



Hypocreopsis amplexans (Tea Tree Fingers), image credit: Sapphire McMullan-Fisher

Mycommunity Tea Tree Fingers research grant update

By Ema Corro

Our Fungimap research grant project was to design LAMP primers for the critically endangered Tea Tree Fingers fungus.

LAMP stands for Loop Assisted Isothermal Amplification. It is a method of searching for the DNA of a species in an environmental sample such as soil or wood. It has been used in the UK and US as part of their Covid testing. It uses less lab equipment than many other similar testing methods and can show presence/absence using a colour change test.

We are still developing the primers. We have designed and tested several sets so far. While these all work on the Tea Tree Fingers, they also appear to give false positives for a closely related and extremely common soil fungus called *Trichoderma*. Currently we are waiting to access more data from different regions of the fungus genome so that we can design primers that don't have this problem.

We have also been teaching the public and volunteers about the Tea Tree Fingers, including doing a survey in Nyora earlier in the year with about a dozen volunteers. No new populations were found, but we did find a new sporebody on a population that hadn't been seen for a couple of years.



LAMP reaction (yellow shows presence of DNA), image credit: Ema Corro