Australian Network for Plant Conservation Inc

invasive species council

Comments on the draft report on biosecurity import requirements for guava fruit from Taiwan (pursuant to Biosecurity Advice 2025-P03)

A joint submission by the Australian Network for Plant Conservation Inc. and the Invasive Species Council

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SUMMARY

The Biosecurity Import Requirements Draft Report issued with Biosecurity Advice 2025-P03 recommends allowing the importation of commercially produced fresh guava fruit (*Psidium guajava*) from Taiwan. The Draft Report excludes Myrtle Rust (*Austropuccinia psidii*) from risk assessment on the grounds that it is not present in Taiwan.

We argue that this finding was not well justified – a concern validated by the confirmed occurrence of Myrtle Rust in Taiwan, reported after the Draft Report's publication. Although DAFF now proposes to conduct a risk assessment of Myrtle Rust, we provide here a critique of the original decision to exclude Myrtle Rust from assessment:

1. Historical evidence for presence: The Draft Report too cursorily dismissed a 1991 Taiwan detection as 'unreliable', based on attenuation or misinterpretation by secondary sources.
2. Other evidence for presence: Relying on a lack of recorded presence as an indicator of absence is not a reliable approach for a highly mobile pathogen like Myrtle Rust. The assessment failed to consider the implications of its rapid spread across the Pacific region since 2005, including recent detections in neighbouring countries: Japan (2007) and southern China (2009, 2024).
3. Process concerns: The assessors did not consult with the National Myrtle Rust Working Group before concluding that this high-priority biosecurity threat required no risk assessment.

We suggest there are grounds for a review of the approach to pre-assessment categorisation, and the depth of assessment performed and reported, particularly for environmental pathogens.

We also provide information germane to the forthcoming risk assessment**:**

- Fruit morphology: Some Guava varieties have terminal pits that could harbor spores and evade cleaning.
- Internal infection: Myrtle Rust can infect fruit internally without visible external symptoms.

We urge the assessors to consider in detail the risks of introducing different strains of Myrtle Rust – whether new strains pathogenic to additional hosts or the existing pandemic strain, not yet present in Western Australia and South Australia. We urge consideration of the risks of introducing multiple variants that could lead to genetic recombination, expanded host ranges and more severe impacts.

RECOMMENDATIONS

1. Revise the information in the Draft Report about the presence/absence of Myrtle Rust in Taiwan to include not only the 2025 detection but to also acknowledge:

    (a) the likelihood that Myrtle Rust was detected in Taiwan in 1991 on eucalypt species
    (b) the extreme mobility of Myrtle Rust and its regional presence, making it highly likely that it had already spread to or would soon be present in Taiwan.

2. Include a focus in the Myrtle Rust risk assessment on the following risks:

    (a) the potential consequences of different strains of Myrtle Rust, including new exotic strains and the pandemic strain already present in parts of Australia
    (b) the potential for genetic recombination of different variants, and hence adaptive potential, leading to host range expansion and/or more severe impacts
    (c) the potential for some cultivars of Guava fruit to feature a terminal dimple or pit that can serve as a harbour for fungal spores, enabling them to evade cleaning.
    (d) the potential for internal fruit infection that is not evident on the fruit surface.

3. For the Myrtle Rust risk assessment, seek expert advice prior to publishing a draft report, including with the National Myrtle Rust Working Group.

1. BACKGROUND

1.1 Findings of the Draft Report

On 15 July, subscribers to DAFF's Biosecurity Advice circular received an invitation to comment within 60 days on 'Guava fruit from Taiwan: biosecurity import requirements draft report' (Biosecurity Advice 2025-P03).

As outlined in the advice summary, the Draft Report:

> *…proposes that the importation of commercially produced fresh guava fruit (Psidium guajava) to Australia from all commercial production areas of Taiwan can be permitted, subject to a range of biosecurity requirements.*
>
> *… identifies 7 pests associated with fresh guava fruit from Taiwan that require risk management measures to reduce the biosecurity risk to an acceptable level.*

The pests found to require risk management are four species of fruit fly and three of mealybug.

