

Wyre Forest Study Group

Squamanita paradoxa IN WYRE FOREST, SHROPSHIRE 2004

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It must be said that recording fungi is a very 'hit or miss' affair. Fungal fruiting is so dependent on weather and seasonal variations, some years are poor whilst others are bumper years. Well, 2004 was certainly a bumper year. Species started appearing early in the season and persisted from summer to late autumn. Apart from a few dry weeks in September most of the autumn was wet August and October especially so (at least mycologists were happy).

My best find of 2004 goes to the genus *Squamanita*. A rare parasitic group of fungi with very few finds ever recorded. I have never seen this genus in some 25 years worth of recording fungi and as far as I am aware there were no records locally. So recording the species in Wyre Forest on September 27 was personally a great find. The fungus was discovered along the section of the Elan Valley water pipe track at Corbets Park. The pipe track forms a species-rich acidic grassy ride and normally rich in grassland fungi. In September a few *Hygrocybe* and *Entoloma* species were present and a scattering of *Cystoderma* but nothing unusual. In an area of mossy turf I spotted a dark capped fungus that looked different.

There were several caps present and I collected a few specimens. At the time I had no idea of the genus but the unusual two-tone dark grey cap and orange stem was certainly striking and different. I vaguely remembered an illustration in the Fungi of Switzerland of something similar. (Breitenbach & Kranzlin 1995). Looking in the books at home Volume 4 had an illustration of a species called *Squamanita pearsonii*. It looked promising, although the description did not seem quite correct for my find.



Squamanita paradoxa © John Bingham
Growing in habitat



Specimens © John Bingham
Half were sent to Kew for identification

Checking the British Mycological Society database for other *Squamanita* species there was an illustration and link to Alan Silversides' web site where all became clear – it was *Squamanita paradoxa*, a parasite of *Cystoderma amianthium* and it was very rare! It was listed as vulnerable on the 1992 Provisional Red Data List of British Fungi and according to Alan Silverside only collected on a couple of occasions anywhere in Europe. My record was the 5th British collection. The other records were recorded from Mull Scotland in 1969 (some doubt?), West Downe, Kent in 1982, Muirshiel, Scotland in 1996 and also Clydach, Wales in 1996.

A dried specimen was dispatched to Peter Roberts at Kew, just to make certain, later he confirmed the identification and placed it in the Kew herbarium. The photographs show the two colour tones with the dark cap and top of the *Squaminata* 'grafted' onto the more orange lower stem of the *Cystoderma*.

Until recently the true parasitic nature of the genus *Squamanita* was not realised. As recently as 1995 Breitenbach & Kranzlin only suspected that *Squamanita paradox* grew parasitically. In their book they welcome any new notification of such findings as 'further observations along these lines are urgently needed'.

There are only 10 species known in the genus and all appear to be parasitic on living sporophores of other basidiomycetes. A sort of gall growing on another fungi that itself becomes deformed by the parasite. Only about 30 species of fungi globally are considered to be mycoparasitic. The genus *Asterophora* are also parasitic and two species *A. parasitica* and *A. nyctalis* are often found in Wyre Forest growing on the decaying sporophores of *Russula* or *Lactarius* species.



Asterophora lycoperdoids

© John Bingham



Squaminata paradoxa

© John Bingham

On Brown Clee Hill, an amazing clumped specimen.

After checking a few *Cystoderma* I spotted the now unmistakable cap of *Squamanita paradoxa*. I could hardly believe my luck, two records in the space of a few days! Further along the track more and even larger specimens were found with several multi-stemmed, tufted *Squamanita* one with nine caps emerging from the enlarged basal *Cystoderma* host. Peter Roberts at Kew was rather surprised at my report of a second location and another voucher specimen was sent for the herbarium. Either I have been very lucky or more likely this is one of the rare fruiting years for this elusive species. Does the species require rather acidic grasslands and higher rainfall more typical of the Welsh Marches or Wales? To date I have heard of no more finds being reported to Kew, but time will tell. In any case we have a very rare and unusual fungus to add to the list for Wyre Forest.



Asterophora parasitica

© John Bingham

Perhaps even more unusual was the next foraging day on 2 October at Brown Clee Hill in Shropshire. In the past I remembered seeing quite a good number of *Cystoderma* on Brown Clee, so I checked some grassy verges along forest roads.

References;

Breitenbach J, Kranzlin F. (1995) *The Fungi of Switzerland. Volume 4.* Lucerne

Henrici A. (1996) *Squamanita in Britain and Europe* Unpublished

Evans S, A. (1997) *Fungal First for Wales.* Brecknock Wildlife Journal