WANTED

Sightings of rare fungi!



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How to identify and record information to help save Tea-tree Fingers.

SJM McMullan-Fisher, Version 8 (July 2021)





About Tea-tree Fingers



Tom May CC-BY-NC

- Hypocreopsis amplectens (Tea-tree Fingers or TTF) is the only macrofungus listed under the Victorian Flora and Fauna Guarantee Act 1988. However, as yet, no action plan for this species' survival and recovery has been developed.
- This was assessed as critically endangered IUCN global assessment in 2019. The risks associated with fire, habitat degradation and climatic warming are real threats to this species survival.
- Surveys by Fungimap and the local community and Royal Botanic Gardens Victoria suggest that it has disappeared from known locations on the Mornington Peninsula. But the good news is that a new sites have been found by the Royal Botanic Gardens Victoria on French Island and in the Gurdies near the other two Coastal Gippsland sites. There is also a population in the Yarra Valley being conserved by Trust for Nature.
- This booklet is designed to help you recognise and record information about this rare fungus. If you have any questions, contact Fungimap Conservation (fungimapconservation@gmail.com).

Good luck fungi hunting. If you have any questions, please contact Dr Sapphire McMullan-Fisher.



Please help find Tea-tree Fingers

This booklet is designed to help you recognise and record information about this rare fungus. We hope to find out more about new populations which could be present on public or private areas of bushland. This species has been found in other vegetation including forests with southern beeches: *Lophozonia* and *Fuscospora* (previously *Nothofagus*) in New Zealand, New South Wales - and possibly Tasmania.

Get to know what Tea-Tree fingers looks like and keep your eyes open wherever you go!

Important:

- Please do NOT collect Tea-tree Fingers (Hypocreopsis amplectens) or host species. At this point, we have not learned enough about the biology to know if collecting is detrimental to populations.
- Please be aware that locations where it could be found may have high conservation value. In order to prevent the spread of weeds and pathogens, good hygiene is essential.
 Before carrying out any searches, please make sure to clean and dry any equipment, including footwear, bags and hats etc. Ideally <u>Phytoclean</u> or methylated spirits should also be used to clean boots and equipment <u>between</u> any sites you visit.



Where does Tea-tree Fingers live?

Known Victorian populations have been found in long-unburnt heathy woodlands and Tea-tree thickets on the Mornington Peninsula, Coastal Gippsland and the Upper Yarra Valley.

Tea-tree Fingers only fruits on some of the available woody substrates, mainly standing dead wood (stags) and branches. These are usually about 5 cm diameter and about 1 m long.

Typically it favours wood that is dead but not yet lying on the ground.



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Take care moving through the bush. Be aware of this species substrate requirements and avoid trampling dead and falling wood onto the ground.



Which plants does it live with?

Hypocreopsis is mainly found on:

- Prickly Tea-tree (Leptospermum continentale top right)
- Silky or Heath Tea-tree (Leptospermum myrsinoides middle right)
- Yarra Burgan (Kunzea leptospermoides)
- Prickly Broom-heath (Monotoca scoparia)

It has also been found on the wood of:

- Tea-tree or 'Manuka' (Leptospermum scoparium)
- Scented Paper Bark (Melaleuca squarrosa bottom right)
- Kunzea sp.
- Scrub Sheoak (Allocasuarina paludosa)
- Silver Banksia (Banksia marginata)
- Spike Beard-heath (Leucopogon australis)

It is important to note the plant species on which it has been found. Take photographs of fruit, flowers, leaves and bark to aid plant identification, if you are not sure.



Lyn Allison

Identify Tea-tree Fingers

Found on dead and living branches of trees and shrubs long-unburnt thickets and heathlands in Victoria, this firm-textured, brown, irregularly shaped species clasps dead branches with light brown, finger-like projections.

Hypocreopsis amplectans grows up to 90 mm in length in a raised mass edged with irregular lobes up to 8 mm wide. The lobes are brown with tips of paler yellowish-brown. White, powdery areas are often found on older specimens.

Fresh looking fruit bodies have been found from Feb – November.

The fruit bodies are about the size of 50¢ coin (~1-5 cm) and the branches they were found on were ~3 cm in thick.



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Look-alikes

A word of caution! Some other organisms bear a resemblance to Tea-tree fingers. For example, it is thought that unconfirmed sightings of *Hypocreopsis* from Tasmanian may be a species of lichen.



Photo-monitoring

The fruit bodies of Tea-tree Fingers may persist for several seasons. Shown here is an image of a fruit body over a year old, the right hand portion of which appears to still be fertile.

Photo-monitor by taking photos every month or two from the same position during the growing season (~Feb – October). Please take several images of fruit bodies from different angles each time you monitor. Include a scale like a ruler in some of the pictures.



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Spotted it? Let us know!



Please join our iNaturalist Australia project

Tea-tree Fingers plant hosts

https://inaturalist.ala.org.au/projects/tea-tree-fingers-plant-hosts

Please add up the time you spent searching and add a habitat shot of the plant host you looked at. If there were multiple plant hosts then divide the time according to plant host frequency and do separate observations for each plant host considered.

