

Minutes

Meeting Fifteen of the Myrtle Rust Transition to Management Group

Teleconference held on Wednesday 9 October, 2013 – 3.00pm – 3.30pm

Attendees: Tom Aldred, Department of Agriculture (DA) (Chair); Chris Howard, DA; Benjamin Finn DA; Tegan Ludzioweit, DA; Karen Butler, Department of Environment (DE); Alex Blanden, DE; Sophie Peterson, PHA (Secretariat); Suzy Perry, DAFF Queensland; Geoff Pegg, DAFF Queensland; Satendra Kumar, NSW DPI; Liz Minchinton, DEPI; Gavin Matthew, AFPA.

Apologies: Andrew Wilson, DA; Luke Osbourne, DA; Nin Hyne, DA; Greg Fraser, PHA; Rod Turner, PHA; Melissa Hart, DA; David Forsyth, DE; Mark Panitz, DAFF Queensland; Bruce Christie, NSW DPI; Kathy Gott, NSW DPI; Graham Wilson, OEH; Angus Carnegie, NSW DPI; Gabrielle Vivian-Smith, DEPI; Hugh Bramwells, DEPI; Russell McMurray, DEPI; Peter Grist, AFPA; Lucy Sutherland, ASBP.

Item 1 – Welcome by the Chair

The Chair welcomed all Members of the Myrtle Rust Transition to Management Group (MRTMG).

Item 2 – Endorsement of Minutes from the Previous Meeting

The draft minutes from Meeting Fourteen were circulated out of session and no comments were received. Members were given a final opportunity to comment or request an amendment. There were no further comments or amendment requests and the minutes were taken to be endorsed. PHA will make them available on the Myrtle Rust Transition to Management Program website.

Item 3 – Action Items from the Previous Meeting

The only action item that remained open was that of comments on the Legacy document. Members were again provided the opportunity to forward any comments they had so far. It was noted that this document will include outcomes of the research projects, many of which are completed or now due.

Item 4 – Report from PHA

Contracts

Sophie Peterson updated the status of the research projects that were provided an extension but are now due. There are still two projects yet to reach their Final Report dates. The final research contract has now been signed though the research had commenced prior to this. One project has requested a further extension and further details regarding this request have been sought.

As there are several Final Reports due close together, PHA will await receipt of them all prior to circulating to the MRT2MG and the Myrtle Rust Scientific Advisory Group MRSAG.

Item 5 – Report on Myrtle Rust Activities in Queensland

Suzy Perry gave an update on Myrtle Rust activities in Queensland. Her report is attached at Attachment A.

Item 6 – Report on Myrtle Rust Activities in NSW

Satendra Kumar gave an update on Myrtle Rust activities in NSW. His report is attached at Attachment B.

Item 7 – Report on Myrtle Rust Activities in Victoria

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Liz Minchinton gave an update on Myrtle Rust activities in Victoria. Her report is attached at Attachment C.

Item 8 – Report on National Myrtle Rust Activities

Karen Butler advised that she had nothing additional to report on behalf of DE since the last meeting.

Item 9 – Report on the Australian Seed Bank Partnership

Lucy Sutherland from the Australian Seed Bank Partnership provided a written report presented by PHA. This is attached at Attachment D.

Item 10 – Report on Forestry Activities

Gavin Matthew advised that he had nothing additional to report on behalf of the Forestry industry since the last meeting.

Gavin asked if there was a report that came out of the Workshop held in Sydney. Sophie Peterson undertook to provide some dot points out of the workshop (included below) as well as including a summary in the Legacy document.

- Workshop provided a forum for the exposure of preliminary results for all of the T2M funded research projects
- The molecular taxonomy of the organism is proving / proved more challenging than expected
- Australia only has one “strain” of the rust pathogen but, unfortunately, it is one of the more aggressive strains
- Resistance is being detected within species and the implications of this are still to be determined but for species with low population diversity there is a risk the species will be lost
- Effective chemicals for use in nurseries, gardens and urban environments have been determined and data provided to chemical companies so they can register the new use uses
- Guidelines need to be developed for Transition to Management so all involved/potentially involved know what is expected
- Project development should be a highly consultative across a wider stakeholder base (including environment, tourism etc)
- Listing of Myrtle Rust caused by *Puccinia psidii sensu lato* as a Key Threatening Process under the EPBC Act (1999) should be investigated
 - Whilst the environmental agencies supported this approach, a number asked some fundamental questions: what could be done to minimise environmental impact of this organism? And what would listing achieve?

