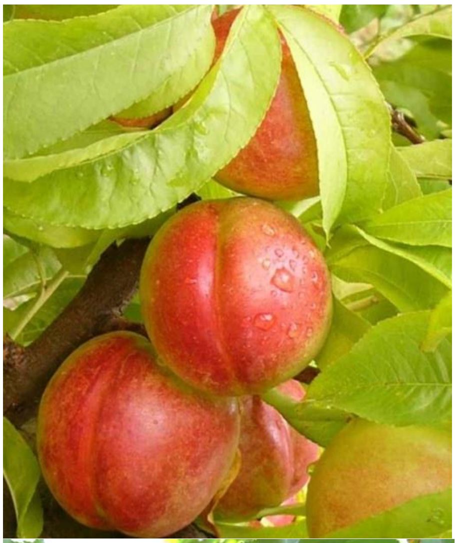
Best Practices for Brown Rot Management – Booklet

Oscar Villalta, Robert Holmes and Simone Kreidl
Biosciences Research, Department of Economic Development, Jobs, Transport and Resources



KEY POINTS

The key management practices for minimising the risk of Monilinia infection and improving brown rot control in fresh market stone fruit production include:

- **removing rotten/mummified fruit and cankered and dead twigs to reduce the over-wintering of inoculum,**
- **monitoring infection periods (IPs) to optimise the timing of pre and post-infection fungicide sprays,**
- **spraying based on the risk of infection from over-wintered inoculum, weather (IPs) and crop susceptibility, and**
- **determining Monilinia latent infection pre-harvest to predict and improve post-harvest brown rot management**

INTRODUCTION

Research funded by Horticulture Innovation Australia Limited, using the summerfruit industry levy and funds from the Australian government, and the state government of Victoria (**projects MT08039 and SF12004**) developed and validated two disease predictive systems as practical management tools to help industry improve brown rot management. The first tool is a weather-based model for monitoring *M. fructicola* infection periods to improve decision making on fungicide use. The second is a pre-harvest assessment method for predicting the risk of Monilinia latent infection in harvested fruit to improve management of post-harvest brown rot.

Trials in commercial orchards (2010-2015) provided a platform for:
1) testing and validating the disease predictive tools,
2) using the tools to assess risk-based spray programs, and
3) identifying factors that drive disease development in different production systems.
Results from this research have been used to develop an improved spray strategy and best practice recommendations for brown rot blossom blight and fruit rot control in Australian fresh market stone fruit production.

This booklet describes the predictive tools, spray strategy and best practices.

KNOW THE DISEASE CYCLE

Causal agent

Two species of *Monilinia* cause blossom blight and fruit rot in Australia; *M. fructicola* and *M. laxa*. *M. fructicola* is the more common and widespread cause of all phases of the disease in Australian fresh market and canning stone fruit.

