Tyntesfield Audit, 4 August 2023

After a gap of two months the Audit team met up following a very wet July. Previous Audits had been postponed, firstly because of the extensive drought in May and June and the secondly because of storm force rain in July. However, on this occasion we were welcomed by calm weather and treated to a great array of fungi, almost 70 species being identified.

There was one species new to Tyntesfield - *Inocybe godeyi*. When found it was clear that this was one of the two species of Inocybe (*I erubescens* and *I. godeyi*) that turn red when handled. The pruinose stem, marginate stem base and large metaloid cystidia clearly proved this was *I godeyi*.

Agaricus altipes Amanita ceciliae Amanita rubescens Anthracobia melaloma **Bolbitius titubans** Boletus chrysenteron Boletus subtomentosus Calvatia gigantea Ceratiomyxa fruticulosa var. fruticulosa Chlorophyllum rhacodes Clitopilus prunulus Coprinellus micaceus * Coprinopsis stercorea Crepidotus mollis Echinoderma perplexum Fuligo septica Ganoderma australe Ganoderma resinaceum Geastrum triplex Gymnopus confluens Gymnopus dryophilus Gymnopus peronatus Hymenopellis radicata

Hypholoma fasciculare Hypomyces chrysospermus Inocybe adequata Inocybe fibrosoides Inocybe geophylla var lilacina Inocybe godeyi Inocybe maculata Inocybe rimosa Kuehneromyces mutabilis Laccaria amethystina Laetiporus sulphureus Lepiota pseudolilacea Lepista flaccida Lycoperdon perlatum Marasmius oreades Marasmius rotula Megacollybia platyphylla Mycena pelianthina Mycena speirea Panaeolus cinctulus Parasola plicatilis * Pilobolus crystallinus Pleurotus ostreatus Pluteus cervinus

Pluteus chrysophaeus Pluteus nanus Pluteus salicinus Polyporus leptocephalus Polyporus squamosus Postia subcaesia Psathyrella candolleana Rhytisma acerinum Rickenella fibula Russula sanguinaria Russula vesca Scleroderma areolatum Stereum hirsutum Trametes gibbosa Tremella mesenterica Tricholomopsis rutilans Tubifera ferruginosa Xylaria cinerea Xylaria longipes

* Indicates fungi that developed on deer dung after incubation

Polyporus leptocephalus: a small bracket fungus. It was found growing on wood at several sites on the estate, often in large numbers. (Photo JB)



Mycena pelianthina: one of the larger species of Mycena (5cm), which can be readily identified from its overall lilac/grey colour and the dark edges to the gills. (Photo JR)



Tricholomopsis rutilans: several examples of this beautiful species were found along the trunk of a Monkey Puzzle tree felled 10 years earlier. It had not been seen here before. The base of the Monkey Puzzle showed several fruitbodies of young *Ganoderma resinaceum*, which had been seen in previous years. (Photo JR)



Fuligo septica var. flava: a slime mould covering a rotting tree stump. (Photo PG).



Megacollybia platyphylla : several fruitbodies were seen throughout the estate. (Photo JB)



Amanita ceciliae: a magnificent example growing in Paradise. (Photo DB)



Pleurotus ostreatus: the Oyster Mushroom, a species which can vary considerably in colour. This example was a distinct pink and was found growing on a mature log pile. (Photo DB)



Anthracobia melaloma: a small cup fungus, found in Five Ways Combe on an old fire site (Photo JB)



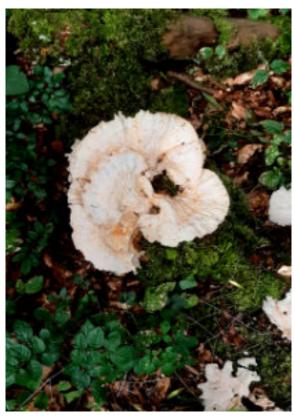
Chlorophyllum rhacodes: a typical species of Chlorophyllum, showing red/brown colouration when cut. The marginate bulb was suggestive of *C. brunneum*, but examination of the cheilocystidia revealed it to be the more common *C. rhacodes*. (Photo JB)



Geastrum triplex: the Collared Earthstar, recently renamed *Geastrum michelianum*. These magnificent examples were found in Five Ways Combe. (Photo DB)



Laetiporus sulphureus: Chicken of the Woods. A large mature example (20 cm) growing on felled wood in Plantation. (Photo PG)

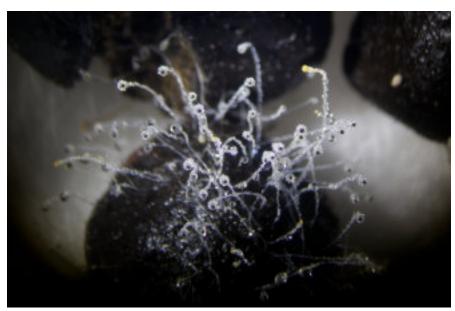


Fungi on deer dung: several samples of dung were collected and incubated on moist paper in Petri-dishes. Within 48 hours mycelium appeared and after 4 days large numbers of *Pilobolus crystallinus* (Dung Cannon) were visible.

Two days later many examples of *Coprinopsis stercorea* had also developed (see below).

Pilobolus is a remarkable genus. The black spore mass (sporangium) on the top is propelled violently when mature, travelling anywhere from a couple of centimetres to a distance of 3 metres. This involves acceleration from 0 to 20 km/h in only 2 microseconds, subjecting it to over 20,000 G, equivalent to a human being launched at 100 times the speed of sound.

Several sporangia emerging from a dung pellet



An individual sporangium ready for ejection



Coprinopsis stercorea: a minute Inkcap growing on deer dung, viewed 6 - 8 days after the dung was collected.

Top left: young developing fruiting bodies (cap 2mm diameter)

Top right: mature fruiting body (cap 6mm diameter)

Lower left: globose cells on the surface of the cap, with emerging hyphae

Lower right: hyphae emerging from the cap surface





