Tyntesfield Audit 13 Jun 2019

What a difference! A week of rain had stirred the fungi into life – nearly 40 different species. Grass everywhere was full of "little brown jobs", including many unidentified *Psathyrella* species and *Parasola conopilus* (see below), *Panaeolina foenisecii* and *Panaeolus fimicola*.

Perhaps most surprising, were several examples of mycorrhizal *Russula cyanoxantha* and *R. atropurpurea.* The largest species found was *Agaricus osecanus,* 15cm across, which was growing in association with Sequoiadendron.

The most interesting species *was Inocybe erubescens* (aka *I. patouillardii*) – the Deadly Fibrecap! The latter was growing in large numbers under beech at the side of the track in Plantation. This species is notable for its extreme toxicity. It contains the toxin muscarine and has been known to cause death This toxin is also present in *Amanita muscaria* (Fly Agaric), but at much lower concentrations. The symptoms of intoxication with mushrooms rich in muscarine start early, after one-quarter to two hours, with headache, nausea, vomiting, salivation, lacrimation and excessive perspiration. Death can occur after 8 to 9 hours. Clearly one to avoid.

A very welcome sight were several flower spikes of the Common Spotted Orchid (*Dactylorhiza fuchsii*) on the Meadow and some early spikes of the Yellow Broomrape (*Orobanche sp*.) beside the track in Plantation.

Notes on other fungal species are given in the illustrations listed below. Unfortunately the wet conditions were not ideal for photography.

List of Fungi

Agaricus osecanus
Agrocybe pediades
Agrocybe praecox
Antrodia serialis
Auricularia auricula-judae
Bjerkandera adusta
Bolbitius titubans
Calocera pallidospathulata
Crepidotus mollis
Exidia thuretiana
Fuligo septica
Galerina graminea
Ganoderma australe
Gymnopus ocior
Hypholoma fasciculare
Inocybe erubescens
Lycogala epidendrum
Lycoperdon perlatum
Marasmius oreades
Marasmius torquescens
Mycena pelianthina
Mycena rosea
Mycena vitilis
Nectria cinnabarina
Panaeolina foenisecii
Panaeolus fimicola
Parasola conopilus
Parasola plicatilis
Peniophora lycii
Phallus impudicus
Pleurotus ostreatus
Pluteus cervinus
Pluteus phlebophorus
Polyporus brumalis
Polyporus squamosus
Postia subcaesia
Puccinia caricina
Puccinia lagenophorae
Russula atropurpurea
Russula cyanoxantha
Stereum hirsutum
Tremella mesenterica
Tubaria furfuracea

Agaricus osecanus. This is one of the larger species of Agaricus, which though not turning yellow on bruising does so when treated with NaOH. It is readily distinguished from other large Agaricus by having small spores (6-7µ).

Calocera pallidospathulata. The Pale Stagshorn fungus was present in very large numbers, covering large areas of fallen decorticated beech trunks. Another example of the influence of heavy prolonged rain.

Inocybe erubescens. Mature examples showing extensive reddening of the fruitbodies.

Mycena rosea. A beautiful species growing under beech. This fungus that has been notably rare during the last 12 months of dry conditions. So good to see it flourishing once more.

***Phallus impudicus*.** A Stinkhorn Egg emerging through the litter. Mature Stinkhorns were not seen during the Audit , though had been seen by NT staff earlier in the week

***Tubaria furfuracea*.** Large examples of a very common species, growing in litter near a large log pile, in association with *Bolbitius titubans.*

***Hypholoma fasciculare*.** Growing on wood in the middle of a path in the Plantation

Microscopy can reveal aspects of fungal structures that are essential for their identification. An excellent example was provided by studies of a *Marasmius sp*. found by Judith beside the path in Plantation. Was it *M. cohaerens* or *M. torquescens*? A look at the surface of the stipe revealed long setae typical of *M. torquescens* all across the surface.