Overwintering

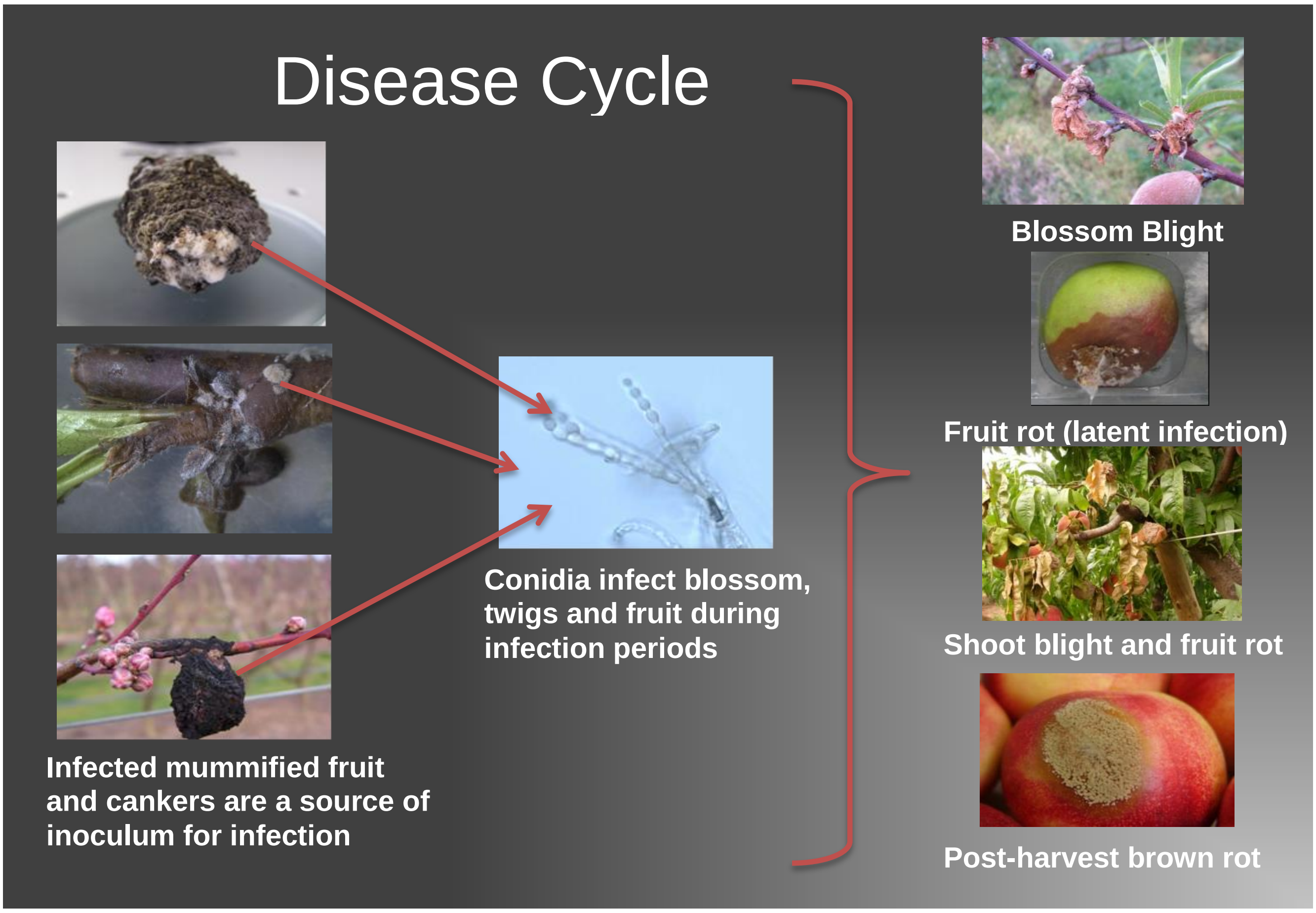
The fungus overwinters in mummified fruit on the ground or in the tree, and in twig cankers **(Insert 1).** The sexual stage (apothecia) of *M. fructicola* has been observed only once in Australia (Victoria), several decades ago. The primary inoculum for infections in spring and summer is therefore considered to be mainly conidia produced by infected mummified fruit and cankers. The disease is more difficult to control in late season crops in temperate regions due to the slow decomposition of mummified fruit and in sub-tropical regions due to warm humid weather conditions.

Spring infection

Conidia infect flowers and young shoots when climatic conditions are suitable for spore release from inoculum sources and for infection of susceptible tissue. A moisture film is required for spore germination and infection. Blossom blight is more severe when warm and wet conditions occur during flowering but is also possible under cooler conditions. Twig blight and shoot blight can occur under high inoculum pressure and prolonged wet conditions during warm weather.

Secondary infection

Conidia produced on blighted blossoms can be a source of secondary inoculum for infection of immature and ripe fruit. In orchards in south eastern Australia, conidia produced in infected mummified fruit are considered the main source of spores for fruit infection. Once the fruit begins to ripen and change colour, it becomes more susceptible. Infected ripe fruit produce masses of spores which spread by wind and rain to infect healthy fruit in the pre-harvest period. Insects (e.g. *Carpophilus* beetle) also contribute to the spread of spores. Dormant (latent) infections on green fruit will resume the infection process only when fruit is maturing or detached from trees. Ripe harvested fruit with latent infection will develop rots in storage and market. Fruit injuries increase the susceptibility to brown rot. If an infected fruit is left on the tree it will dry out and carry the infection over the winter.



An understanding of brown rot disease cycle can help growers improve disease management

PREDICTING INFECTION RISK

Factors that influence infection

Wet weather particularly during bloom and pre-harvest can result in severe blossom and fruit infection if inoculum is present and fungicide protection inadequate. Fungicide application (preventive and post-infection) can be improved by knowing:

1) the inoculum potential (i.e. overwintering inoculum or block history),

2) when conditions have been wet enough for Monilinia infection (i.e. the chance spores have to germinate and infect) and

3) the susceptibility of the crop during infection periods. This information is important for decision making to increase the efficiency of fungicides for disease control.