Our focus in this submission is a species identified as not requiring risk assessment or risk management measures – Myrtle Rust (*Austropuccinia psidii*).

According to the Draft Report (Section 3.1 'Summary of outcomes of pest initiation and categorisation'):

> *The initiation process (Appendix B) identified 115 pests as being potentially associated with guava in Taiwan. In addition to the 115 pests,* ***Appendix B also included 2 pests, Drosophila suzukii and Austropuccinia psidii, that are now considered absent from Taiwan to provide further clarity and assurance regarding their status*** *(emphasis added).*

Of the 115 pests said to be potentially associated with Guava in Taiwan:

> *… 9 pests were assessed as having potential to enter, establish, spread and cause consequences in Australia, and therefore requiring further pest risk assessment.*

The sum total of 'clarity and assurance' for *A. psidii* promised in Section 3.1 is the following table entry at Appendix B of the Draft Report ('Initiation and categorisation for pests of guava from Taiwan', p. 116), which states that Myrtle Rust is not present in Taiwan, and therefore does not require a risk assessment:

Pest	Present in Taiwan	Present within Australia	Potential to enter on pathway				
			Potential for importation	Potential for distribution	Potential for establishment and spread	Potential for economic consequences	Pest risk assessment required
Aspergillus parasiticus Speare [Eurotiales: Aspergillaceae]	Yes (Farr & Rossman 2025; GBIF Secretariat 2025; Shao 2020)	Yes (APPD 2025; GBIF Secretariat 2025)	Assessment not required	Assessment not required	Assessment not required	Assessment not required	No
Austropuccinia psidii (G. Winter) Beenken Synonym: *Puccinia psidii* G. Winter [Pucciniales: Sphaerophragmiaceae] Myrtle rust	No, unreliable record (EPPO 2025). Reported once from Taiwan but not definitively identified and appears not to have established (Glen et al. 2007)	Assessment not required	Assessment not required	Assessment not required	Assessment not required	Assessment not required	No

1.2 Subsequent proposed Myrtle Rust risk assessment

Since the publication of the Draft Report, its finding that Myrtle Rust is not present in Taiwan has been invalidated by a confirmed occurrence report (Yeh and Kirschner 2025).

On 21 August DAFF announced there would be an additional pest risk analysis and consultation process for Myrtle Rust (Biosecurity Advice 2025-P05).

1.3 This submission

In this submission, we respond to the finding of the Draft Report that Myrtle Rust is not present in Taiwan and therefore does not require risk assessment. Although this has since been invalidated by a confirmed occurrence and DAFF has announced a Myrtle Rust pest risk analysis, we make this submission to raise questions about whether the original finding was justified. We also provide information about certain risks that should be considered in the Myrtle Rust risk assessment.

When the draft pest risk assessment for Myrtle Rust becomes available, we will submit an additional response.

2. COMMENTS ON THE DRAFT REPORT

DAFF deploys a standardised categorisation pathway for a Plant Commodity/Country Risk Analysis Process, said to be aligned with and required by the SPS Agreement. It uses a linear, stepwise approach of binary (yes/no) criteria, or questions, to eliminate pests and diseases from a pool of potential organisms of concern, to yield a shortlist for possible risk assessment.

The first step in this decision pathway (link) is to answer the question 'Is the pest present in the exporting country?' If the answer is 'no', the species is excluded from all subsequent steps of the categorisation process and deemed to not require assessment.

The categorisation of Myrtle Rust as not requiring assessment, on the present/absent criterion, raises two questions:

(i) Was the decision to exclude Myrtle Rust from assessment on the basis of non-presence in Taiwan soundly based at the time it was made (i.e. disregarding the positive occurrence report of Yeh and Kirschner, published 3 July 2025)?
(ii) For a highly mobile pathogen like Myrtle Rust, does it make sense to base exclusion from assessment exclusively on this first-step question on a presence/absence basis?

