

Tyntesfield Audit, 23 March 2022

Pale Bramble Rust (*Kuehneola uredinis*) was extremely common on stems of *Rubus fruticosus* (Blackberry) throughout the Estate.



Another very dry month! The majority of fungi found were plant pathogens - rusts and mildews.

The species found are listed below, along with some images.

Two species are worthy of comment:

Beside Five Ways Combe we sighted a small yellow mushroom growing from the base of a very decayed beech tree. The immediate identification was one of two species of *Pluteus* - *P. chrysopheus* or *P. leoninus*. The latter has not been found at Tyntesfield yet. So a sample was examined carefully under the microscope. The distinction between the two species relies on the type of cells on the surface of the cap. *P. chrysopheus* has clavate/sphaeropedunculate cells, whilst *P. leoninus* has cylindrical/fusiform cells. As shown below, this sample was clearly another example of *P. chrysopheus*. The hunt for *P. leoninus* goes on.

The other notable fungus was the clear and very disappointing massive development of *Pestalotiopsis funerea* on the leaves of the Wollemi Pine. We had first seen this in our very early audits and had eventually identified it in 2015 as *Pestalotiopsis funerea*. Since then we have made regular observations and generally the fungus was noted to be present but had not caused any notable effects of the tree. Now, the amount of dead leaves on the tree has increased considerably and is making the tree quite unsightly.

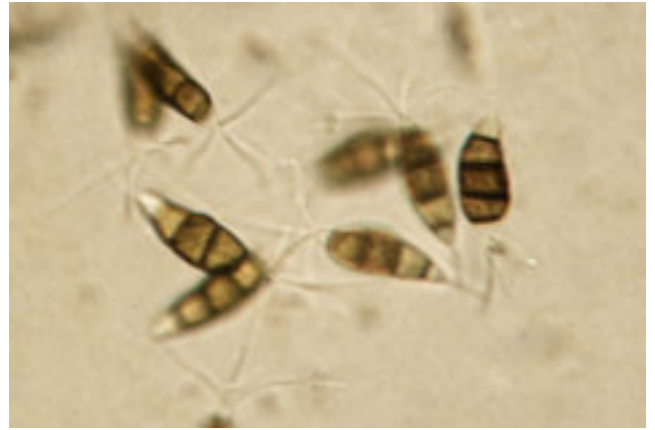
List of Fungi

Calocybe gambosa
Coprinellus micaceus
Ganoderma australe
Hypholoma fasciculare
Hypoxylon fragiforme
Kretzschmaria deusta
Kuehneola uredinis
Kuehneromyces mutabilis

Leptosphaeria acuta
Melampsora populnea
Nemania serpens
Pestalotiopsis funerea
Phoma hedericola
Phragmidium violaceum
Pluteus chrysophaeus
Polyporus brumalis

Puccinia sessilis
Ramularia rubella
Trametes gibbosa
Trichia persimilis

Pestalotiopsis funerea (Tip Blight of Conifer) on leaves of the Wollemi Pine. Examination of the spores produced on the surface of the leaves revealed the characteristic spores - multicelled with a single appendage at one end and multiple appendages at the other



Pluteus chrysopheus (Yellow Shield). A young sample was found on decaying beech. This showed typical calvate/sphaeropenduculate cells on the cap surface.