Estimating infection periods

The length of the wet period required for blossom infection is influenced by temperature and for fruit infection by temperature and stage of fruit maturity. We used blossom blight and fruit rot epidemiology data to increase the accuracy of Monilinia infection criteria for use in Australia. **Table 1** describes the wetness requirements at various temperatures for *M. fructicola* infection of flowers and fresh market stone fruit (peach, nectarine, plum and apricot) when fruit is susceptible to Monilinia infection. The minimum wetness and temperature thresholds identified for fruit infection are very similar to thresholds identified for blossom infection under warm field temperatures (i.e. late flowering varieties).

Table 1[1]. Hours of continuous wetness required for blossom blight and fruit infections to occur when blossom/fruit are susceptible to infection at various temperatures.

	Severity Rating of *M. fructicola* Infection Periods for blossom[2] and fruit				
Wetness Duration (hours)	Mean Temperature (ºC) during wet period[3]				
	5º	10º	15º	20º	25º
2	none	none	low	low	low
3	none	none	low	low	low
4	none	none	low	low	high
5	none	low	low	high	high
6	none	low	low	high	high
7	none	low	high	high	high
8	low	low	high	high	high
9	low	high	high	high	high
10	low	high	high	high	high
12	low	high	high	high	high
20	high	high	high	high	high

[1] This is a revised version of Monilinia infection criteria developed and provided by Tate (1999), using data from Weaver (1950) and Tate et al. (1984), for canning peach in New Zealand. The criteria was revised using blossom blight and brown rot fruit rot data collected in Australia by HAL project SF12004. This model can be used to estimate infection periods for both blossom blight and fruit rot, caused by *M. fructicola.*

[2] The accuracy of prediction of IPs for blossom infection at temperatures <10°C should be viewed with caution until further field evaluation has been undertaken (as discussed in the final report).

[3] The model assumes *M. fructicola* inoculum (spores) is present on the surface of susceptible blossom/fruit at the start of the wetness period caused by rain and/or dew. Two wet events interrupted by a dry period of four hours or less can be considered a single wet event if RH during the dry period >80%.

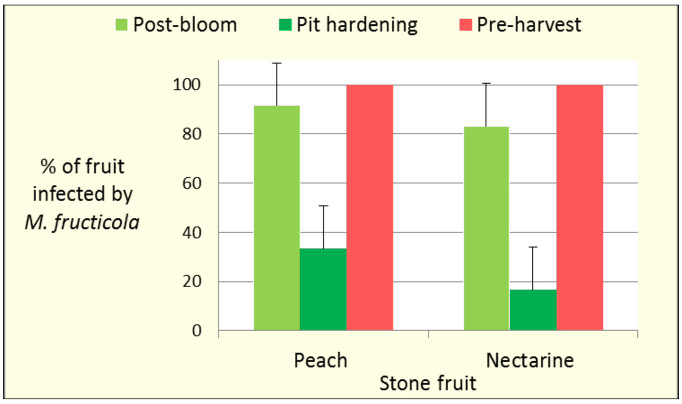


Figure 1. Susceptibility of peach (cv. Autumn Snow) and nectarine (cv. Arctic Snow) fruit to *M. fructicola*, showing that fruit is less susceptible to infection at the pit hardening stage. Fruit was inoculated with abundant spores at optimal infection conditions (24-hrs of wetness at 20°C). Post-bloom = 4 weeks after shuck fall.
Bars indicate least significant difference.

Important note on using the infection criteria

The criteria are useful for detecting infection periods of short wetness duration, which often occur during key stages of blossom and fruit susceptibility (e.g. ripening), and should be responded to by spraying if tissue/fruit is susceptible, inoculum is present, and no fungicide cover was present to prevent infection. Dew is common during the growing season in temperate and some sub-tropical regions and of sufficient duration to cause infection periods. Infection periods of long wetness duration (i.e. high risk) are easier to predict and can mostly be protected against using preventive spraying.

Important note on fruit susceptibility

Young green fruit can be infected by *M. fructicola* before shuck fall, but the infection usually remains dormant until fruit ripens. There are, however, differences in fruit susceptibility to *M. fructicola* between fruit maturity stages and differences in susceptibility to *M. fructicola* and *M. laxa* among *Prunus* species and cultivars. Generally, the susceptibility of developing immature fruit gradually decreases as fruit approaches the pit hardening stage and increases again in the pre-harvest period when fruit is ripening. Our research showed that detached peach (cv. Autumn Snow) and nectarine (cv. Arctic Snow) fruit were more susceptible after bloom (post-bloom) and when ripe than at the pit hardening stage (**Figure 1**). Plums (cv. SuPlum) were relatively less susceptible to infection than peach, nectarine and apricot (cv. Robada) fruit at the post-bloom stage but all were equally susceptible when ripe. Longer wetness durations were required for *M. fructicola* to infect immature fruit at the pit hardening stage when fruit was inoculated with abundant spores at optimal wetness and temperatures for infection.