2.1 Question (i): Was the conclusion in the Draft Report about the absence of Myrtle Rust robust?

The Draft Report mentions, and dismisses, an 'unreliable report' of Myrtle Rust from Taiwan (Appendix B, p 116). It does so on the basis of two references: (A) an entry in the EPPO global database and (B) a paper by Glen et al. (2007). We track the origins of the 'unreliable report' in detail here because it is pivotal to the decision by the assessors to not consider Myrtle Rust any further.

(A) The **EPPO Global database** entry (link, accessed 1 Aug 2025, BM) reads:

> *Distribution details in Taiwan*
>
> *Situation*
>
> *Current pest situation evaluated by EPPO on the basis of information dated 1998: Absent, unreliable record*
>
> *Comments*
>
> *EPPO Reporting Service (1998/199) : an alert to this newly important pest.*
> *The record in Taiwan is based only on rust symptoms, without specific identification.*
>
> *References * Coutinho, T.A.; Wingfield, M.J.; Alfenas, A.C.; Crous, P.W. (1998) Eucalyptus rust: a disease with the potential for serious international implications. Plant Disease, 82(7), 819-825.*

The Coutinho et al. (1998) paper (p. 809) cited in the EPPO database in turn cites a paper reporting a Taiwanese detection in 1991:

> *A rust, suggested to be P[uccinia] psidii, has recently also been reported from Taiwan on E[ucalyptus] camaldulensis (56). In this case, only a uredinial state was reported and it is impossible to confirm whether the fungus was the same as P. psidii. Despite considerable effort, the fungus has not been seen again (W. Wang, Taiwan Forestry Research Institute, personal communication).*

The Coutinho et al. paper notes that the rust was examined under a scanning electron microscope (p. 824):

> *Only in the case of Taiwan was the rust identified as P. psidii (56). Wingfield (unpublished data) also conducted morphological comparisons, including scanning electron microscopy, of the rusts from Taiwan and Brazil and could find no differences between them. Indeed, if the rust in Taiwan is the same as that occurring in Brazil, it is possible that it has been introduced from South or Central America. Given the proximity of Taiwan to Australia, the threat of introduction to eucalypts in their native range would appear to be even more severe.*

(B) The paper by **Glen et al. (2007: 7)** says:

> *There has been a single report from Taiwan in 1992 (Wang 1992), but the pathogen was never definitively identified and it appears not to have become established (M. J. Wingfield, unpubl. data).*

Both references cited in the Draft Report as the basis for 'absence from Taiwan' thus derive from Wang (1992), but this paper does not appear to have been directly consulted in the preparation of the Draft Report.

Information in Wang (1992) has become attenuated in its passage to the 2025 Draft Report – particularly in the EPPO database. Coutinho's 'impossible to confirm' became 'unreliable', a shift of nuance, and EPPO's statement that 'The record in Taiwan is based only on rust symptoms', is incorrect. Wang (1992) provided a brief morphological description of the spores (Box 1), and Coutinho *et al*. state that Wingfield conducted a micrographic examination of the spores.

It is not clear what would have constituted 'definitive identification' for the authors of the 1998 and 2007 papers, given the relatively poor state of knowledge of the taxon then known as *Puccinia psidii*. There was taxonomic confusion enough in Australia in 2010 (the '*Uredo rangelii*' diversion). A vouchered specimen from Wang's work or Wingfield's examination of the Taiwan material would have helped, but full satisfaction of Koch's postulates would have been a big ask at the time, and even today can be logistically difficult for various reasons.

We acknowledge both of these papers as foundational in drawing attention to the Myrtle Rust threat, and in most respects authoritative in the context of the information available at the time.

But it is clear that doubt about the identity of the Taiwan 1991 pathogen expressed by Glen *et al*. and Coutinho *et al*., was theirs, not Wang's, and was taken up and over-simplified by EPPO and CABI. The original report, Wang (1992), does not indicate uncertainty, at least as it is auto-translated in Box 1 below: Wang states categorically that 'The causative agent of leaf rust is *Puccinia psidii* Wint.'.

