

DNA Sequencing results

17th March 2025

This is a short summary of the latest sequencing results since the 25th February report. It looks like I have turned the corner and am getting a decent number of results again. In no particular order:

- ***Amanita umbrinolutea***. Found in Castlewellan Arboretum by Mark in 2021. Under conifers. There is much confusion with this and *Amanita battarrae* but the consensus is that *A. umbrinolutea* is much more common.



- ***Amanita coryli***. This would be new to Ireland but a much better sequence is required. In the very difficult *Amanita vaginata* group. Found by Mark in Belfast Castle woods in 2022.



- ***Cortinarius alboatustus*** From Mullynacooagh Wood (Crom Estate). New Irish record. I reported this as *C. russulaespermus* in the February report but was suspected that I had got my samples muddled as it did not fit the description. I redid the two suspects in the opposite direction and sure enough, this one is *C. alboatustus*.



- ***Cortinarius russulaespermus***. See above. This now fits the description and makes sense! Also a first Irish record.



- ***Cortinarius decipiens***: Found in Derryvore by Jolanda Smit (yet another find from here), Kilgarrow Wood by Mark and on the NIFG foray at Belfast Harbour under Salix. There is a bit of a debate about this concept. The excellent recent Dutch publication on Cortinarius (Flora Agaracina Neerlandica Vol 8) that combined very detailed molecular studies with the fruiting body descriptions has combined a number of species in this group together into *C. decipiens* that Kibby's book has as separate species e.g. *C. castaneus*, *C. alnetorum* and *C. falsosus*. The Dutch write that the choice was either one species with a wider concept or 32 species with some barcodes only differing by one base pair so, luckily, they chose the former. This sequence came out very close to sequences with these names as well as *C. decipiens*.



C. decipiens from Derryvore



C. decipiens from Kilgarrow Wood

- ***Cortinarius subporphyropus***: Found in Reilly Wood by Lisa Maddox. This is a very small Phlegmacium with a bulbous stipe base in the clade purpurescens. I got a second sequence in the other direction and combined this into a consensus sequence of better quality and this now comes out as *C. subporphyropus*. It was actually added to the British list in 2023 with a find in Minsmere but this is the first Irish record.



- ***Cortinarius rusticelloides*** Not a great looking specimen but found at Crom by Jolanda Smit on Inisherk. New to Ireland and one of the Corts under Salix.



- ***Cortinarius parvannulatus***: Unfortunately no photo of this one. New to Ireland. Found by Mark in Kilgarrow Wood. Geoff has separated this species from *C. pseudofallax* in his book but the Dutch have lumped them after molecular analysis describing it as “a species currently undergoing speciation”

- ***Entoloma politum***. Found in Derryvore, this is maybe one of the more common woodland Entolomas. It needs to be sniffed as nitrous smelling species may be different.



- ***Hebeloma pusillum***. One of the notable things to come out of the sequencing of Hebeloma specimens is that they are all coming to different species. There is a diversity of species here that we had not been picking up in this very difficult group (probably due to avoidance of them...). Again from Derryvore. There are a couple of records of this species from NI from BMS forays. Found by Jolanda Smit.



- ***Hebeloma incarnatum* / *velutipes***. This is another one which can't be distinguished by the ITS region alone and needs a bit of work under the microscope. Found at Crom by Jolanda Smit and in Kilgarrow Wood by Mark Wright.



- ***Hebeloma sinapizans*** It is quite nice to get a more familiar Hebeloma. Very slimy cap and large. Found by Marie-Claire Vallely at Reilly Wood.



- ***Naucoria sp.*** Another *Naucoria*, again from Derryvore but this one only comes out near to an undescribed species from Austria. I am in correspondence with the finder, Ursula Eberhardt about this find. Found by Jolanda Smit.



- ***Rhodocybe gemina***. Apparently now known as *Clitopilus geminus*, this was found in grassland at South Point on the Outer Ards and also at Little Deer Park ASSI. Traditionally thought of as a woodland species, this should maybe be looked out for on grasslands as well!!