There was some discussion at the teleconference regarding listing of Myrtle Rust caused by *Puccinia psidii sensu lato* Key Threatening Process under the EPBC Act (1999). Karen Butler undertook to follow up with Joanne Nathan (who attended the Workshop) if any applications for listing of the disease as a Key Threatening Process had been received and other details about the application process (i.e., who can submit a proposal?)

Item 11 – Next Meeting

The date for the next meeting was not set but was proposed for late January.

Item 12 – Close of Meeting

The Chair thanked the Members of the MRTMG for their participation in the teleconference and closed the meeting.

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Attachment A

Queensland Update – Meeting Fifteen of the Myrtle Rust Transition Management Group Fifteen held by teleconference on Wednesday 9 October, 2013

Disease Reports

Reports of myrtle rust in Queensland have been increasing over the past few weeks. To date, 4723 reports or enquires regarding myrtle rust have been received by the Queensland Department of Agriculture, Fisheries and Forestry (DAFF) Myrtle Rust On-line Reporting System.

Geographic Range

The current geographic range of *Puccinia psidii* extends from the Queensland/New South Wales border in the south, to Cooktown in far north Queensland.

Recently, there was a report of myrtle rust on Geraldton wax at Chinchilla, which is still being investigated. If confirmed, this will be the first record of myrtle rust being established in the environment west of the Great Dividing Range in Queensland.

Host Range

Five new species have been identified as hosts of myrtle rust since the last MRTMG meeting.

The new species are:

Gossia lewisensis

Homoranthus virgatus

Hypocalymma angustifolium

Leptospermum trinervium

Syzygium banksii

The known host range in Queensland includes over 165 species from 38 genera within the Myrtaceae family

Research Activities

Disease monitoring and host screening activities continue.

The PBCRC project 'Managing myrtle rust and its impacts' has commenced.

Field assessments investigating disease rating systems, disease epidemiology and impact have continued in Qld and NSW. Rust levels are higher in October than previous years despite minimal rainfall since June.

Clones of hosts of different rating susceptibilities (1-5 based on Brazilian rating system) are being developed and will be used to:

- Test difference in isolate aggressiveness
- Test effect of leaf age on disease development
- Test effect of spore concentration on symptom development and severity

Screening of commercial eucalypts

- Spotted gum (*C. variegata*) and *E. globulus* are being examined at a family level for resistance genes in collaboration with the University of Tasmania.

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- Collaborative process in place with Acelino Alfenas in Brazil to look at differences in susceptibility of eucalypts to the strain of rust present in Australia and those in Brazil. A student will be coming to Australia for 12 months centred out of the Sunshine Coast University and DAFF Queensland.

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Attachment B

Myrtle Rust in NSW – report from NSW DPI for Myrtle Rust Transition to Management Group Fifteen held by teleconference on Wednesday 9 October, 2013

- No new reports of Myrtle Rust were received in July/August and only 3 were received in September
- It is unknown if this is due to season (winter) or the length of time the pathogen has been in NSW and the general awareness on its management is relatively good
- No reports of Myrtle Rust have been received from the west of the Great Dividing Range in NSW
- Dr Angus Carnegie is involved in a CRC for Plant Biosecurity funded research work with DAFF Queensland
- The MRT2M funded project 'Genome sequencing of myrtle rust, *Puccinia psidii sensu lato*' conducted by NSW DPI researchers (led by Dr. Mui-Keng Tan) has been completed and the report will be of interest to all.

