



4-2019

## **1,303 generic names of agarics and Agaricales: Where are they now?**

Jacob Kalichman  
*University of Tennessee, Knoxville*

Paul Kirk  
*Royal Botanic Gardens, Kew*

P. Brandon Matheny  
*University of Tennessee, Knoxville*

Follow this and additional works at: <https://trace.tennessee.edu/masmc>

---

### **Recommended Citation**

Kalichman, Jacob; Kirk, Paul; and Matheny, P. Brandon, "1,303 generic names of agarics and Agaricales: Where are they now?" (2019). *Middle Atlantic States Mycological Conference 2019*.  
<https://trace.tennessee.edu/masmc/18>

This Presentation is brought to you for free and open access by the Conferences at UT at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Middle Atlantic States Mycological Conference 2019 by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact [trace@utk.edu](mailto:trace@utk.edu).

Mid-Atlantic States Mycological Conference (MASMC)  
University of Tennessee – Knoxville  
12-14 April 2019

**ABSTRACTS** - Oral Presentations

**1,303 generic names of agarics and Agaricales: Where are they now?**

Jacob Kalichman<sup>1</sup>, Paul Kirk<sup>2</sup>, and P. Brandon Matheny<sup>1</sup>

<sup>1</sup>Department of Ecology and Evolutionary Biology, University of Tennessee, <sup>2</sup>Royal Botanic Gardens, Kew

1300 genus names of gilled mushrooms (regardless of taxonomic order) and Agaricales (regardless of morphology) are compiled along with basic information for each. Including names both in and out of use, the set is intended to be comprehensive and phylogenetically up-to-date. Listed information includes authors, years of publication, reasons for deprecation, type species, sequenced genes for type species, geographic origin, current names, current taxonomic placement, number of accepted species, broad morphological categories, and literature citations. Index Fungorum provides a basis for the data; most are confirmed, augmented, or corrected based on recent literature. By genus, 84% of gilled mushrooms belong to the Agaricales and 67% of the Agaricales are gilled. With automated searches of GenBank and MycoCosm, we determined that 65% of the type species of these genera have been sequenced, leaving 186 accepted genera lacking type sequence data. We summarize the morphological diversity of Agaricales, list nomenclaturally threatened and taxonomically dubious genera and families, and note under-sequenced subsets, especially cyphelloid genera and genera described from Africa and tropical Asia.