

Report on the MiSAC Annual Competition 2018

Commercial uses of fungi - What fungi do for us

The requirement of the 30th MiSAC Annual Competition was to produce information for a new teenagers' web site called *What fungi do for us*, with the purpose of increasing an understanding of the wide range of commercial uses of fungi in everyday life. This maintained our well-established approach of basing the competition on a topic that is associated with school curricula but with specifications that require students to explore material beyond the curriculum. The British Mycological Society generously provided special sponsorship for the competition and also, with MiSAC and IPST (a Thai government agency), concurrently sponsored a competition with the same title for secondary school students in Thailand.

The MiSAC competition continues to attract newcomers as well as maintaining strong support from regular participants. The popularity of this year's topic is particularly encouraging because, despite the wide significance of fungi, this very important group of microbes tends to be neglected in school (and university) education. As usual, there were two entry groups, KS3 and KS4 (Secondary 1/2 and 3/4 in Scotland). The 63 establishments that took part were from schools throughout the UK but also included one from the Netherlands; 15 schools made submissions to both entry groups. In total, there were 405 entries consisting of 307 in the KS3 (S1/2) group and 98 at KS4 (S3/4). Many participants took the opportunity to work together in groups of up to 4, making a total of 608 students having had the experience of contributing to the competition.

Members of MiSAC were joined on the judging panel by three representatives of the competition sponsor, the British Mycological Society: Ms Carol Hobart, Vice-President, Professor Stefan Buczacki, past-President and Dr Margaret Whalley, also Treasurer of MiSAC. This year, the overall requirement was to design material for a web site for teenagers; this would be arranged in two parts. The first half of the entry required an overview of the extraordinary range of fungal activities that are of commercial importance; the second half had to be a description of the scientific details of one of those processes and include the name of the fungus responsible. The competition entry had to be printed on one A3 sheet (or two A4 pages attached side-by-side). Examples of relevant processes were provided for guidance but entrants were encouraged to consider others.

As the judging procedure always includes attention to the requirements of the competition, it is important that entrants take careful note of the specifications. The judges noted that the entry requirements were generally well observed, with many hand- and computer-produced entries that achieved high standards of presentation and with some demonstrating innovative approaches. Entrants showed a good awareness of the range of commercially-important fungal activities and, in the second part of the entry, of the scientific details of the chosen process. Credit was given for illustrating a good factual account with photographs, diagrams or data and for presenting a design which is appropriate for a web site and is both informative for, and attractive to, the intended interest group, i.e. teenagers. Only a small number of entrants revealed their wide-ranging research by referring to activities other than those suggested in the competition guidance, e.g. the use of a fungal mycelium in building materials. The guidance also drew attention to the rules of biological nomenclature, i.e. the use of italic font (or underlined if hand written) for the formal name of an organism and upper case for the genus and lower case for the species, e.g. *Saccharomyces cerevisiae*. In addition, the judges observed the need for improvement in the correct use of the singular and plural cases, e.g. fungus, mycelium (singular); fungi, mycelia (plural).

It was encouraging to receive appreciative comments from teachers regarding the benefits for their students in taking part in the competition and on the interest and enjoyment that was generated. We also thank teachers for their attention to the request to record full identification details on the back of each entry which eases the administration of several hundred entries, many involving more than one student.

Money awards totalling £1,255 were made to prize winners and their establishments, and some entries were awarded a commendation. All students who did not receive an award have had their work acknowledged by receiving a certificate of entry and each participating establishment will receive some microbiology teaching resources.

MiSAC warmly thanks the students for making the competition a success and their teachers for their support. We look forward to an even stronger response to the next competition which will mark the 50th anniversary of MiSAC's foundation.

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