MYCOSPEAK AND BIOBABBLE

"There are at least thirty kinds of biologist, each with a mutually incomprehensible 'biobabble'." James Lovelock (The Times 65257 (3 May): 23, 1995).



ycologists are often accused of using terminologies that are not immediately understood by biologists as a whole. A topical example is that of anamorph and teleomorph, rather than either the immediately understood asexual and sexual, or the now less-used alternative mitotic and meiotic. In descriptions, there is also a tendency to follow tradition. Some commonly used adjectives likely to be understood by those with some knowledge of Latin or Greek, but not so readily by others. Amongst numerous examples are coprophilous, corticolous, epiphyllous, lignicolous, mycobiont, and saxicolous rather than on dung, on bark, on leaves, on wood, fungal partner, and on rock. In descriptions examples are manifold, such as moniliform for in chains, punctate for spotted, reniform for kidney-shaped, and verrucose for warty. It is good practice when editing or reviewing papers, to always ask "is that term really necessary or appropriate?"

Rambold *et al.* (2013) have argued for the recognition of mycology as a separate field in biology, and one element of establishing that distinctness is the use of special terms where they are justified. This point is stressed by Jens H. Petersen,

author of The Fungal Kingdom (Petersen 2012), in an interview on pp. (21)–(22) of this issue of IMA Fungus: "We have to insist that fungi are not 'Lower Plants', their occurrence in nature should not be called *flora* but *funga*, they are not kept in herbaria but in fungaria, etc. We have to insist on their uniqueness, \dots " $\,$ – although I personally prefer mycobiota to funga (and also avoid *mycota* as a term indicating the rank of phylum). As many mycologists will perhaps be aware, I have also refrained from publishing on mycological matters in journals and books which have 'botany' in their titles since IMC5 (Vancouver) in 1994 to help address this issue of subject identity (Hawksworth 1995), and this practice is advocated for adoption by all mycologists in the MycoAction Plan (Hawksworth 2003).

At the same time, the adoption of terms from other areas of biology for dissimilar structures can mislead, and even give subliminal impressions of affinity where there is none. One term which continues to mislead, and is still in widespread use by mycologists, is fruiting and fruiting body. This is so entrenched, and surely was an oversight in Petersen's book, but persists in conveying the subliminal connotation that these structures are comparable to the fruits of plants. A fruit is a "seed bearing organ, with or without adnate parts" (Beentje 2010). Fungi do not have seeds, so cannot have fruits, so why do many mycologists persist with using this anachronism? What fungi do have is spores, so logically we should always adopt either sporocarp or sporophore for fruit body, and sporing for fruiting? The term carpophore is better avoided; it has been used both for the stipe region of basidomes, and also the carpelbearing structure in some plants.

Communication amongst mycologists, with other biologists, and also citizen

scientists, will surely be facilitated if we all resolve to: (1) use 'mycospeak' terms when they are necessary, for either features unique to fungi, to enhance precision, or to assert the identity of the discipline; and (2) simultaneously eliminate biobabble that merely obfuscates.

Beentje H (2010) *The Kew Plant Glossary: an* illustrated dictionary of plant terms. Kew: Kew Publishing.

Hawksworth DL (1995) Challenges in mycology. Mycological Research 99: 127–128.

Hawksworth DL (2003) Monitoring and safeguarding fungal resources worldwide: the need for an international collaborative MycoAction Plan. *Fungal Diversity* 13: 29–45.

Petersen, JH (2012) *The Kingdom of Fungi*.

Princeton, NJ: Princeton University Press.

Rambold G, Stadler M, Begerow D (2013)

Mycology should be recognized as a field of biology at eye level with other major disciplines – a memorandum. *Mycological Progress* DOI: 10.1007/s11557-013-0902x.

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Clavaria argillacea: fruit-body or sporophore?



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