DNA Sequencing Results

Update February 2026 Part 2

Waxcaps

- ***Cuphophyllus aff fornicatus?*** Yet another puzzling one from the Curragh. Found in the military graveyard by Mo Rainey, I wondered in the field if this was a Dermoloma with the cracked cap but the spores were wrong. The sequence is not bad but has a small undercurrent of minor peaks so I am looking to get one in the other direction to see if I can improve on it. But it takes me to near to *Cuphophyllus fornicatus* but it does not look right for that – maybe more like *flavipes??* More work to do…

Cuphophyllus aff. fornicatus, The Curragh

- ***Hygrocybe aff. quieta:*** This is the one I was puzzling over from Ballycoos Hill (the other side of the road from Linford Barrows). Chris may remember it as Jolanda found it beside the fence with the two of us there and we were all puzzling over it. The slightly purple colours made me thing it was a possible *Gliophorus reginae* but the sequence took it to near to an *aurantiosplendens* from a specimen held at Kew and some *quieta* sequences. Martyn Ainsworth of Kew mentioned that they were working on a paper looking at the *aurantiosplendens* area (I didn't even realise there were cryptic species in that group….) so I sent him this sequence and it comes out identical to a find that was sent into Kew from the Brecon Beacons that is close to *quieta* but that had purple even on the gills. This could get worked up into a new species but the Ballycoos specimen had seen better days and it would be really good to get a fresh specimen so if anyone wants to look, I have the exact coordinates and it is not far from the road at all!!

Hygrocybe aff. quieta, Ballycoos Hill

- ***Hygrocybe aurantiocitrina:*** I now have a sequence in the other direction for the Cushleake find and it is now 98.91% match to the type specimen. Nearer but not cast iron. This may now be a case of waiting for Boertmann's new book and the release of more sequences.
- ***Hygrocybe coccineocrenata****:* This one was found at the Giant's Causeway by Jolanda in one of the fields right beside the cliff path directly north of the upper car park. Thus definitely not a bog which is the habitat that *H. coccineocrenata* is supposedly restricted to. *H. coccineocrenata* sequences appear all through the tree sometimes mixed with ones for *turunda* so this is probably *H. coccineocrenata* but it is a case of waiting for the new edition and definitive sequences of these species. As with the Gortnagory find, the distinctive black squamules were not obvious. I can sort of see them now in the photo but they didn't jump out in the field. *H. coccineocrenata* is not a JNCC scoring species for grassland fungi as it was thought not to be in grasslands but I am wondering if that actually holds….

Hygrocybe coccineocrenata, Giant's Causeway

- ***Hygrocybe lepida***: Found at Kebble by Ruan McCready. The sequences that I have had that come out as *lepida* are all more orangey and it is the scarlet ones that are or are near to *coccineocrenata* so those look to be the ones we need to be more careful of. *H. lepida* is described as having cap colours ranging from orange to orange reddish, rarely pure red or pure yellow.

Hygrocybe lepida, Kebble NNR

- ***Hygrocybe miniata:*** *H. miniata* is reasonably clear cut with a dry cap with squamules, adnate gills and under the microscope, it has odd shaped spores with a wide base but I was beginning to question everything and decided to sequence this as well. However, it clusters neatly with a large group of miniata sequences. Found at Glendun Hill Farm by Jolanda.

Hygrocybe miniata, Glendun Hill Farm

- ***Hygrocybe mucronella:*** *Hygrocybe amara* has very recently been described and confirmed from the UK so *mucronella* is no longer the only bitter tasting waxcap. The differences are cap colour and spore Q value (length / width). *H. amara* is pale orange, yellowish orange to orange with spore Q value of 1.32-1.39 while *H. mucronella* is more reddish orange and has a Q value of 1.51-1.63 so are more elongate. This find was from Ballycoos Hill by Jolanda and while the cap colour would suggest *mucronella,* the spores were right in the middle between the two so I sequenced it. And it is *mucronella.*

Hygrocybe mucronella, Ballycoos Hill

Pink Gills

- ***Entoloma argillaceum:*** Yet another find, this time from Ballyconagan on Rathlin. It is going to be common…

Entoloma argillaceum, Ballyconagan, Rathlin

- ***Entoloma asprellum:*** Two finds, both from Rathlin – one on Kebble found by Matthew Flood and one on Kinramer South by myself. This species is noted by its grey brownish roughened cap, polished blue stipe, a fertile gill edge (with basidia and spores rather than just cheilocystidia) and with the spores larger than 10µm. There are only about 5 other scattered records in Northern Ireland.