In notes please note habitat condition like weeds and any information about threats or time since disturbance.

Likely plant hosts include:

Prickly Tea-tree (Leptospermum continentale)
Silky or Heath Tea-tree (Leptospermum myrsinoides)
Yarra Burgan (Kunzea leptospermoides)
Prickly Broom-heath (Monotoca scoparia)
Tea-tree or 'Manuka' (Leptospermum scoparium)
Scented Paper Bark (Melaleuca squarrosa)
Silver Banksia (Banksia marginata)
Kunzea sp.
Leptospermum sp.

IUCN Red List information

https://www.iucnredlist.org/species/801 88449/80188453





Prevent weedy fungi 😂

Protect our bush by arriving with clean and dry equipment, including footwear and hats. Below are two fungal weeds that are commonly spread by people, so best to *Arrive* clean. Leave clean!

https://fungimap.org.au/help-stop-the-spread-of-weedy-fungi/

Orange Ping-pong Bats (Favolaschia calocera)

This weedy wood rot fungi pushes out the diversity of native fungal recyclers. They can spread spores from high in the canopy so best to prevent them getting into your local bushlands.

Fly Agaric (Amanita muscaria)

This weedy mycorrhizal fungus came in with Pine trees. As well as many exotic trees it is a less useful partner to Eucalypts and Myrtle Beech trees.



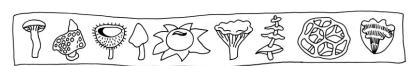
 Orange Ping-pong Bats (Favolaschia calocera, Richard Hartland)



Fly Agaric (Amanita muscaria, Ian Bell)

Please Take Care

- Protect our bush by arriving with clean and dry equipment, including footwear and hats. So best to Arrive clean. Leave clean!
 - Ideally Phytoclean or methylated spirits should also be used to clean boots and equipment between any sites you visit.
 - For vehicles do not drive on access tracks when it is wet.
 - Never go from infected sites to clean areas.
 - These protective measures help prevent the spread of species we don't know are a problem yet.
- Be mindful of rarity.
 - Do not collect all fruit bodies, leave some for spores.
 - Be careful about not disturbing or removing substrate.
 - Please do NOT collect Tea-tree Fingers (Hypocreopsis amplectens), nor Hymenochaete species.
- Have a Permit for collections
 - If collections are made ideally written proof like an email of land holders permission (for the Nagoya Protocol which is trying to prevent biopiracy).
 - Tea-tree Fingers (Hypocreopsis amplectens) and lichens: Black-beard Lichen (Neuropogon acromelanus), Xanthoparmelia suberadicata and Xanthoparmelia victoriana are a FFG listed species in Victoria so a specific collection permit is needed.



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Who does it live with? - on other fungi!

Hypocreopsis is unusual, because it lives on other species of fungi, probably as a parasite - either on the fruit body or the mycelium; possibly both. As yet we know very little about how it lives, which is why your help is so important.

The organisms on which it lives are wood-rotting fungi. The main host is thought to be the species of shown here *Hymenochaetopsis*, which emerge as flat patches on the under surface of fallen logs and branches. These develop pale edges and some may start to shelve. It may also grow on species of *Hymenochaete* and possibly *Cyclomyces*, , *Hydnochaete*, *Phellinus*, and *Pseudochaete*.

Remember to photograph the host fungi, as part of the record images.

You might need to use a mirror!

SJM McMullan-Fisher





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Record other fungi

Naturalist 1

Please record other fungal observations using this iNaturalist project **Fungimap Australia**: https://inaturalist.ala.org.au/projects/fungimap-australia

Lost fungi

Help us find our uncommon Victorian fungi. Not all fungi are not so easily recognisable and some of them are rarely seen. Some fungi naturally occur infrequently, or in low numbers. These uncommon fungi are at greater extinction risk than common fungi as the reproduce infrequently. To help conservation efforts we need to record both when they are seen but also when we have been to likely habitat or a known site where they have occurred in the past and record their absence.





Find out more about other rare fungi here: https://fungimap.org.au/lost-fungi/lost-fungi/

fungimap



Lost Fungi



Two-tone Pin (*Chlorovibrissea bicolor*, John Eichler)



Beenak Long Tooth (Beenakia dacostae, Jurrie Hubregtse)



Tea-tree Fingers (Hypocreopsis amplectens, SJM McMcMullan-Fisher)



Green-staining Coral (*Phaeoclavulina abietina*, Mark Campobasso)





Lost Agarics



Blue-grey Navel (*Arrhenia* aff. *chlorocyanea*, John Eichler)



Grey *Jockey (Asterophora mirabilis,* John Eichler)



Steel-blue Rozites (Cortinarius metallicus, John Eichler)



Russet Rozites (Cortinarius perfoetens, John Eichler)





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- Southern Peninsula Indigenous Flora & Fauna Association
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