Wildlife Report 2014

Fungi

Tony Leech

Rarities at Earlham Cemetery

Many fungi require specialist literature for critical identification but the Yew Club *Clavicorona taxophila* almost identifies itself - a pale cream spindle fungus with an obliquely truncate tip, growing under Yew *Taxus baccata*. The problem is finding it because it is small (10-20 mm tall) and very rare (with fewer than twenty British records). Ian Senior, however, did find it at Earlham Cemetery [TG 2108]. Remarkably, Ian was present a couple of months later, when Emma Harris, a participant on a fungus identification workshop at Holt Hall [TG 0739], found it for the second time in Norfolk.

For several years Ian has been assiduously recording fungi at Earlham Cemetery and his collection of the earthtongue *Geoglossum elongatum* has added another species to the Norfolk list. This species has scarcely a dozen British records and, like the Yew Club, is listed as endangered on the current Red Data List. The identity of an Earthtongue does, however, need confirming by an expert, in this case by Paul Cannon (RBG Kew). Ian's tally for the cemetery has now reached 180 species, including *Sowerbyella radiculata* var. *radiculata*, a large yellow cup fungus found by Alex Prendergast in 2013, and ten species of waxcap.

Another poisonous mushroom

The word mushroom means different things to different people. Increasingly it is being used for all agarics (fungi with gills) and even for all fungi, following American usage. Mycologists, however, generally restrict the term to members of the genus *Agaricus*, 42 species of which are known in Britain (including 25 from Norfolk). Although the genus contains some excellent edible species, it is well known that the three species in which the flesh flushes bright yellow when broken can cause severe gastrointestinal upset when eaten. This account demonstrates that an additional *Agaricus* species, which does not turn yellow and occurs in Norfolk, is equally poisonous.

The story begins in November 2009 when hours after consuming a meal of mushrooms, collected from a garden lawn, a couple from North Norfolk felt distinctly ill. The symptoms experienced by the two, and the timecourse these followed, differed somewhat. Initially the woman had an uncomfortable feeling in her stomach which grew steadily to a dull but severe pain. About four hours later she vomited, after which the symptoms subsided and she felt relatively well by the next day. Her husband also had severe abdominal pain but did not vomit; his symptoms came in waves of decreasing frequency for three days. Neither suffered from dizziness or loss of balance but were understandably frightened by their experience.

After they had recovered, I was brought fresh specimens to see if I could identify them. Some possessed white rhizomorphs, root-like extensions from the base of the stem. This, and other characteristics, initially suggested that the culprit could be either *A. bresadolanus* or *A. romagnesii*. species which are now synonymised (as *A. bresadolanus*) in the British Checklist (Legon & Henrici 2005). However, the lack of brown scales on the cap cast some doubt on this identification. In 2013, Anne Edwards (John Innes Centre) was able to confirm that the species responsible was indeed *A. bresadolanus* from molecular evidence

Table 1. New county records of fungi (excluding those referred to in the text).

Species	Place	Collector [Identifier if different]	Habitat
Agarics			
Leucoagaricus pilatianus	Lynford Arboretum TL 8294	Jonathan Revett (foray)	
Parasola kuehneri	Holt Hall TG 0739	Tony Leech	Woodchip mulch
Pholiota lubrica	Lynford Arboretum TL 8294	Jonathan Revett	Mixed woodchips
Bracket fungi			
Antrodia sinuosa	Welney TL 5394	Jonathan Revett	Rotting softwood planks
Discomycetes (cup fungi)			
Saccobolus beckii	Watermill Broad, Cranwich TL 7795	Tony Leech	Deer dung. Previously only recorded from five sites in Scotland.
Scutellinia cejpii	Dersingham Bog NNR	Keith Fox [Mal Greaves]	

(Edwards & Leech 2014)[1]. *A. bresadolanus* is uncommon in Britain, and reported mostly from the Midlands and south-east England, often in parks and gardens. It was first recorded in Norfolk at Dersingham in 2009 (S. Rees) – and subsequently at Bayfield 2013 (foray) and Bunwell 2014 (Anthony Anson).

The advice that 'true' mushrooms that do not turn strongly yellow on bruising, and that do not smell 'phenolic', are edible, must be revised. With a lack of brown scales on the cap, very slight reddening flesh in the cut stipe and no sign of yellowing, it is of concern that these Norfolk specimens would not have been assigned to *A. bresadolanus* using Kibby's (2011) synoptic key, or illustrations in Cortecuisse & Duhem (1995) or Buczacki (2012). The photograph in Phillips (2006) is closer but the text states that cheilocystidia are absent (although they can be present, as here).

1 The experiments to identify the fungus were carried out at the John Innes Centre by visiting school students Phoebe Ellwood and Sophie Royal during a practical session of the Year 10 Science Camp, an educational outreach scheme which provides an experience of life as a scientist at Norwich Bioscience Institutes. Funding for the scheme was provided by the John Innes Centre, The Institute of Food Research, The Genome Analysis Centre and The Sainsbury Laboratory.

A second rare *Gloeophyllum* sp. at Whitlingham

Of the four *Gloeophyllum* species in Britain, Conifer Mazegill *Gloeophyllum sepiarium* is the only one with an English name. It is common in the north and west of Britain but scarce in the south and east. There are only three records for Norfolk (Sea Mere, 1976, Reg Evans; East Harling, 1978, Reg Evans; Reffley Wood, 2014, Anne Crotty) Rather unusually, *Gloeophyllum* spp. prefer dry exposed wood so are quite often found on worked timber. In 2010 Anne Crotty found *Gloeophyllum trabaeum* on a bench at Whitlingham Country Park (Leech 2012). This was only the 5th British record since 1970 (with about a dozen earlier records). Contrast this with about 700 records nationally for *G. sepiarium.* In 2012 James Emerson found a second specimen at a different location at Whitlingham.

At a bioblitz at Whitlingham Country Park organised by the Broads Authority, James Emerson (again!) drew attention to a small brown bracket growing profusely on a log which had been carved into a seat near the visitor centre. Our suspicions that it might be *G. abietinum* were confirmed by Martyn Ainsworth (RBG Kew). As part of his investigation he redetermined specimens

of *G. abietinum* in the Kew fungarium and concluded that it was rarer than thought, with only three confirmed previous British records. James still has to find the common Gloeophyllum species at Whitlingham!

References

BUCZACKI, S. 2012. *Collins Fungi Guide*. HarperCollins, London.

COURTECUISSE, R. & DUHEM, B. 1995. *Collins Field Guide Mushrooms & Toadstools of Britain and Europe*. HarperCollins, London.

EDWARDS, A. & LEECH, T. 2014. *Agaricus bresadolanus* - a toxic mushroom. *Field Mycol.* 15: 113-114.

KIBBY, G. 2011. *The genus Agaricus in Britain*. Privately published.

LEGON, N.W. & HENRICI, A. 2005. *Checklist of the British and Irish Basidiomycota*. Royal Botanic Gardens, Kew.

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Yew Club *Clavicorona taxophila*. Holt Hall. *Tony Leech.*

***Agaricus bresadolanus*.** Cley. *Tony Leech.*

***Gloeophyllum abietinum*.** Whitlingham. *Tony Leech.*