BIOSECURITY
TASMANIA

Blueberry Rust Status Update

Season 2021/2022

Industry Briefing Paper

Current at 20 May 2022

DEPARTMENT OF
Natural Resources and Environment Tasmania

Tasmanian Government

Background

Blueberry rust (BBR) detections have been increasing with a total of sixteen new IPs since the commencement of the 2021/22 season. Most significantly, the rust has spread further west than before and has also spread to the south for the first time. This suggests conditions have changed and the existing containment course-of-action requires consideration for review of suitability and appropriateness.

Current Situation

There are currently twenty-one IPs, with four now resolved (2IP, 3IP, 5IP & 24IP) – the most recent detection being designated 25IP. Importantly 23IP represents the first home garden detection which meets an important containment plan trigger (see below), whilst 24RP represents a detection in the nursery retail sector that is likely to have seen some infected plants sold to the public.

The following table indicates how the number of detections has increased this season:

Season	**No. of IPs detected**	**Region**
2016/17	3	NW
2017/18	2	NW
2018/19	2	NW
2019/20	0	
2020/21	2	N & NW
2021/22	16	S, N & NW
Total	**25**[1]	

In addition to the sixteen new detections made this season, an IP which had managed BBR through treatments and not seen it on-site for some years has had it return this season. Although not conclusive, this suggests a new infection rather than a re-emergence of an old infection which effectively increases the number of new infections this season to seventeen. Further re-infections at IPs would be reliant on owners self-reporting to BT.

Ramifications for the Recent Surge in Detections

BBR is now widespread with around ¼ of known production orchards infected. Disease pressure has increased putting other orchards at greater risk. It is now clear that the current containment strategy is no longer working and it is now more challenging to justify this approach to other jurisdictions. BBR is categorised as a List A (exotic) disease under the *Plant Quarantine Act 1997* with an import requirement in place to mitigate the risk of it entering the state. Clearly BBR no longer meets the requirements of a List A disease and restricting trade through import requirements is not a justifiable position.

Annual Surveillance Progress

Routine annual surveys for BBR, conducted by BT primarily to support market access arrangements, have been completed. At this stage there are 19 out of 71 (approx.) or 27% of known blueberry production sites deemed infected. 71 properties surveyed in total (34 in North, 12 in North-west & 25 in South). 48,031 plants have been individually inspected across 331,598 plants in total. Survey progress was slowed down significantly this season due to the increase in positive detections and their impact on 'clean' versus 'dirty' teams ('dirty teams' cannot resume routine surveys for 2 weeks).

[1] 24IP was a retail nursery that became 24RP once the infected plants were removed

Resolved Premises

There are currently four resolved premises (designated RP) - 2RP, 3RP, 5RP and 24RP. Evidence suggests that BBR did not return to 2RP and 5RP due to a break in the rust cycle from a substantial dormant period where growers reported 100% leaf drop. Only organic-approved treatments were used which were stopped prior to the season where final surveillance took place to clear the sites. Note also that 3RP were not growers and elected to destroy their plants rather than manage the rust (no longer exists). 24RP, as a retail nursery, also elected to destroy their plants (in pots).

Tracing

Some IPs appear to have been infected by wind (due to proximity to an IP) whilst others have suspected infection from Pick Your Own (PYO) members of public due to their relative geographic isolation. New plants have been suspected as a source of infection at four IPs, though this cannot be proven. In short, there is no conclusive evidence, and the source of infection cannot be determined for most IPs – which is not unusual for rust diseases.

Containment

BT has been managing BBR under a Containment Plan which regulates IPs under the *Plant Quarantine Act 1997* via legal directions/permits and Site Management Plans. This effectively regulates the movement of material from infected sites, manages the disease through treatments, and applies strict hygiene procedures – to best ensure that BBR is contained to the site. The first containment plan ran for three years from 2017/18 to 2019/20 and a review at the end of that period was optimistic with no new detections in the final year. A second containment plan (2020/21 to 2022/23) began with just four IPs being managed.

Containment Triggers

The following triggers were written as points where the containment plan should be reviewed.

