DNA Sequencing Results

Update May 2025

- ***Clavaria sp.*** This one is quite a curiosity. Found on the NIFG foray at Linford Barrows in November, it looks like a cluster of pink unbranched clubs rather the more typically single clubs of *C. incarnata* or *C. messapica.* The sequence comes out nowhere near to anything else on GenBank so it looks like one to file away until something else appears similar to it. I will be uploading a lot of these sequences to GenBank so hopefully someone else will find a similar sequence. Meanwhile if anything similar is seen, it needs to be well photographed and collected.

- ***Cortinarius fuscogracilescens***. Found at Mullynacoagh Wood in Crom by Jolanda Smit. First record for Ireland. Noted by its red brown convex cap with scanty white velar remnants at the cap edge and stipe. There is no particular smell. Only recently recorded in 2022 from the UK – see Field Mycology - https://www.researchgate.net/publication/363174837_Bushy_Park . Oak and Hazel in immediate vicinity. The Dutch book lists it as a synonym of *C. sordipes.*

- ***Cortinarius ochraceopallescens.*** Found on an NIFG foray to Crom in 2022. Possible new British record with a 99.64% match to the type specimen. In section Calonarius, it is noted by the pale brown cap colours, very bulbous stipe base, lilac gills and lack of smell. A drop of KOH on the cap would turn brownish red.

- ***Cortinarius olivaceofuscus.*** Also found at Crom in 2022 on an NIFG foray, this is in section Dermocybe with olivaceous gills. There are three other NI records all from Fermanagh. The cap colours can vary from very olivaceous to a reddish brown as the name suggests. See http://www.stridvall.se/fungi/gallery/Dermocybe/NIKA1689?full=1 for an idea of the cap variation. The illustrations in Kibby are very olivaceous.

- ***Entoloma mediterraneenense.*** Found at Little Deer Park ASSI in 2022, I've finally got a better sequence of this. I'm wondering if a number of the finds we labelled as *E. longistriatum* are in fact this species as other collections from Little Deer Park and Galboly seem to come to this as well if I can get better sequences from them. Unfortunately, I don't have a photo of these finds but the photo below is of an earlier find of "longistriatum" but of course, that find may not be of *E. mediterraneense*. Molecular work has shown *E. longistriatum* to be an American species not found (so far) in Europe.

And back to the Hebelomas.

- ***Hebeloma erebium.*** Reported earlier as either *H. erebium* or *H. celatum,* microscopy has now been undertaken and this comes out as *H. erebium.* This would be the first confirmed UK record although there is a report of it from Lancashire. *H. erebium* is a smaller, more gracile species compared to *H. celatum* from which it cannot be separated molecularly via the ITS region alone. One of the key features is a stipe less than 8mm wide on average. Found at Derryvore by Jolanda Smit.

- ***Hebeloma vaccinum.*** Reported earlier as either *H. vaccinum* or *H. cavipes* which cannot be separated molecularly via ITS alone, it was distinguished from *H. cavipes* by having longer and wider spores than *H. cavipes. H. vaccinum* is typically found under *Salix* particularly in sand dunes but here it was found at Derryvore in the seasonally flooded Salix carr. This is the first Northern Ireland record. There are three other Irish records – from Sheskinmore and Maghera dunes in Donegal and Roundwood Reservoir in Wicklow.

- ***Hebeloma velutipes.*** Reported earlier as either *H. velutipes* or *H. incarnatulum* which cannot be separated molecularly via ITS alone, it was distinguished from *H. incarnatulum* by having wider cheilocystidia. *H. incarnatulum* has particularly notable cheilocystidia which are very cylindrical, hardly widened at the apex which is less than 6.5µm wide. Found at Crom by Jolanda Smit and at Kilgarrow Wood by Mark Wright. There are scattered records of *H. velutipes* from Ireland and two records from Northern Ireland from the Share Centre and Big Dog Forest in Fermanagh.

To summarise the Hebelomas found so far, notably two of the most commonly recorded species, *H. crustiliniforme* and *H. leucosarx* have still not been found. The ones with sequences are:

- *Hebeloma eburneum* (2 locations)
- *Hebeloma erebium*
- *Hebeloma geminatum*
- *Hebeloma hiemale (*2 locations)
- *Hebeloma pusillum*
- *Hebeloma sinapizans*
- *Hebeloma sordescens*
- *Hebeloma vaccinum*
- *Hebeloma velutipes* (2 locations)

- ***Pseudosperma ushae.*** I think I have enough to say now that this is *P. ushae,* new to Ireland from Crom (Derryvore). A slightly longer sequence agrees with the original one and the microscopy also fits. See https://www.researchgate.net/publication/360823313_Noch_mehr_Risspilze_3_Einundzwanzig_neue_Arten_der_Familie_Inocybaceae although the description is in German….

- ***Russula luteotacta.*** A medium sized *Russula* with a mixture of red and white on the flattened cap. The striking thing was the bruising yellow of the gills and stipe. As a dried specimen, the gills are bright yellow. Found just below Crom Castle itself by Mark Wright under oak and again in Reilly Wood. Only the 5th and 6th records for Northern Ireland but one of those was from Inisherk back in 2003.