

Collections, Cultures and the names of Fungi

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Names of Fungi are critical for communicating scientific findings, but also for clinical diagnostics, legal compliance, and regulatory controls, such as biosafety, food security, quarantine regulations, and industrial applications. The stability of the taxonomic system and the traceability of nomenclatural changes is crucial for a broad range of users and taxonomists. The unambiguous application of names is assured by the preservation of nomenclatural history and the physical material of the organism representing a name. The International Code of Nomenclature for Algae, Fungi, and Plants (ICNafp) permits cultures to represent a type if they are stored in a metabolically inactive state. The collections ensure safe preservation of the type material and collection numbers are the unique identifiers to be cited in a taxonomic description. The current edition of the ICNafp allows culture collection acronyms to be used in the protologue, and the Code refers to the World directory of collections of cultures of microorganisms (Art. 40.7, Note 4), the discontinued service of the WFCC and WDCM.

Mycologists working with yeasts campaign for using viable cultures as nomenclatural types under the ICNafp. Nowadays, many collections employ modern preservation techniques and management practices to ensure safe preservation of the material and the associated information. A number of already existing mechanisms, including mandatory authentication of deposited cultures, deposition certificates and registration in electronic nomenclature repositories can help to create a transparent system for tracking viable type material. The WFCC collections can play an important role in the process by creating common standards and certificates, and by reviving the World directory of collections as a voluntary register of collections accepting type viable material under common quality standards.