Yeh and Kirschner (2025) note that the 1991 detection was accepted in Taiwan and 'persisted in the list of plant diseases of Taiwan'. They consider that their 2025 detection may have descended from this earlier occurrence rather than being a new incursion:

> *Most likely, the fungus persisted undetected until its presence in Taiwan has been confirmed on other hosts in this study.*

It seems reckless for the Draft Report to have dismissed the possibility of a Myrtle Rust presence in Taiwan on the basis of secondary-and-third-source comments on a 1992 report and an absence of reports of recurrence up to 2007. It was instead open to the assessors to conclude that Myrtle Rust may

have or likely had been detected in Taiwan in 1991 and that the possibility of it being present at least warranted further investigation.

Box 1. Wang's 1992 report of Myrtle Rust in Taiwan

The most relevant part of Wang's text (Chinese to English, Google Translate, 30 July 2025) reads as follows (see link for the original):

> *7. Leaf rust*
>
> *Pathogen: The causative agent of leaf rust is Puccinia psidii Wint. Summer spores are bright yellow, ranging in size from 20 to 30 × 15 to 20 µm, round to oval, pear-shaped, and covered with spiny projections (Figure 4B). No polyspores were observed.*
>
> *Symptoms: Leaf rust was first discovered in March 1991 in a Eucalyptus camaldulensis plantation at Zhaofeng Farm in Hualien. The affected two-year-old eucalyptus trees displayed numerous, prominent golden uredules on the undersides of leaves in the lower canopy (Figure 3H), while the upper sides of the leaves displayed irregular white spots (Figure 4A). In May 1991, rust uredules were found scattered on the undersides of seedlings of Eucalyptus camaldulensis, Eucalyptus robur, Eucalyptus urophylla, and Eucalyptus serrata at the Ji'an Nursery in Hualien. As of October 1991, no eucalyptus leaf rust had spread to the plantation. Furthermore, apart from Hualien, no eucalyptus leaf rust had been reported in eucalyptus plantations in western Taiwan.*
>
> *Eucalyptus leaf rust has only been reported in Brazil and India in South America to harm lemon eucalyptus seedlings, and has not been found in other regions, including Australia, where eucalyptus is native (Heather and Griffin,1984). The rust is an obligate parasite, with Psidium sp. as its cross-host. Eucalyptus leaf rust may also harm guavas, which are widely cultivated in Taiwan. Therefore, further investigation of the distribution and spread of rust in Taiwan is necessary. This disease is newly recorded in Taiwan. P. psidii is also a newly recorded species in Taiwan.*

As far as they go, the reported urediniospore morphology, and the pustule phenology, are both consistent with *Austropuccinia psidii*.

Wang (1992) mentions *four* putative eucalypt host taxa, not just *E. camaldulensis* as stated by Coutinho et al (1998). However, the identities of 'Eucalyptus serrata' (not a known combination in APNI) and 'Eucalyptus robur' are unclear. Weh and Kirchner (2025) regard them as assignable to *E. grandis* and *E. tereticornis*. Wang's *E. camaldulensis* and *E. urophylla* are likely correct, although land races or hybrids might be involved.

Note that *E. camaldulensis* and *E. urophylla* are known as hosts of the pandemic strain by inoculation test within Australia. *E. tereticornis* and *E. grandis* are each known from both inoculation and 'natural' infection (ambient spores) within Australia (Makinson 2018), so again the pandemic strain can be confidently inferred in that Australian context.

2.2 Question (ii): For a highly mobile pathogen, is a lack of recorded presence a sufficient indicator of absence?

Relying on an absence of reports as a definitive indication of actual absence is not by itself a reliable approach for high-consequence biosecurity decisions. The potential for presence should be assessed against the known mobility and global or regional spread history of the organism, over an appropriate time scale.