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Attachment C

Myrtle Rust in Victoria – report from the Department of Environment and Primary Industries Victoria for Myrtle Rust Transition to Management Group Fifteen held by teleconference on Wednesday 9 October, 2013

Situation Report

- There have been two new detections since the June 2013 report, at adjoining private residences in Canterbury, inner eastern suburbs of Melbourne. The infections, all on *Lophomyrtus* (probably “Black Stallion”) may have been present since last Autumn as old lesions appear to be re-sporulating (Fig. 1.).
- The total number of myrtle rust detected sites stands at 78, mainly across Melbourne, with outliers in Shepparton and Ballarat (Fig. 2.).
- The disease has not yet been detected in natural bushland.
- The weather conditions over winter were not conducive to the spread of myrtle rust but this has changed with the warmer, wet weather in spring. Disease development trends have been similar in 2013 to those of 2012 (Figs. 3. and 4.).

Training and Communication

Approximately 425 people attended seven information sessions held from late May to early September at Alexander, Nillumbik, Sunraysia, Yates, Leongatha, Westgate Park and Treenet National Street Tree Symposium.

A presentation by Professor Alfenas from the Federal University of Viçosa, Brazil, a world authority on myrtle rust, was given at DEPI Knoxfield. The seminar was attended by over 60 people including scientists, government agents, the nursery and forestry plantation industries, councils and friends groups. Professor Alfenas was also taken on a tour to the Otway Ranges. A report on the professor’s visit was submitted to ‘Around the State’, DEPI’s internal e-newsletter.

Information and images were provided for a national myrtle rust update in the ‘Horticultural Media Australia News’ magazine.

There is still a demand from local councils and land management groups for myrtle rust awareness, hygiene and identification information.

The DPI website updates included dates of upcoming information sessions and has recorded 423 visits to the myrtle rust landing page during May and 335 in August.

Another myrtle rust update was prepared and distributed to the Coordination Committee and other relevant and interested parties in September 2013.

Surveillance and Tracing

There has been good participation from stakeholder groups in the surveillance program and participation is increasing. Over 150 sentinel sites have now been established and data from these sites is provided by land managers e.g. Parks Victoria, for collation by DPI (Fig 5). These sites provide an early warning in areas of high risk such as significant bushland sites. Recently members of the Varroa mite project of the DEPI “Growing Fruit and Fibre Initiative” will add myrtle rust surveys to their list of surveyed diseases which will further increase the sentinel site network.

Market Access and Compliance

On 30 June 2012, myrtle rust was declared an endemic disease in Victoria and the Victorian Importation Order was rescinded. This means that Myrtle Rust host material is able to enter Victoria from disease affected states without certification. It remains illegal under Victorian plant biosecurity legislation to sell plants with visible symptoms of Myrtle rust.

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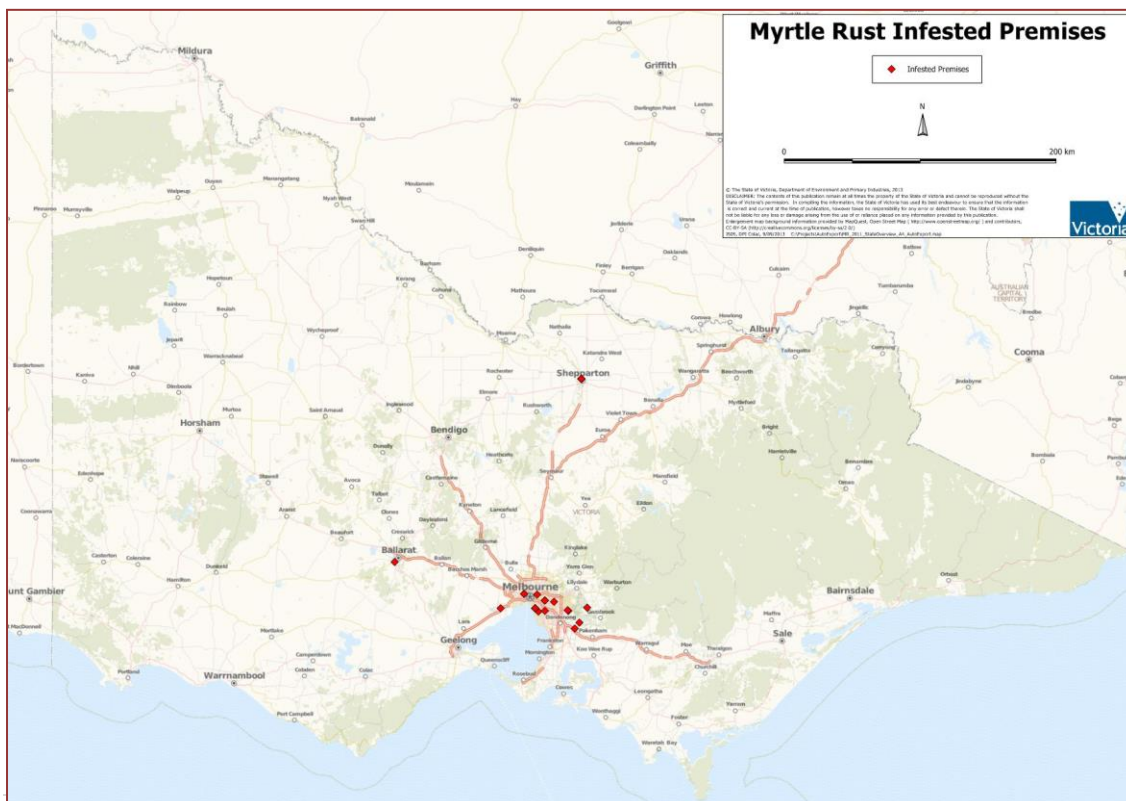
Management