Interpreting the severity of infection periods

The blossom blight and fruit infection criteria assume that there is enough inoculum present in the orchard block for infection to occur. If there are no infected mummied fruit and diseased twigs, risk is greatly reduced. Flowers and young wood (i.e. twigs) must be protected with fungicides during infection periods because these tissues are susceptible to *M. fructicola* infection. The lower susceptibility of immature fruits to infection around the pit hardening stages must be considered when interpreting the severity of infection periods and need for fungicide intervention. Fruit injuries caused by insects and abiotic factors (e.g. hail damage) increase fruit susceptibility, especially close to harvest when ripening fruit is highly susceptible to infection.

KEY POINTS (predicting infection risk):

- **Leaving susceptible fruit unprotected during infection periods (IPs) is one of the main causes of severe losses to brown rot.**
- **The Monilinia infection criteria can be used to identify the wet events conducive to spore germination and infection (IPs) during the growing season.**
- **The wet periods with the greatest risk of blossom bight and fruit infection can be identified using information on IPs, inoculum potential and crop susceptibility.**
- **Fruit injuries caused by insect and abiotic factors (e.g. hail) increase fruit susceptibility to infection.**
- **Spraying based on disease risk will make spray timing more precise, potentially reducing the number of fungicide applications and infection risk during the growing season.**

IMPROVING DISEASE MANAGEMENT

Evaluation of risk-based spray programs

Trials in orchards (2010-2015) investigated risk-based spray programs in which growers applied fungicide sprays guided by the occurrence of infection periods determined with the weather-based model. The decision to spray was also based on the risk of over-wintered inoculum and stage of crop susceptibility, at sites with different stone fruit crops. In general, results showed that brown rot control was gradually improved by more precise application of fungicide sprays, targeted during periods when tissue/fruit was most susceptible to *M. fructicola* (see final report **SF12004**). The trials also identified orchard factors that influence disease development in different production systems.

Development of a risk-based spray strategy

The ability to improve fungicide efficiency using infection period prediction and improved knowledge of factors that influence disease risk has allowed development of a risk-based spray strategy and best practice recommendations for managing brown rot in Australia. Using the improved spray strategy and best practices will result in more targeted and rational spray programs to control blossom blight and fruit rot in fresh market stone fruit production. **Figure 2 and Insert 2** describe the spray strategy for early and late season stone fruit crops. In this strategy, the fungicide program and spray application is based on inoculum potential, weather (rain forecast and infection period monitoring) and crop susceptibility. Whether growers adopt a risk-based schedule will depend on their perception of the risk involved and the value of the crop.

There are several considerations that will help make better management decisions when using a risk-based strategy to control Monilinia brown rot:

- Successful spray timing requires accurate prediction of infection periods and the application of fungicide just before (protectant) or soon after (systemic with curative activity) the wet event to optimise fungicide efficacy. This approach assumes that fungicide cover was not present.

- Preventive spraying, especially when tissue (i.e. flowering – shuck fall) and fruit (pre-harvest period) are most susceptible to Monilinia infection, is most efficient in time and resources than relying on post-infection spraying to control brown rot blossom blight and fruit rot.

- The spray timing and interval should be adjusted according to crop susceptibility and stage of fruit development, frequency of rain/dew related infection periods and fungicide efficacy (see fungicide labels).

- Fungicide effectiveness can be affected by many factors including spray timing (interval), efficacy, coverage and rain-fastness. These factors must be considered when spraying to maximise the efficiency of fungicide sprays against Monilinia infection.

- Fruitlets are very susceptible to *M. fructicola* infection prior to shuck fall, therefore must be well protected with fungicides during infection periods.

- The decision to protect immature (green) fruit should be based on fruit age (i.e. around pit hardening fruit is least susceptible), inoculum levels, weather conditions (i.e. longer wetness duration increase infection risk) and the risk of fruit injuries.

- Spray effective fungicides when the fruit is ripening because ripe fruit are highly susceptible to brown rot infection. An application of a fungicide shortly before harvest (1-3 days) may be needed to protect healthy fruit from infection if fruit rots are present during pre-harvest.

- For early season crops, fungicide coverage on the blossom and young and ripe fruit stages may be sufficient for good disease control if brown rot is not problematic and weather conditions dry.

- For late season crops, however, good fungicide coverage must be considered during flowering and all immature and mature fruit stages because the risk of infection is usually higher due to high levels of over-wintered inoculum.

- Control insects that cause fruit injury because wounding increases fruit susceptibility to *M. fructicola*.

