RISK FRUIT
SOUR ROT



CULTURAL & PHYSICAL CONTROL

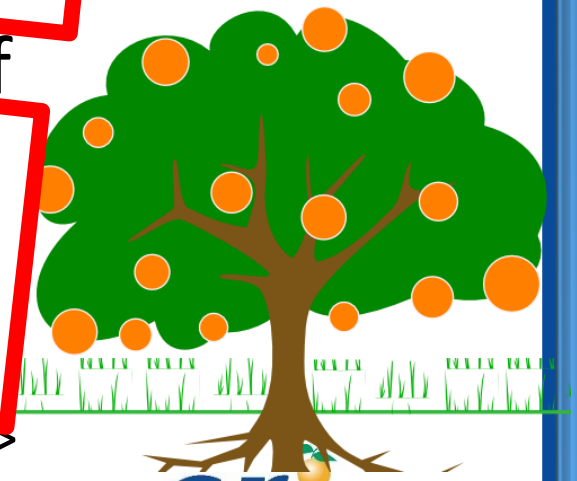
- **SOCIAL DISTANCING!!!**
If you can't get rid of the source, you can only lower the chance of your fruit rotting

ISOLATION!!!

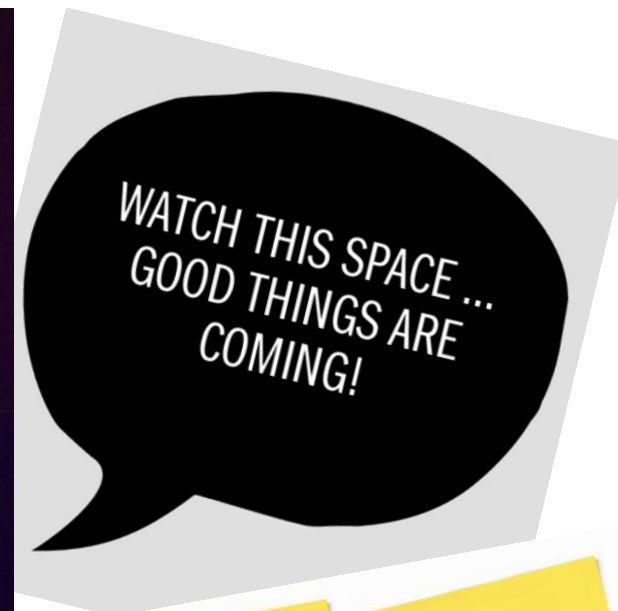
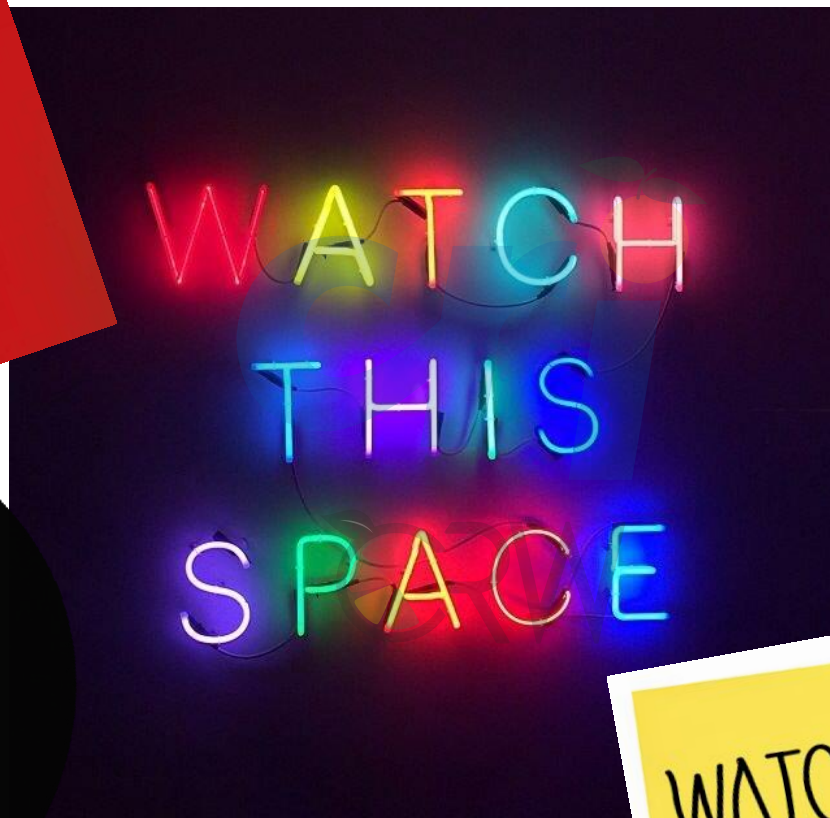
- ORCHARDS: prevent the source of new spots
- SKIRTING: prevent the source of infected from the soil