- ***Entoloma eborinum:*** Sometimes, you have to be patient in getting results back. This was one of my early sequences from a find in Kinramer Wood on Rathlin back in 2023. At the time, it came out not near to anything so I put it aside. A new paper on Entolomas just came out on Friday (https://www.persoonia.org/images/Volume56/Persoonia56Art3.pdf) and it included a description of a new species called *Entoloma eborinum* (see page 224 in the pdf) and my sequence is a 99.57% match with the type. It is a described as similar to the common *Entoloma sericellum* and the differences do seem slight with *eborinum* having small clavate cheilocystidia about as long as the basidia but *sericellum* have conspicuous ventricose cheilocystidia and slightly larger spores. The annoying thing is that I have no photograph so this is another one for Hazel and Ric to look out for! It was in one of the grassy areas just leaving the wood heading north. My notes say that it wasn't pure white but was a bit more pale milky coffee colour but the stipe was white.

Earth Tongues

- ***Microglossum truncatum:*** This is proving to be the most common *Microglossum* so far. Found by Matthew Flood on Scawt Hill on what was a very profitable site visit. The breakdown of finds so far is:

Species	Sequences
Microglossum truncatum	7
Microglossum aff. nudipes	6
Microglossum pratense	5
Microglossum rufescens	4
Microglossum fuscorubens	3
Microglossum 'brown clade'	2
Microglossum clavatum	1

Microglossum truncatum, Scawt Hill. Photo by Matthew Flood

Dermolomas

- ***Dermoloma cuneifolium:*** Like the *insipida* group, I wanted to sequence a batch of Crazed Caps or *Dermolomas* to work out which ones we have. The "good" news is that while there are a number of possible species of *Dermoloma* now, we are only finding a few making life a bit simpler. *D. cuneifolium*

remains the most common with sequences from Knockdhu ASSI, Kebble, Gortnagory, Dungiven Church of Ireland (two finds) and Altnahinch.

Dermoloma cuneifolium, Dungiven Church of Ireland

Dermoloma cuneifolium, Dungiven Church of Ireland (second find)

- ***Dermoloma intermedium (alexandri):*** This is the other common species with finds now from Gortmaconnell Rock and Legalough on the Marlbank, Galboly and now the Curragh as well. But what distinguishes *D. intermedium* from *D. cuneifolium?* It is not very easy. The cap colours in both are variable from grey to distinctly brown as shown in the *cuneifolium* above and the *intermedium* photos below. Both are in the inamyloid group (this is very important in *Dermoloma).* The spores of *intermedium* are slightly larger, but only slightly and the basidia are slightly longer and wider. The main differences are size with *intermedium* being larger with the cap measuring 2.0-5.2cm and even up to 8cms while the *cuneifolium* cap measures 1.2-3.5 cms and up to 4.4 cms. The stipe of *intermedium* is slightly longer and wider measuring 2.6-5.9 x 0.4-1.0 cms while *cuneifolium* is 2.1-5.0 x 0.2-0.6 cms. The other feature highlighted in the key is that *intermedium* is hygrophanous but to be honest I have not noticed that in the collections I have made.

Dermoloma intermedium, The Curragh

Dermoloma intermedium, Legalough, Marlbank

And then there is Mo's find from Ballyquintin. It looked very curious, possibly a *Dermoloma,* but the sequence suggests that either someone dumped a Shiitake log on the site or someone dropped one out of their lunchbox as it is a 100% match for a Shiitake (*Lentinula edodes)…..*