- A post-harvest treatment should be considered if there is a risk of latent infection (detected with the pre-harvest rot method) in harvested fruit.

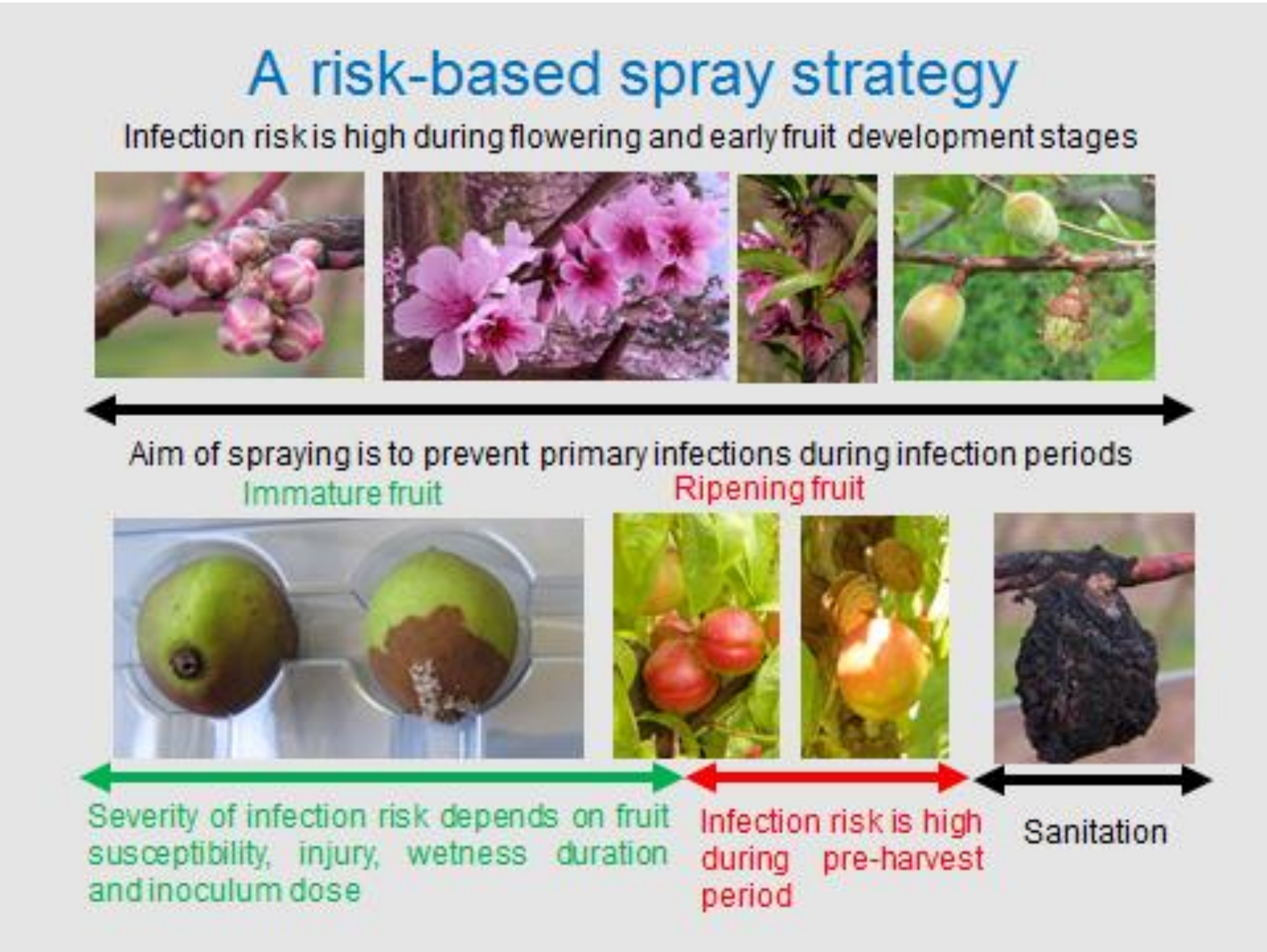
Figure 2. A risk-based schedule in which spraying is based on block history (inoculum potential), fruit susceptibility and weather to optimise fungicide application.