PREVENT THE SPREAD OF COVID SOUR ROT!!!

SOUR ROT

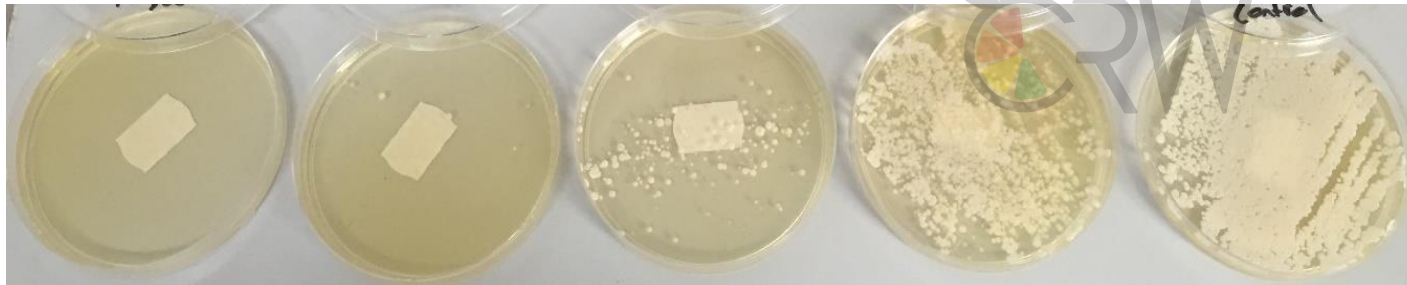


THE FUTURE



THE FUTURE – UV LIGHT

- NO RESIDUES! Very effective against sour rot spores! Shows promise for infected fruit!
- Already working on other crops in other industries, final CRI testing on citrus fruit soon.



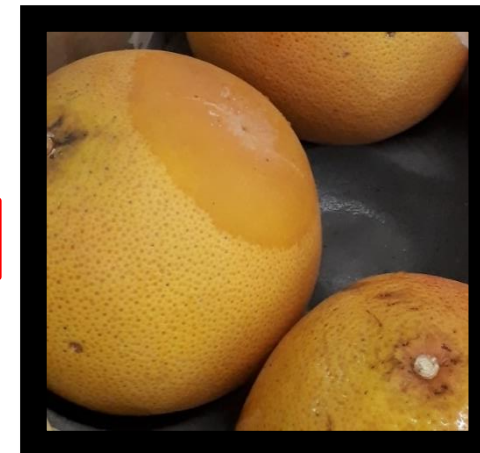
THE FUTURE – PLANT BASED ACTIVES

- NO RESIDUES!
- Shown great promise and works well
 - Act 5 registration now in place
 - Act 36 registration underway
- Some plant based products already available
e.g. clove oil



WHAT YOU NEED TO DO

- Export to markets that allow guazatine and/or propiconazole
 - Don't treat EU destined fruit with propiconazole after April at the latest
- Follow Covid rules for your fruit
 - Wash your fruit in sanitised water to remove sour rot spores **SANITATION!!!**
 - Never compromise on orchard sanitation and skirting **SOCIAL DISTANCING!!!** **ISOLATION!!!**
- Hang in there!



THANK
YOU

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STAY SAFE
& SANITISE