The Myrtle Rust literature shows that over the past 20 years the 'pandemic strain' of Myrtle Rust has become widespread in the central and western Pacific basin: Hawaii (2005), Australia (2010), New Caledonia (2013), parts of Indonesia (2015), Singapore (2016), New Zealand (2017), and Palau (2025, an iNaturalist record reported in CABI). In the immediate region of Taiwan, Myrtle Rust was recorded in Japan in 2007 (Kawanishi et al. 2009), in southern China on Hainan in 2009 (Zhuang and Wei 2011), and in Guangdong in 2024 (EPPO 2024, based on Liu et al. (2024).

A thorough analysis would have noted (a) the rapidity of spread within and between those countries, by uncertain vectors (probably both human and natural, including wind), and (b) the fact that Taiwan, Guangdong, Hainan, Palau, and southern Japan are all in a typhoon zone.

Incidental to the argument, but perhaps relevant to the question of potential persistence and chronic spore load in Taiwan from non-cultivated sources, is the recent report of occurrence in the nursery trade from Switzerland on *Syzygium buxifolium*, a species native to Taiwan (Ruffner et al. 2024) which is a new host from that report. Yeh and Kirschner (2025) investigated a single planting of *S. buxifolium* but found no rust. However, *Rhodomyrtus tomentosa*, one of the five species reported by Yeh and Kirschner (2025) as infected, and a long-known host, is also native to Taiwan. *The Flora of Taiwan* 2nd ed. Vol.6 (2003) lists 12 native and naturalised species of Myrtaceae, all of which could potentially harbour the disease. We do not know the number of cultivated Myrtaceae in Taiwan.

A more appropriate and informative conclusion would have acknowledged the regional outbreaks since 2007, and the likelihood that the pandemic strain of Myrtle Rust (at least) would get to Taiwan sooner rather than later, if not already there. This in turn should have led to some form of assessment of the risks associated with Myrtle Rust.

2.3 Concerns regarding the assessment process

Given the extreme risks of Myrtle Rust to Australia – acknowledged by its listing in both the National Priority Plant Pests List (NPPP, link) and the National Priority List of Exotic Environmental Pests, Weeds and Diseases (EEPL, link) – the finding of the Draft Report that Myrtle Rust did not require risk assessment is of concern to us. Some concerns are specific to this finding and others are more general about the risk assessment method. We will address the latter in another forum.

The concerns specific to Myrtle Rust finding are that the potential for its presence in Taiwan was too cursorily dismissed due to the following:

- an incautious mischaracterisation of the 1991 report as 'unreliable' on the basis of second-hand and third-hand sources that attenuated the findings of the original report
- lack of consideration of the regional presence of Myrtle Rust and its extreme mobility as evidence indicating a likelihood that Myrtle Rust was present in Taiwan (as has proved to be the case) or would be in the near future
- a lack of consultation of the Myrtle Rust Working Group or its experts prior to publication of the Draft Report to gain informed views about the likelihood of presence
- an apparent lack of appreciation of the seriousness of the disease risk of Myrtle Rust, as indicated by the points above and the lack of any mention of it being one of Australia's highest priorities to exclude by being listed on the NPPP and EEPL.

3. ADDITIONAL CONSIDERATIONS

We raise here some issues that should be considered in the upcoming Myrtle Rust-specific risk assessment.

3.1 'Exotic strain' considerations

The definition of 'pest' in the Biosecurity Act 2015 acknowledges that risks can be specific to strains:

> ***pest*** *means a species, strain or biotype of a plant or animal, or a disease agent, that has the potential to cause, either directly or indirectly, harm to: (a) human, animal or plant health; or (b) the environment.*

We have sought assurances that attention will be paid to the 'strain' question in the forthcoming Myrtle Rust risk assessment. This should be a front-of-mind consideration for all pathogens, but particularly in the case of *A. psidii* for which the differentiation of strains and host ranges has been clear since 2015, if not yet fully elucidated (see Stewart et al. 2018 for an overview).