	Crop Stage				
Block history (i.e. inoculum carry-over)	Bloom to Shuck fall[A]	Post-bloom 30-50 days[B]	Post pit hardening[B]	Pre-harvest 3-4 weeks[A]	Post-harvest Treatment[C]
Low disease site:	Use rain forecast and monitored infection periods to optimise spraying				
Example early season cultivars, little or no fruit mummies	**RISK HIGH:** spray at short interval	**RISK MODERATE:** spray at suitable intervals	**RISK LOW:** Monitor for disease risk	**RISK HIGH:** spray at short interval	Post-harvest treatment
High disease site:	Use rain forecast and monitored infection periods to optimise spraying				
Late season cultivar, fruit mummies and diseased cankers	**RISK HIGH:** spray at short interval	**RISK HIGH:** spray at suitable intervals	**RISK LOW:** spray at suitable interval	**RISK HIGH:** spray at short interval	Post-harvest treatment

[A] Monilinia infection risk is highest during the growing season.

[B] Infection risk depends on fruit age (i.e. around pit hardening fruit least susceptible), availability of spores, weather conditions (i.e. longer wetness duration increase infection risk) and risk of fruit injuries.

[C] Post-harvest treatment required if fruit rots on trees at harvest and/or there is a risk of latent infection in harvested fruit. ***Always read the label before using a fungicide product.***



KEY POINTS (towards sustainable disease management)

- **Orchard trials showed that brown rot incidence can vary considerably among stone fruit cultivars and between early and late season crops.**
- **Brown rot was more difficult to control in late season peach and nectarine crops where over-wintered inoculum (i.e. fruit mummies and wood cankers) was high compared to early season stone fruit crops in temperate regions.**
- **An estimation of over-wintered inoculum is therefore of major importance in disease risk assessment to optimise spraying for brown rot control in fresh market stone fruit.**
- **Blossom blight development can be affected by many factors including inoculum availability and weather conditions. In temperate regions, the lack of the sexual stage and cold temperatures during flowering are factors influencing spore production and availability for blossom blight development. More research is required to better understand this phase of brown rot to improve its management and reduce management costs in Australia.**
- **The pre-harvest period is the key period for controlling brown rot due to warm and humid conditions favourable for *Monilinia* infection, high susceptibility of ripe fruit and ability of *M. fructicola* to infect ripe fruit during short wetness events.**
- **The decision to spray for blossom blight and fruit rot should take into consideration the main factors that influence infection risk namely (i) the over-wintered inoculum, (ii) blossom blight incidence, (iii) crop susceptibility, (vi) age of fruit, (v) fruit injuries and more importantly (v) the crop value.**
- **The use of a risk-based spray strategy will result in more targeted spray programs which will improve spray application, fungicide effectiveness and overall disease management. Improvements in disease control will reduce post-harvest brown rot incidence caused by latent infection.**
- **More research is required to determine the economic benefits of risk-based spray programs for disease control and reduction of production costs.**

MANAGING POST-HARVEST BROWN ROT

Measuring latent infection

Assessment of Monilinia latent (dormant) infection in fruit at harvest is an important practice for determining the need for post-harvest fungicide treatment and marketing strategy. Our research improved the accuracy of a pre-harvest rot assessment method developed to help growers quantify latent infection in fruit shortly before harvest. The method induces rot development by accelerating fruit ripening under moist and warm conditions. The accuracy of the method was improved by (i) determining an appropriate fruit sample size to detect latent infection, (ii) optimal incubation and assessment protocols, and (iii) validating the method in commercial blocks with early and late season stone fruit crops. Validation results indicated that brown rot incidence observed on trees at harvest was not a good predictor of post-harvest brown rot incidence (**Figure 3**). Brown rot incidence from latent infection measured 7 days before harvest using the moist incubation test was a more reliable predictor of post-harvest brown rot.

Method

❖ Healthy fruit samples should be collected 7-days before the predicted date of harvest to allow sufficient time for rot development during incubation.

❖ In blocks with a history of little or no brown rot, a sample of 60 fruit per ha should be sufficient to detect *M. fructicola* latent infection. In blocks with a history of brown rot 120 fruit per ha can provide a good estimate of the incidence of latent infection.

❖ Two fruit per tree should be collected systematically in a grid pattern from 30 or 60 trees spread along tree rows (i.e. 10 trees sampled per row) within a 1 ha block of trees.

❖ Fruit from each row should be placed in a carton with a plastic cup tray (see picture) and the cartons placed inside plastic bags under natural light/dark conditions at ambient warm temperatures (18-22°C) to increase humidity, fruit ripening and thus rot expression (**Insert 3**).

❖ Rotten fruit should be counted every 2-3 days for 5 to 7 days incubation to estimate the percentage of fruit infected by Monilinia per carton and site/block. Fruit infected by Rhizopus should be taken out because it will spread quickly and infect the fruit in the box.

