Call for records of rust and smut fungi

in support of GB Red-listing process

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Fungi have not been prominent in official Red Lists for Great Britain, and there is currently only one non-lichenised fungus group, the *Boletaceae*, that has a Red List officially approved and constructed in accordance with the IUCN Red-listing criteria (Ainsworth *et al.*, 2013). An earlier unofficial and provisional Red List (Evans, 2006) included rusts and smuts, but this is now very out of date. Natural England are currently supporting new Red List exercises for myxomycetes, grassland fungi and a revision and expansion of the bolete (*Boletales*) and lichen and lichenicolous fungi assessments. Now there is an opportunity to begin a process for rusts and smuts, and a small group is working to support this initiative.

One of the first steps is to collate all the existing distributional information. Some of this is already available in national and regional databases, and we expect to extract records from these sources and from iRecord and similar biological recording platforms. There is also information in published sources, and we will draw on these as resources allow for their extraction.

There are sure to be other sources of records which are not known to us or not so readily accessible, and we would like to include as many of these as possible in the data to form the basis of the assessments. There are several ways you can contribute your records:

- add them to FRDBI https://www.frdbi.org.uk/ —please use the CC-BY (or a less restrictive) licence so that they can be easily used for the Red-listing
- put them into iRecord https://irecord.org.uk/
- send them in some electronic form (spreadsheet, database, text file, document) to Paul Smith, pas.vc110@gmail.com. We can probably cope with nearly any format, but if they are in some proprietary software, then please check first, or export to something more standard
- we may be able to digitise a limited number of paper records. If your records are only in this form, and you are unable to add them to FRDBI/iRecord or similar, then please contact Paul to discuss (with a description of the format and an estimate of the number of records involved)

These are roughly in order of ease of access for us, so please choose the earlier options if possible. Whichever of these options you choose, it would be helpful if you could contact Paul to let him know what is happening and, if possible, a rough estimate of the number of records you may contribute. Do not include records that are *already* in the national databases.

We are interested in records for *all* rust and smut taxa, including common ones. The numbers and distribution of records for common species provide valuable information on the intensity of recording in these groups which can help to interpret the records of rarer species during the Red List assessment. Species that are (or have been) common in some areas may nevertheless be in overall decline. “Smuts” includes all the species that have been called smuts, including *Microbotryaceae* (now in the same subphylum as rusts) and *Entorrhizomycota* (now split off as a separate phylum). The taxonomy in use in Britain is currently in flux, with the recent publications of the Welsh Parasitic Microfungus Group (the latest overview of many groups is in Woods *et al.* (2025)) largely following the taxonomy of Klenke & Scholler (2015). This brings us into line with European taxonomy, but means that we will need to assign some records to species based on their host plants. So it is very important to include the host plant information with your records if you have it.

Although we are asking for records for Red List assessment, we would like them to be available for wider use, including (for example) the production of distribution maps, so please donate records for general scientific study. For the same reason we would also be interested in records from the island of Ireland, from the Isle of Man and the Channel Islands even though they are outside the geographical scope of the Red List exercise. If there is a need to protect site information for very rare species, then we can handle that.

It would be helpful if you could process your records by the end of January 2026. The absolute cut-off date for records to be used in the Red-listing project will be 31 March 2026. Thank you in advance for your help.

References

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Book review

RHS Fungi for Gardeners

Dr Jassy Drakulic

Illustrated by Amy Child and Rose Holman

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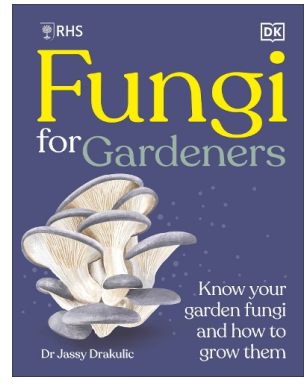

I work as a gardener in a woodland garden in Sussex, but I have been an amateur naturalist for much longer and I know enough about fungi to get by. Having a foot in each camp, so to speak, I would say that today the majority of gardeners are well aware of fungi and the ways they are beneficial in a garden, and a smaller number will be actively interested in field mycology, like me. Undoubtably, there will still be a lot of gardeners, especially among those who work in very formal or intensively managed gardens, who are only aware of fungi as pest species that damage crops or kill woody plants. So, it is great to see this book, from the RHS no less, pushing a pro-fungi stance in gardening—something that is long overdue.

Dr Jassy Drakulic sets out the purpose of the book early on '…this book aims to explain what fungi are, what they do, and how to work with them to get the best from your garden.' So it is established that this is very much an introduction to fungi, purely in a garden setting, and assuming the reader has little to no prior knowledge of fungi outside of a few pest species. The members of the BMS are definitely not the target audience, and I admit that the book is set at a slightly lower level than I had expected. When the book starts off explaining, clearly and succinctly I must add, the basics of what a fungus is—I did have to reset my expectations. I do feel, and this is not the fault of the author, that this RHS book aimed at professional gardeners is assuming a very low level of fungi knowledge in the reader and that does come across as somewhat patronising.

But there's a lot to like here, and overall I was impressed by the book—Dr Drakulic has a knack for taking a very complex topic which is inherently loaded with specialist jargon and making it very accessible to practically anyone, in a manner that is clear, precise and informative. As you would expect from a DK publication, the book is amply illustrated throughout with helpful photographs, diagrams and superb artwork by Rosie Holman