- Some of the sites re-surveyed during autumn and winter and declared negative for myrtle rust may be re-surveyed in Spring to determine if the disease symptoms have re-appeared.
- One nursery is using a boom to blow air into seedling trays to reduce leaf wetness. It has achieved both an impressive reduction in general fungal diseases and an increase in whole seedling growth (Peter D Clarke pers. comm.).

Fig. 1. *Lophomyrtus* plants showing symptoms of myrtle rust (see arrows) with sporulation on old lesions – Canterbury residential site September 2013.

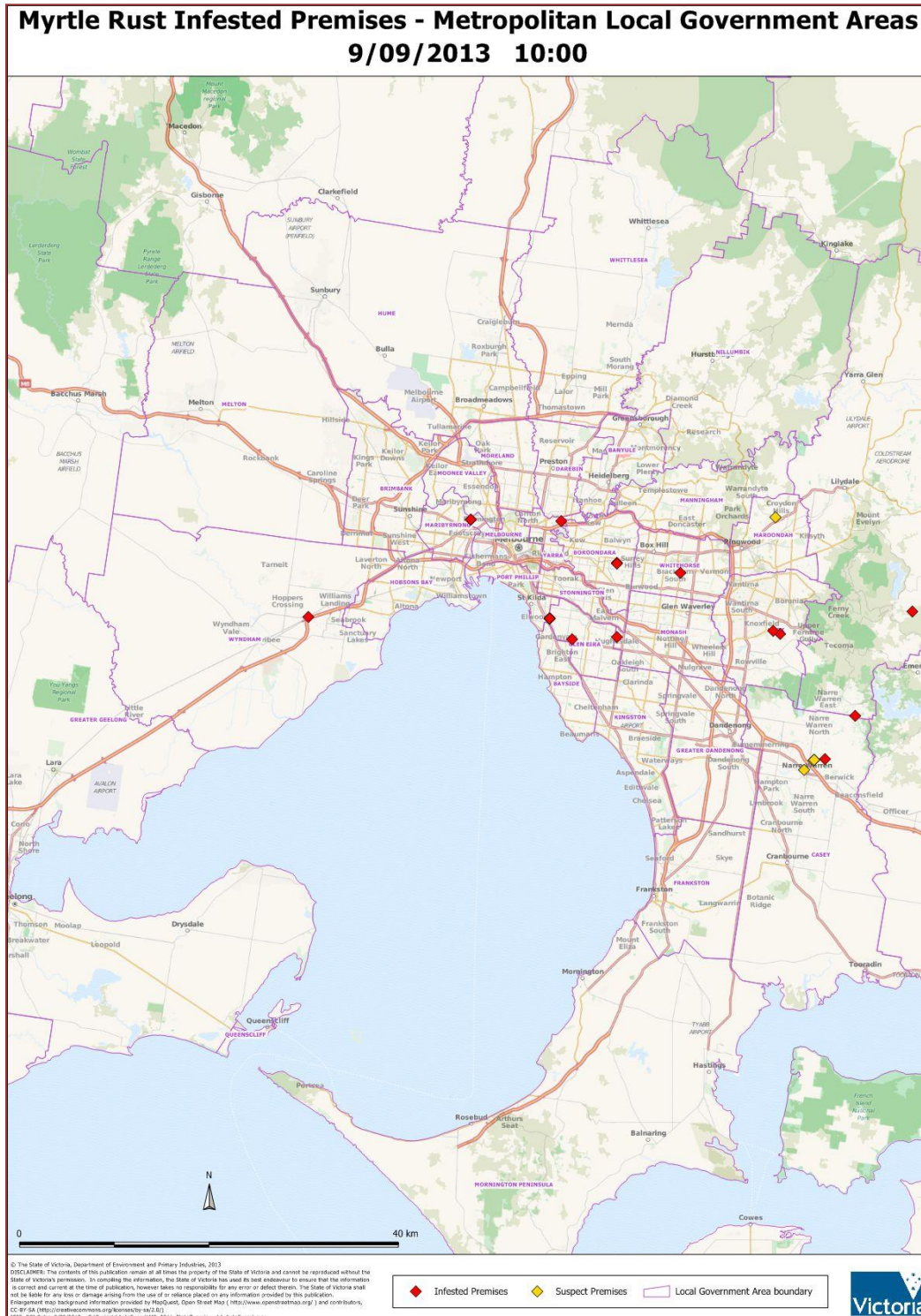


Fig. 2a. Myrtle rust infested premises, state wide (winter 2013).



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Fig. 2b. Myrtle rust infected premises (winter 2013) Melbourne CBD.



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Fig. 3. Cumulative monthly myrtle rust detections for 2012.

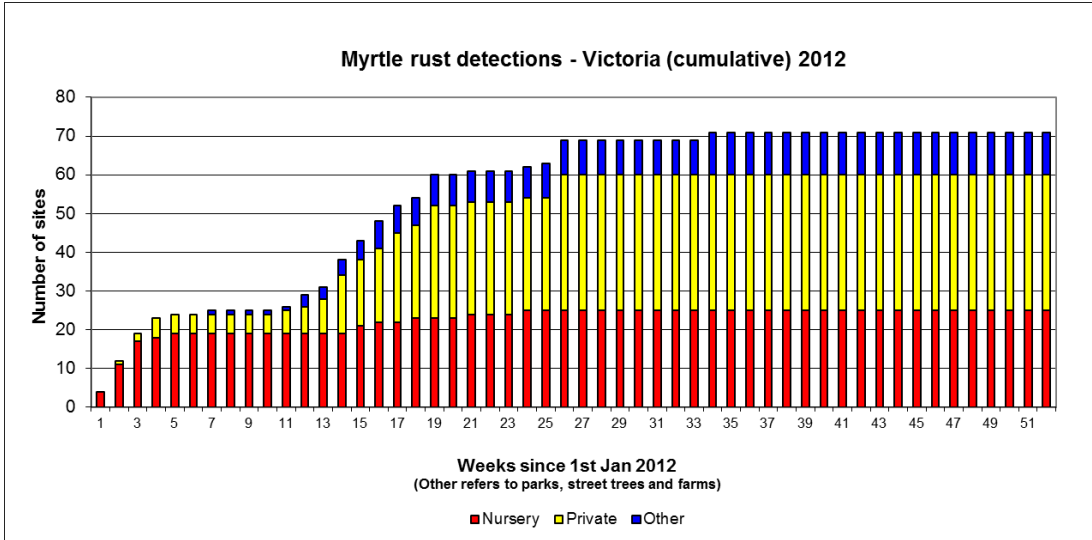
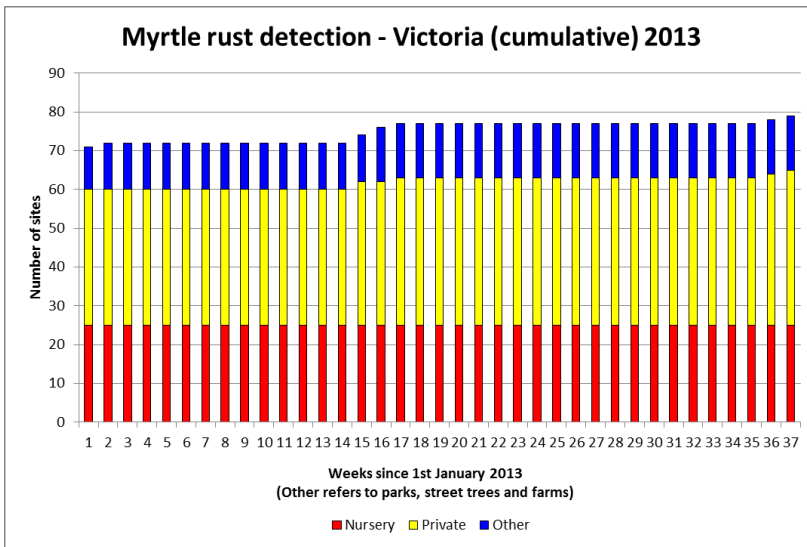


