

FUNGI WALK at RUSHMERE ESTATE on Saturday October 19th 2024

Penny Cullington

Our group of 19 – of which just under half were new or relatively inexperienced members - met up amazingly promptly considering the constant torrential downpour those of us coming from the south of the county experienced with surface water proving a serious hazard. Donned in waterproofs we set off across the grassy area adjacent to the car park with the rain thankfully gradually easing and enough fungi to keep us occupied and provide opportunity for some explanation of the basics, though material was not looking its best after its recent thorough soaking. This site always provides interest with a different set of species from our Chiltern beechwoods, the varied mix of habitats here resulting in a list comprising grassland species as well as those favouring both conifer and broadleaf woodland.

Several species of *Agaricus* (the genus containing the true Mushrooms) provided discussion early on and will need DNA sequencing to hopefully provide confirmation of species names: like many other genera *Agaricus* is quite easy to recognise but that's where the easy bit stops! Determining to species level is quite another matter with many different species often separated by only subtle differences; even with the aid of specialised literature and a microscope they are often a challenge. As an example, the collection shown here from the grassy area today belongs in Section *Minores* – those small delicate *Agaricus* species with small spores - and matches well to *A. purpurellus* (no English name) which, however, is a known complex of species still in need of further research.



Above: *Agaricus* cf. *purpurellus* – to be sequenced. (DIS)

The perimeter of this grassy area provided three Birch associating species of *Russula* (Brittlegill) together with one Pine associating *Lactarius* (Milkcap) – all nice to see because down south we've been starved of both these genera this season! In the grass there was another really common species we've failed to record recently. The singleton specimen of *Bolbitius titubans* (Yellow Fieldcap) was, however, extremely waterlogged. In true Blue Peter fashion I include 'one I made earlier' (ie a library photo of mine) to show what it the species can look like when in good condition.



Above: *Bolbitius titubans* from Turville Heath (PC)



Marasmius oreades (Fairy Ring Champignon), a species often found in garden lawns, was also fruiting in this area though not looking wonderful, so I thought it might be useful to include another earlier shot as it may be popping up in your gardens at the moment. (Conditions this morning were not conducive to photography so we only have a limited number to share, I'm afraid.)

Left: *Marasmius oreades* from Rushbeds Meadow (PC)

We have four species of *Amanita* on the list though only one species was looking in reasonable condition today but this was useful because it's one which everyone should learn to recognise because of its serious danger if eaten. *Amanita phalloides* is named Deathcap for a good reason: a quarter of a cap will probably kill you if consumed! It is relatively

common and is not the only green-capped white-gilled mushroom you might encounter, furthermore it can sometimes be almost white! Points to look for are the ring on the stem and most importantly the characteristic prominent volva (sac) enveloping the stem base. We saw this clearly in the smaller specimen found today. It also has a sickly sweet smell which should help to separate it from others it might be confused with. Here are two more library photos which illustrate the colour variation and the volva shape.

Right: immature examples of *Amanita phalloides* (PC)



As we moved under trees, particularly the conifers, there was an abundance of *Paralepista flaccida* (Tawny Funnel) often forming rings. Many mushrooms have brown caps but not with the combination of sunken centre (like a funnel) and pale beige strongly decurrent (sloping gills).

Left: *Paralepista flaccida* - the photo taken here last year (PC, with inset NF)



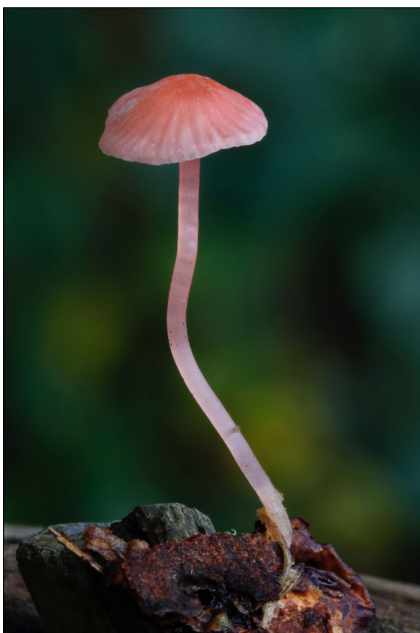
In this same habitat some small mushrooms with rich red-brown cap and stems caught my

attention. They also had a distinct and very strange fishy smell, like cod-liver-oil – known to occur in *Macrocystidia cucumis* (Cucumber Cap) though for several of us familiar with that species this collection just didn't have that jizz: they lacked the expected obviously conical shape. At home, however, there could be no doubt once I looked at the gill edge with a scope where the large fusiform and distinctly pointed cells (hence its Latin species name) together with spore shape confirmed its identity. This just goes to show how learning to recognise mushrooms keeps even the experienced on their toes!