❖ If rot levels are very low (<5%) after 7 days incubation, fruit should be incubated for another 3 days to determine the full amount of latent infection. Results should be interpreted in relation to other site information (i.e. fruit rots on trees, insect pressure, and spraying) for more effective decision making on post-harvest rot management.

❖ Ripe fruit still out in the field can be infected by *M. fructicola* during the period between sample collection and harvest if not properly protected with fungicides during infection periods.

Incubation method. Peach fruit incubated at 20ºC under high humidity for 7 days to accelerate ripening and expression of brown rot from latent (dormant) infection.

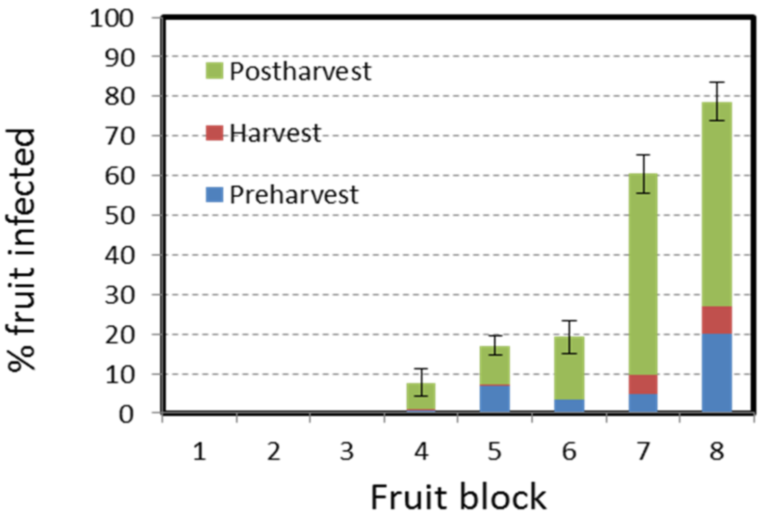


Figure 3. Mean incidences of brown rot caused by latent infection (*M. fructicola*) on peach and nectarine (various cultivars) fruit 7-days before harvest (blue) and post-harvest determined using the pre-harvest rot assessment method (green). Brown rot observed on trees at harvest is shown in red. Data are from orchards monitored during 2012-14. Data are the means of 6 fruit boxes (n = 120 fruit) and bars are standard errors of the mean.

Post-harvest treatment

Research demonstrated that shelf life of nectarine and peach fruit with low (<10%) and high (10-20%) levels of latent infection at harvest was significantly increased by treating harvested fruit with Scholar® (example fruit batch with 20% post-harvest brown rot incidence - Figure 4). This highlighted the importance of post-harvest treatment for suppressing rot development and increasing fruit shelf-life. It is important to note that healthy fruit could be infected in the shed if post-harvest handling practices are not adequate.

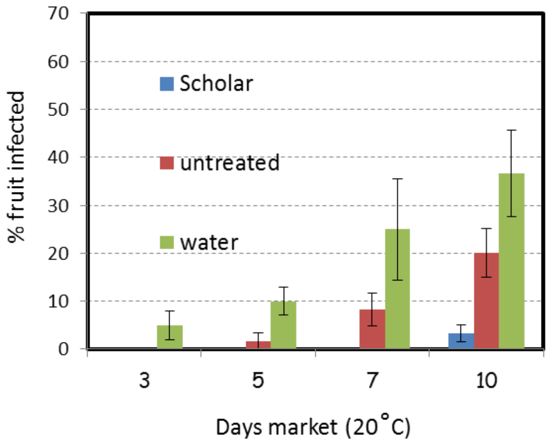


Figure 4. Mean incidence of brown rot caused by latent infection on nectarine (cv. Arctic Snow) fruit untreated and dipped in water only or Scholar® after harvest followed by simulated cold storage (2°C, 7 days) and then 10 days under market conditions. Bars are standard errors of the mean.

KEY POINTS (managing post-harvest brown rot)

- **The pre-harvest rot incubation method can be used on-farm to determine post-harvest rot risk with sufficient time to make decisions about the need for pre-harvest spraying, post-harvest treatment and marketing strategy.**
- **In its current form, this tool offers an inexpensive, reliable method for predicting potential losses to post-harvest brown rot and assigning risk to fruit lines destined for specific markets.**
- **The accuracy of the method should be improved by incorporating more variables into the current risk prediction tool, namely *Carpophilus* beetle population, pre-harvest weather and spray activities.**
- **Fruit can still be infected in the shed if post-harvest handling practices are not adequate, so the method can also be used to test fruit in cold storage.**
- **More research is required to determine the effectiveness of available treatments for controlling post-harvest brown rot to optimise and enhance their use for industry.**

Best Practices for Brown Rot Management

Best practices for the management of brown rot in fresh market stone fruit are summarised in Table 2. The practices should include cultural (sanitation practices), chemical and integrated control for more effective management of brown rot.