1. BBR detections outside the north-west zone of four IPs and three resolved premises
2. BBR detected in another host other than blueberry
3. BBR detected in home gardens
4. BBR detected in a commercial orchard in the south
5. Regulating states (WA and SA) no longer accept fruit under the Pest Free Places of Production (PFPP) trade protocol

Currently triggers 1, 3 and 4 have been met, whilst trigger 5 is under review (WA have advised that they are unlikely to accept the PFPP protocol next season and SA are considering the current situation – refer Market Access below). Trigger 2 regarding other host plants has not been met and this situation stands for the whole of Australia.

Situation in Other States

SA and WA continue to regulate for BBR as the only remaining states free of the disease - although WA is dealing with an incursion and Tasmania awaits the outcome of that. Victoria changed its BBR status in mid-2021 after detection at three sites whereby they considered it not feasible to eradicate. The disease is present in NSW and Queensland.

Market Access

Commercial IPs were able to trade via a Trade Agreement requiring significant treatment of their fruit (in line with ICA-31). Other IPs not wanting or unable to meet the treatment requirements had to freeze or process their fruit prior to sale.

PFPP protocol

At the start of the export season, there were 14 registered businesses for trade to WA/SA. By the end of March, 9 businesses remain registered, with one having not sold to WA/SA, but remained registered

Trade Agreement

3 businesses registered at the beginning of the season. By the end of March there were 4 registered businesses.

BT were obliged to inform WA and SA of any new detections. Whilst these states were considering their positions, trade has continued to the completion of this season (via both the Trade Agreement and the Pest Free Place of Production [PFPP] protocol). BT believe that changes are likely for next season. WA provided advice to BT that they are unlikely to approve the PFPP protocol for next season. SA are still considering the situation but have indicated verbally that they are unlikely to accept the PFPP protocol next season.

Tasmania's Existing Import Requirements

- Hosts and carriers of BBR remain regulated for importation into the state (IR28).
- Plant and plant products can be imported from states with whole of area freedom.
- Partial area freedom is also recognised for orchards that are 200km from any BBR detection.
- Fruit that can't meet the above must have been inspected and sprayed 14 days prior to harvest.
- If Tasmania deregulates, then these requirements are revoked.

Site Management Plan – Key Restrictions / Requirements

- Entering and leaving the infected area
- Harvesting fruit (blueberries and other fruit types)
- Movement of fruit off site
- Pruning, composting and disposal methods
- Application of fungicides for both conventional and organic orchards
- Machinery and equipment (use and decontamination)
- On-farm biosecurity advice (farm imports, deliveries, vehicle access, machinery/equipment, disease prevention, surveillance, records, and pollination services)
- Various standard operating procedures (SOPs) to assist with the above

Resolving Infected Premises

- IPs that have a full dormant period (100% leaf drop for >8 weeks) must demonstrate one complete season without any signs of BBR - which is assessed early in the following season, before they can be resolved.

- IPs that have evergreen varieties and/or spray for BBR remain a challenge as there is no natural break to the disease cycle, and the fungicides can mask infection.
- Any assessment to resolve is via surveillance with samples taken for testing irrespective of whether spores are noticeable.
- Of the three IPs resolved, two were essentially organic with no evergreen varieties whereby the dormant period saw a break in the rust cycle and it did not return the following season.
- The other resolved IP elected to remove their plants as they were not commercial growers.
- RPs are currently at high risk of becoming re-infected and returning to IP status.

Research and Development

One aspect of containing BBR was to create a holding pattern whilst research could be undertaken to assist with managing the disease. Areas such as effective chemicals for organic producers, survival of rust spores in the Tasmanian climate, and defoliation trials to determine the impact on plant health are potential factors in minimising the impacts of BBR.

Future Management

- A technical review of the current approach should be undertaken
- Imminent research needs to be a part of this review
- As IPs increase, the burden of BBR regulations on industry increases
- Note that Tasmania continues to operate under the current containment plan

Summary

- BBR is no longer being contained under the current approach
- Formal responses to the PFPP export protocol are required from SA and WA
- These changes require review of BBR management in Tasmania
- Stakeholders need to have their say