Above right: today's somewhat atypical *Macrocystidia cucumis* (SJE) with inset stained in congo red showing the cystidia x 400 – not my greatest micrograph, apologies! (PC)

Left: *Mycena adonis*, much admired today. (UL)



We were handed many examples of the genus *Mycena* (Bonnet) through the morning from a range of different substrates (soil in grassland, litter, fallen wood of various sorts). A few were named in the field but most needed work at home producing a lengthy list as is normal at this time. Of our 17 species 5 seem to be new to the site and one was a real little beauty, instantly recognisable from its stunning pink colour. *Mycena adonis* (Scarlet Bonnet) is genuinely uncommon - we have just 5 other county sites where it's been recorded – though is not particularly fussy about habitat, occurring in heathland and mixed woodland habitats in litter and twiggy remains (here it was in Spruce litter). We last saw it in 2022 at Dancersend on a dead bramble stem! It is small – only a few cms high - sometimes really bright red all over but tends to fade as here especially when well washed by rain! This was one well worth

getting the camera out for

This is now our fourth consecutive annual autumn visit here, with three other trips prior to that since our inception in 1999. Today's species list of just over 100 is not exceptionally lengthy for this time of year especially at a site with such varied habitats; according to our records we added 26 new to the site. None listed were particularly rare though several collections, once sequenced, may turn out to be so. A pair of small very pale lepiotoid types were handed us as possible *Lepiota cristata* (Stinking Dapperling) but we quickly noted the unpleasant rubbery smell of that species was absent and closer inspection raised more doubts – it just had the wrong 'jizz'. At home the tiny spores, distinct red brown centre but otherwise white smooth cap with a pinkish glint appeared close to the description and illustration of *Leucoagaricus roseilividus* in Kibby vol 2. This species does not appear to have any UK records and the material is dried ready for sequencing though sadly in the heat of the moment no photo was taken.



Last year we recorded an attractive species here which was quite similar to the one described above, *Lepiota echinella* (no English name), but which has a markedly scaly cap. When I was later sent a photo of a *Lepiota* by Sarah and Stephen, found today after we'd concluded, I eventually twigged that it was probably this same species again. It is not that common and also reportedly rather variable which may point to the fact that there is a species complex involved here, so this is another collection we'll have sequenced.

Above left: *Lepiota echinella* found today (singleton SP, group SJE)



Of the various Inkcaps found today were a couple of species which favour dung or straw, a substrate not to escape Derek's notice as he's always on the lookout for nice Inkcap specimens in such places. Here he found *Tulosesus marculentus* (Hexagonal Inkcap), an uncommon species with few UK records

though he also found it here in 2021. The English descriptive name refers not the shape of the mushroom but to its spores!

Right: *Tulosesus marculentus* with inset of the hexagonal spores x 1000 (DJS)



Left below: *Trichaptum abietinum* (SJE)



Just a few more photos to finish with. Three very different bracket types were found, the first was liberally covering a conifer stump and much bigger than one often sees it. *Trichaptum abietinum* (Purplepore Bracket) is commonly found on fallen conifer – not just on Spruce as the Latin species name suggests, and is usually quite small and insignificant often forming tiers or lines along fallen trunks. It's not until one picks a bit and turns it over that the pinkish violet pores underneath are revealed. (If

you find a small bracket with this colour underneath but smooth, not clearly pored, on deciduous wood it is likely to be *Chondrostereum purpureum* (Silverleaf fungus))



Found on bare conifer today was *Gloeophyllum sepiarium* (Conifer Mazegill) - an unusual bracket in the south though much more common in Scotland and N. England. Note the characteristic almost gill-like under-surface visible here on the upturned lower piece.

Left: *Gloeophyllum sepiarium* (SJE)

Then on deciduous fallen wood, probably Birch, a cluster of tiny brackets were noticed, and as with the two brackets above it is the underside which gives rise to the descriptive English name. *Plicatura*

crispa (Crimped Gill) is a small gregarious bracket species, now quite common, and though the upper surface looks superficially similar to several other species the wrinkled white underside seen here is very distinctive.



Above right: *Plicatura crispa* showing the characteristic underside (JL) – directly above is a library photo to show the upper surface (PC)



Thank you all for braving the elements today. Despite the weather's best attempts to deter us, we had a successful and enjoyable morning! Thanks too to our dogged photographers – a noble effort! For more details of what we found see the separate complete species list.

Photographers

DJS = Derek Schafer; JL = Justin Long; NF = Neil Fletcher; PC = Penny Cullington;
SJE = Sarah Ebdon; SP = Stephen Plummer.