For more information contact: Oscar Villalta, Victorian Department of Economic Development Jobs, Transport and Resources;
T 03 9032 7341; Email oscar.villalta@ecodev.gov.au

Useful Resources

- Through chain approach for managing brown rot in Summerfruit and Canning fruit. HAL final report MT08039. September 2011.
- Improvement and implementation of brown rot disease forecasting for improving decision making on fungicide use. HIA Final report SF12004. June 2015.
- Brown rot management. Orchard plant protection guide for deciduous fruits in NSW 2012-13, 3-7, July 2012 (www.dpi.nsw.gov.au/pubs/orchard-guide).

Table 2. Key best practices for management of brown rot

Practice	Impact
Remove rotten/mummified fruit and prune out cankered and dead twigs	Less inoculum for flower and fruit infections in spring and summer
Monitor infection periods (IPs) using Monilinia infection criteria	More accurate application of preventive and post-infection sprays
Apply fungicide sprays preventively and use post-infection sprays only when necessary	Tissue/fruit protected before spores begin infection process, reducing risk of fungicide resistance
Adjust spray interval according to disease risk from weather, fruit maturity and fungicide efficacy	Better coverage and protection of susceptible tissue/fruit
Spray effective fungicides during flowering and shuck fall	Good protection of floral tissues and fruitlets will reduce primary infections
Spray protectant fungicides during immature fruit stages when inoculum and risk of fruit injury high	Good protection of green fruit will reduce latent infections
Spray effective fungicides in the pre-harvest period (3-4 weeks)	Minimises brown rot losses at harvest and post-harvest
Consider an application of a fungicide 1-3 days before harvest if fruit rots present at pre-harvest	Protection of healthy fruit from infection which will reduce post-harvest brown rot
Avoid injuring fruit and control insects that cause injuries (e.g. *Carpophilus* beetle)	Reduces fruit susceptibility to *Monilinia* infection in immature and ripe fruit
Implement a fungicide resistance management strategy	Prolong the usefulness of at risk (i.e. propiconazole) fungicides
Determine levels of latent infections before harvest with pre-harvest incubation method	Improves pre-harvest spraying, post-harvest rot management and marketing strategy
Post-harvest treatment of fruit with latent infection, pre-cool and keep fruit in cold storage until it reaches the market	Suppresses rot development which will increase shelf life

Acknowledgements: This research was funded by Horticulture Innovation Australia Limited, using the summerfruit industry levy and funds from the Australian government, and the state government of Victoria (**projects MT08039 and SF12004**). We thank Chin Gouk, Mofakhar Hossain, Jennifer Sexton, and Jacky Edwards (Biosciences Research, DEDJTR); Phillip Wilk (DPI NSW); Ben Callaghan (HIA), Summerfruit Industry Advisory Committee and the many growers in Renmark, Swan Hill, Cobram, Ardmona, Bangalow and other regions for collaborating with this research.

DISCLAIMER

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Horticulture Innovation Australia Limited (HIA Ltd) make no representations and expressly disclaim all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of information in this publication. Users of this publication should take independent action to confirm any information in this booklet before relying on that information in any way. Reliance on any information provided by HIA Ltd is entirely at your own risk. HIA Ltd is not responsible for, and will not be liable for, any loss, damage, claim, expense, cost (including legal costs) or other liability arising in any way (including from HIA Ltd or any other person's negligence or otherwise) from your use or non-use of the booklet or from reliance on information contained in the booklet or that HIA Ltd provides to you by any other means.

Information in this publication is provided purely for educational purposes. Any recommendations or suggestions contained in this publication do not necessarily represent the policy of the authors' organisation. No person should act on the basis of the contents of this publication without first obtaining specific, independent and professional advice. Any research with registered fungicides reported in this document does not constitute a recommendation for that particular use by the authors or the authors' organisation. All fungicide applications must be in accord with the currently registered label for that particular product, crop and pathogen.

© The State of Victoria Department of Economic Development, Jobs, Transport and Resources

This work is licensed under a Creative Commons Attribution 3.0 Australia licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment and Primary Industries logo.

To view a copy of this licence, visit: http://creativecommons.org/licenses/by/3.0/au/deed.en

Accessibility

If you would like to receive this publication in an alternative format, please telephone the Customer Service Centre 136 186, email customer.service@depi.vic.gov.au (or relevant address). This document is also available on the internet at www.economicdevelopment.vic.gov.au and www.summerfruit.com.au