The 1991 report of Myrtle Rust in Taiwan pre-dates by more than a decade the breakout of the *A. psidii* 'pandemic' strain in the western Pacific basin. Notwithstanding the 'likely persistence' view of Yeh and Kirschner (2005) cited above, a logical alternative possibility, not mentioned in the Draft Report but which should be considered, is that it was a different strain, one adapted to eucalypts (although we note that the four taxa mentioned by Wang (1992) are also known hosts for the pandemic strain). This would be a major concern – as recognised in the NPPP and EEPL listings.

There is as yet no information as to whether the confirmed set of 2025 Taiwan occurrences (on five non-Guava species) are of the pandemic strain, the only one confirmed as present in the western Pacific basin and Australasia. We understand that DAFF analysts will pursue this issue in the new Myrtle Rust-specific risk assessment. The Hainan occurrence of 2009 is positively assigned by Stewart et al. (2018) to the pandemic strain. The Japanese and Guangdong occurrences appear to be undetermined, although Liu et al. (2024) postulate that the latter is 'likely to be the same "pandemic biotype" due to the close geographical location to Hainan Province'. Although 'likely', this is not a safe assumption for biosecurity purposes now that strain diagnostic tools are available, and also in light of the 1991 Taiwan report (Wang 1992).

The 'pandemic strain' of Myrtle Rust, the only one currently present in Australia, rarely infects species of *Psidium* (the genus that includes commercial Guava). A single record for commercial Guava (*Psidium guajava*) from the host list of Giblin and Carnegie (2014) may remain the only such record in Australia (there is no ongoing centralised Myrtle Rust host-tracking other than that conducted on an unsupported basis by a few researchers). The implication of this is that any importation of Myrtle Rust on Guava fruit as an infection (and not just an adherent ungerminated spore) is likely *ipso facto* to represent a high risk of being a new ('exotic') strain of the pathogen – with a different set of commercial and environmental risks from the pandemic strain, as recognised in the NPPP and EEPL listings.

In addition to strain-specific impacts is the risk that repeated introductions of variants increase the propagule pressure, increase the likelihood of successful breeding and genetic recombination, and hence adaptive potential), and thus potentially broaden its host range and deepen its impacts. We urge consideration of these aspects of risk in the forthcoming risk assessment.

3.2. Domestic biosecurity considerations

As Myrtle Rust was excluded from consideration, the Draft report did not address the differential risks that might apply to Guava imports to different parts of Australia. The 'pandemic strain', while 'present in Australia', is not yet present in South Australia or Western Australia (except for an e-DNA detection of wind-borne spores in Adelaide, and a single very limited on-plant incursion in WA just inside the border with the NT). Domestic biosecurity restrictions still apply to both those states – they are trying to exclude the pathogen.

The environmental consequences of Myrtle Rust naturalisation in the south-west of WA are potentially very serious. The main WA environmental response planning document available to us states in summary that the naturalisation of the Myrtle Rust pathogen in the south-west of WA (WA Department of Parks and Wildlife 2015, p. 14):

> *… could have devastating impacts, given that the area has the highest species richness of myrtaceous hosts in the country, with almost 1,500 myrtaceous plant species, combined with a climate that is thought suitable for pathogen establishment.*

We hope that the forthcoming assessment will give full consideration to the implications of any imports for these domestic biosecurity issues, including for the 'already present' pandemic strain.

3.3 Guava fruit morphology and potential surface spore 'refugia'

One risk not mentioned in the Draft Report that should be considered in the Myrtle Rust risk assessment is the presence in some or many commercial guava varieties of a terminal (botanically apical) dimple or pit on the fruit, sometimes with parts of the outer floral whorl (sepals, calyx) still attached (Figure 1, Figure 2). The pit is the former flower's receptacle area within the floral disk.

This pit is a potential harbour for viable Myrtle Rust spores, and liable to be missed during a simple cleaning operation. Cleaning methods for the fruit should particularly address this pit area and any persistent sepals.

The Draft Report does not provide a full list of Guava cultivars grown in Taiwan, so it cannot be determined if any are likely to have the deep receptacle pit and persistent sepals.