Fig. 4. Cumulative monthly myrtle rust detections for 2013.



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Attachment D

Report from the Australian Seed Bank Partnership for Myrtle Rust Transition to Management Group Fifteen held by teleconference on Wednesday 9 October, 2013

Report to the Myrtle Rust Transition to Management Group 09/10/2013

1. The Partnership has received a grant from the Foundation for National Parks & Wildlife to collect and bank seeds of 8 threatened species susceptible to myrtle rust. The work will focus in NSW and Qld.
2. The Partnership was invited to submit a large grant proposal to a Trust for conservation seed banking of Eucalypt species. The Secretariat will be advised at the end of the week if the grant application was successful.
3. The ASBP has recently investigated the status of eucalypt taxa in Australia's conservation seed bank collections. A summary of the findings is presented below:

Within Australia's conservation seed banks there are estimated to be 5055 collections of eucalypt taxa in the broad sense including *Angophora*, *Eucalyptus*, *Corymbia*, *Stockwellia* and *Allosyncarpia*. Of the total number of existing eucalypt collections, around 23% (n=1152) have been collected and banked to the international standards established as part of the Millennium Seed Bank Partnership.

Of the 1145 recognised eucalypt taxa according to the Australian Plant Census, there are collections of 666 (58.2%) of these taxa in Australian conservation seed banks that meet the international standards for collecting and storage (Table 1).

Of the seventy six (76) eucalypt taxa listed as threatened in the Environment Protection and Biodiversity Conservation Act (EPBC 1999), 81.6% are contained in Australian conservation seed bank collections.

Few of the collections are in sufficient quantities for species recovery actions or for conservation of the genetic diversity of the species, especially when the geographic (and by implication, genetic) range of widespread species is considered. More specifically, there are several critical gaps in Australia's eucalypt conservation ex situ seed collections:

- There are 487 eucalypt taxa that have no collections within Australia's conservation seed banks.
- Fourteen (14) of the EPBC listed eucalypts are not represented in Australia's conservation seed bank collection.
- Few of Australia's current conservation collections capture the genetic diversity of eucalypt taxa.

Table 1: Eucalypt conservation seed collections in Australia (Years 2000-2013)

Eucalypts (species numbers include phrase names and hybrid species)	Number of taxa in Australia according to the Australian Plant Census	Number and % of eucalypt taxa in seed banks¹
Angophora species	12	10 (83.3%)
Angophora subspecies ²	2	2 (100%)
Corymbia species	98	45 (43.9%)
Corymbia subspecies ²	13	1 (13%)
Eucalyptus species	825	532 (64.5%)
Eucalyptus subspecies ²	156	72 (46.1%)
Eucalyptus varieties ²	37	4 (10.8%)
Stockwellia species	1	0
Allosyncarpia species	1	0

¹ Using the Australian Plant Census (APC), 62 taxa (equivalent to 62 collections) were excluded from this table because the taxonomy of these collections could not be verified. The majority of these are likely to be excluded or doubtful names that have not yet been entered into the Australian Plant Name Index (APNI) database.

² These figures represent non-autonym taxa and are not included in the species numbers given.

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