# How to identify & record information to help save Tea-tree Fingers

SJM McMullan-Fisher, Version 9 (July 2023)

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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.

**Please do NOT collect** Tea-tree Fingers (TTF, *Hypocreopsis amplectens)* or host species.

CRITICALLY ENDANGERED
CR

IUCN Red List information
https://www.iucnredlist.org/species/80188449/80188453

fungimap

# 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. As yet, no action plan for this species' survival & recovery has been developed.
- Assessed as **Critically Endangered** IUCN global assessment in 2019. Fire, habitat degradation & drying due to climatic warming are real threats to this species survival.
- Surveys in Victoria by Fungimap and the local community and Royal Botanic Gardens Victoria have discovered new sites have been found by the Gardens on French Island, in the Gurdies and other Western Port Woodlands. There is also a population in the Yarra Valley being conserved by Trust for Nature.
- Even though TTF hasn't been seen in Mornington NP for decades, we found suitable habitat worth protecting in the hope of future colonisation via natural or human-assisted means
- This species has been found in other vegetation including forests with southern beeches: *Nothofagus, Lophozonia* & *Fuscospora* in Canterbury, New Zealand, New South Wales and possibly Tasmania.
- 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 finding it.*

*If you have any questions, please contact*

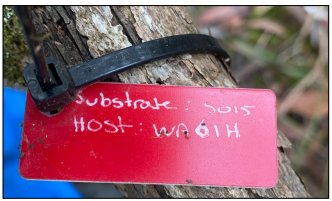
*Dr Sapphire McMullan-Fisher.*

# Spotted TTF or its hosts? Let us know!

Please join our iNaturalist Australia project

**Tea-tree Fingers hosts: Plant & Fungal**

www.inaturalist.org/projects/tea-tree-fingers-hosts-plant-and-fungal

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**Absence data** helps! So please add up the time you spent searching but not finding it! Add **habitat** & **plant hosts shots**. If there were multiple plant hosts then record time for dominant plant In notes please note other likely plant hosts & habitat condition elements like weeds, and any information about threats or time since disturbance.

•Where the host fungi is in recognisable as reproductive as skin or leathery shelf fungus, save as Genus **Hymenochaete.** Please make each different host fungus a separate observation

•If only binding mycelium is visible save as Family **Hymenochaetaceae**

•If it is a hoof or bracket fungi record it as Class **Polyporales**

•If you are uncertain what it is but you think it is fungal use **Fungi including Lichens** (Kingdom Fungi)

•If you spot a tag like above in the bush please take a picture of it too. This helps track the individual TTF over time.

# Identify Tea-tree Fingers

*Hypocreopsis amplectens* grows as a firm-textured, brown, irregularly shaped species clasps dead branches with light brown, finger-like projections or lobes. TTF lobes are brown with tips of paler yellowish-brown with fine furry texture.

Fresh looking reproductive have been found from Feb – November. Some regrow from older tissue.

Pale patches on right are holes from being eaten by arthropods.

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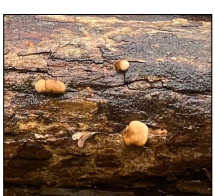
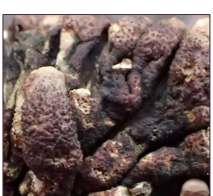
*TTF range in size <5¢ to 50¢ coins (~1-5 cm)*

# Record their breeding condition:





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Left - **Nubs** & immature tissues have not released spores & minutely textured
Middle - **Mature** tissue, often darker with bumps or holes have released spores.
Right – **Dead** tissue these old 'scars' may last months to several years depending on predation & weather conditions.

# TTF lives *on other fungi!*

*Hypocreopsis* is unusual, because it lives on other species of fungi, as a myco-parasite. As yet we know very little about how it lives, which is why your help is so important.

TTF lives on wood-rot fungi. The main host is thought to be the species of shown here *Hymenochaete* (right).

These reproduce on the underside of wood as flat patches some develop pale edges (top right) & some may start to shelve. Sometimes the only visible tissues are binding mycelium may be observed that joins litter & vegetation together. These may be cream, yellowish to brown coloured (lower right).

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*Remember to take images of the host fungi. You might need to use a mirror!*

# Possible hosts

It may also live on fungi in the family *Hymenochaetales,* possibly including *Cyclomyces, Hydnochaete, Phellinus,* & *Pseudochaete. S*ome of these are skin, leathery shelf, bracket or hoof shaped sometimes with pores or teeth.

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# Where does TTF live?

Known Victorian populations have been found in **long-unburnt** (>35 years) **heaths, heathy woodlands, Tea-tree thickets & lowland forests** with dense understory on the West Gippsland & the Upper Yarra Valley.

TTF is found  often standing or falling branches & twigs. These are usually about 5 cm wide & maybe about 10 cm-4 m long. Other vegetation maybe bound together by the host fungi.

*Take care moving through the bush & avoid trampling dead & falling wood.*

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# TTF look-alikes

*Hypocrea* (the sexual stages of *Trichoderma,* right) are relate, that looks similar but these do not form fingers that clasp the substrate.

Also some lichens look like the old scars of TTF (below).

# Which plants does TTF live with?

It is mainly found on:

- Prickly Tea-tree *(Leptospermum continentale*), Silky or Heath Tea-tree *(L. myrsinoides*), Yarra Burgan *(Kunzea leptospermoides),* Prickly Broom-heath (*Monotoca scoparia),* & Scented Paper Bark (*Melaleuca squarrosa*)

It has also been found on:

- *Leptospermum* sp. & *Kunzea* sp., Spike Beard-heath *(Leucopogon australis),* Sheoaks (*Allocasuarina* sp.), Silver Banksia (*Banksia marginata),* Austral bracken *(Pteridium esculentum)* & Messmate Stringybark (*Eucalyptus obliqua)*
- Possibly it occurs on Coastal Tea-tree (*Leptospermum scoparium*), or scrambles on to nearby herbs & sedges.

Lyn Allison

*Record plant species on which it has been found, including images for identification of fruit, flowers, leaves and bark & importantly* ***habitat.***

# Prevent weedy fungi ☹

Protect our bush by arriving with clean and dry clothes, equipment, including footwear & hats. Phytophthora dieback & other problems like the two fungal weeds weeds that are commonly spread by people, so best to ***Arrive clean. Leave clean!***

https://fungi4land.com/working-with-fungi/problem-fungi/

## ☹ Orange pore fungus (*Favolaschia calocera/claudopus)*

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 pore fungus (Richard Hartland)

☹ Fly Agaric (Ian Bell)