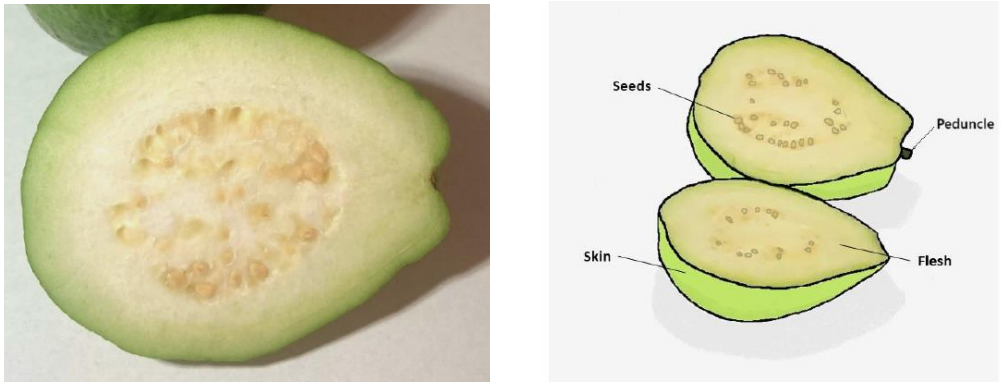

Figure 1. LEFT: Snip from Draft Report cover image, showing peduncle (stalk) attachment point at right; no receptacle dimple at wide end of fruit (at left) is apparent. RIGHT: A cartoon of the fruit (Draft Report, Fig. 1.1) with no dimple/pit.

Figure 2. Varieties of commercial Guava (two of many, cv. names not known). LEFT: showing deep receptacle pit (source: Brittanica); RIGHT: receptable pit on the sectioned fruit, and persistent triangular sepals surrounding it on the whole fruit (source: Seed Fella).

3.4 Potential for internal fruit infection

A further risk that should be addressed in the Myrtle Rust risk assessment is a known capacity for active Myrtle Rust infection and sporulation fully within fruit (perhaps in air cavities caused by tissue collapse around an infection?). This is a phenomenon seemingly absent so far from the published literature, but recognised since 2019 in Australian Myrtle Rust circles.

As far as we know, in-fruit infection has as yet only been confirmed in the native Australian species *Rhodamnia rubescens* (Figure 3). But there seems no reason why it would not occur in other soft-fruited species. Such infection, in *R. rubescens*, is not always apparent on the fruit surface.

The potential for within-fruit infection in commercial Guava is unknown. The Draft Report states (section 2.7.1) that only external visual inspection will be applied before packing for export. A new risk analysis should seek international advice as to whether this phenomenon has been observed elsewhere, in Guava or other soft-fruited Myrtaceae.

The Myrtle Rust assessment should also consider work published from New Zealand, by Rob Beresford and colleagues, on the latency of in-tissue infections in some host species (e.g. Beresford et al. 2020).

Figure 3. Rhodamnia rubescens, in-fruit infection (yellow spore masses). Images G. Errington, NSW PlantBank, 2019.

4. RECOMMENDATIONS

1. Revise the information in the Draft Report about the presence/absence of Myrtle Rust in Taiwan to include not only the 2025 detection but to also acknowledge:

(c) the likelihood that Myrtle Rust was detected in Taiwan in 1991 on eucalypt species
(d) the extreme mobility of Myrtle Rust and its regional presence, making it highly likely that it had already spread to or would soon be present in Taiwan.

2. Include a focus in the Myrtle Rust risk assessment on the following risks:

(e) the potential consequences of different strains of Myrtle Rust, including new exotic strains and the pandemic strain already present in parts of Australia
(f) the potential for genetic recombination of different variants, and hence adaptive potential, leading to host range expansion and/or more severe impacts
(g) the potential for some cultivars of Guava fruit to feature a terminal dimple or pit that can serve as a harbour for fungal spores, enabling them to evade cleaning.
(h) the potential for internal fruit infection that is not evident on the fruit surface.

3. For the Myrtle Rust risk assessment, seek expert advice prior to publishing a draft report, including with the National Myrtle Rust Working Group.

5. REFERENCES

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