

Darwin Initiative: Half Year Report

(due 31 October 2009)

Project Ref. No.	16008
Project Title	Conservation of fungi - a voice for vulnerable and unprotected organisms
Country(ies)	Argentina, Armenia, Cuba, India, Saudi Arabia, South Africa, Ukraine
UK Organisation	BioNET-INTERNATIONAL
Collaborator(s)	Universidad de Buenos Aires [& others]
Project Leader	D.W. Minter
Report date	16 October 2009
Report No. (HYR 1/2/3/4)	Half year report, year 3
Project website	www.cybertruffle.org.uk/darwin-microfungi

1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).

Purpose of project. To initiate a global movement for biodiversity conservation of microfungi (a huge array of organisms covered by the *Convention on Biological Diversity* [CBD], but currently with no explicit protection anywhere in the world) by three key actions:

- establishing three [World Conservation Union](#) [IUCN]-compatible Specialist Groups (for [1] non-lichen-forming ascomycetes & conidial fungi, [2] rusts & smuts, and [3] chromistans, chytrids, myxomycetes & zygomycetes), working through them to prepare global conservation plans for fungi covered by each;
- in co-operation with the IUCN's [Sampled Red List Project](#) and compatible with its [red list assessment criteria](#), preparing and publishing global conservation status assessments for over 800 sample species of microfungi as baseline information for the CBD's [2010 Biodiversity Target](#);
- building capacity for conservation of microfungi and their sustainable use, prioritizing Africa, by training mycologists, enhancing web-based informational resources for mycology and recycling used equipment.

Progress

First key action. This was fully achieved by the end of the project's second year. Around the start of the current reporting period and as a result of the activity of this project, the Species Survival Commission of the IUCN recognized fungi as different from animals and plants, and completely re-organized its coverage of their conservation; the three groups established by this project were adopted, so that the commission has five clearly defined fungal specialist groups, where before this project there were two, both inadequately defined. In late October 2009, a special international meeting will be held, organized for the IUCN through this project, to launch these groups and to determine their strategies and policies (meeting website: www.cybertruffle.org.uk/whitbymycosynod). At the time of writing this report, there are registered participants from Australia, Brazil, Bulgaria, Cameroon, Canada, China, Colombia, Cuba, Egypt, Finland, France, Greece, Italy, Lithuania, New Zealand, Russia, South Africa, Spain, Sweden, Switzerland, UK, Ukraine and the USA. A special issue of the scientific journal *Mycologia Balcanica* is planned for 2010 to published those materials. These are successes significantly beyond anything planned in the original project proposal.

Second key action. When the original proposal of this project was written, recommended sample sizes for the IUCN's Sampled Red List Project were not yet determined, and the proposed sample size of 800 represented a best guess for 90% confidence limits. Shortly after the start of the project, it became clear that 900 species were required for 90% confidence limits, and 1500 for 95% confidence limits. The project therefore used a random sample of 1500 species, with subsets of 900 and 800 so that, if work proceeded well, better confidence limits than those originally proposed could be achieved. By the end of

the project's second year, draft evaluations had been prepared of 800 ascomycete species from a data pool of about 1.6 million records. During the current reporting period, a full review was made of the nomenclatural and taxonomic status of the randomly sampled species names, and efforts were made to improve the quality of evaluations by enlarging the data pool. Curators of the Fungal Databases of the USDA and the Foray Records Database of the British Isles have kindly agreed to collaborate, and have supplied relevant data, thereby taking the size of the data pool up to about 4 million records. In addition, the British Lichen Society has kindly supplied an electronic version of the full indexes of the *Lichenologist*, thereby also enhancing the data pool. This collaboration significantly increases the scientific value of the evaluations and, by virtue of the larger group of collaborators, extends the impact of the work. It is likely that, by the end of the project, there will be 1500 conservation status evaluations - over 80% more than originally promised.

Third key action. The authors of the mid-term review of this project and the review of this project's second annual report all advised that, in view of the impact achieved, the results of this action should be classified as two separate outputs. **Training mycologists.** Up to the start of this reporting period, workshops and courses had been held through this project in Argentina, Brazil, Cuba, South Africa, Ukraine and the USA. Since then, additional workshops have been held in Colombia and, again, in the USA. Because they have been timed to coincide with international mycological meetings, collectively these workshops have now reached mycologists from Argentina, Brazil, Canada, China, Costa Rica, Cuba, Dominican Republic, Ecuador, France, Japan, Lithuania, Malawi, Mexico, Namibia, Peru, Russia, South Africa, Spain, Switzerland, the UK, Ukraine, Uruguay, the USA, Venezuela and Zimbabwe. A major workshop, organized through this project but led by IUCN staff, will form part of the October meeting referred to earlier. A lot of problems have been experienced in organizing courses in Africa, but efforts continue. During the reporting period, plans were agreed for courses to be held in Egypt, Nigeria and South Africa in the first quarter of 2010. These courses will include a significant element of training in classical identification techniques for microfungi. The project leader hopes that, with other project commitments out of the way by then, time can be found to do this aspect of the work justice. **Internet resources.** The Cybertruffle web-server, established during this project, is now one of the two largest non-governmental free access internet information resources about fungi in the world. It supplies searchable information about fungi from all countries of the world (ie all the countries named in this project's original proposal, and every other country as well). Traffic is monitored through Google Analytics. During the week leading to the date of this report, for example, over 700 users per day logged on - about one every two minutes - each viewing an average of about 10 pages. Since inception, the websites have received more than 2 million hits from 203 countries. Those statistics are only a partial picture - perhaps only 60% of total use - because they do not include external calls from the IndexFungorum website which through collaboration makes extensive use of JPG images from Cyberliber. In addition, during the reporting period, website content was enlarged, and work continued in preparing additional content for the Robigalia database recording the places and times where fungi and their associated organisms occur. In particular, during a visit to Britain by Dr Sankaran, one of the named project participants, significant progress was made on digitizing records of fungi from India.

2. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

The Cybertruffle server was relocated in early May 2009, resulting in four days loss of access.

Have any of these issues been discussed with the Darwin Secretariat and if so, have changes been made to the original agreement?

No: not deemed necessary.

Discussed with the DI Secretariat: no/yes, in..... (month/yr)

Changes to the project schedule/workplan: no/yes, in.....(month/yr)

3. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan or budget should not be discussed in this report but raised with the Darwin Secretariat directly.

Please send your **completed form email** to Eilidh Young, Darwin Initiative M&E Programme at Darwin-Projects@ectf-ed.org.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 14-075 Darwin Half Year Report**