

The Microfungi Collections Consortium

Andrew N. Miller
University of Illinois Urbana-Champaign

Scott T. Bates
Purdue University Northwest

Philip J. Anders
University of Illinois Urbana-Champaign

iDigBio Summit
virtual
24 September 2020



MYCOLOGY COLLECTIONS PORTAL

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Welcome to the Mycology Collections data Portal

The Mycology Collections data Portal (MyCoPortal) is more than just a web site - it is a suite of user-friendly, web-based data access technologies to aid taxonomists, field biologists, ecologists, educators, and citizen scientists in the study of fungal diversity. The data are derived from a network of universities, botanical gardens, museums, and agencies that provide taxonomic, environmental, and specimen-based information. Using the Symbiota (<http://symbiota.org>) system of virtual online floras, these data are directly accessible to dynamically generate geo-referenced species checklists, distribution maps, and interactive identification keys, all linked with a rich collection of digital imagery documenting fungal diversity of North America.

Fungus of the Day



What is this fungus?

[Click here to test your knowledge](#)

































































































HIDE CAPTION
Boletus rubropunctatus; 53411; D. Guravich 575.
Courtesy of: University of Michigan Herbarium.



News and Events

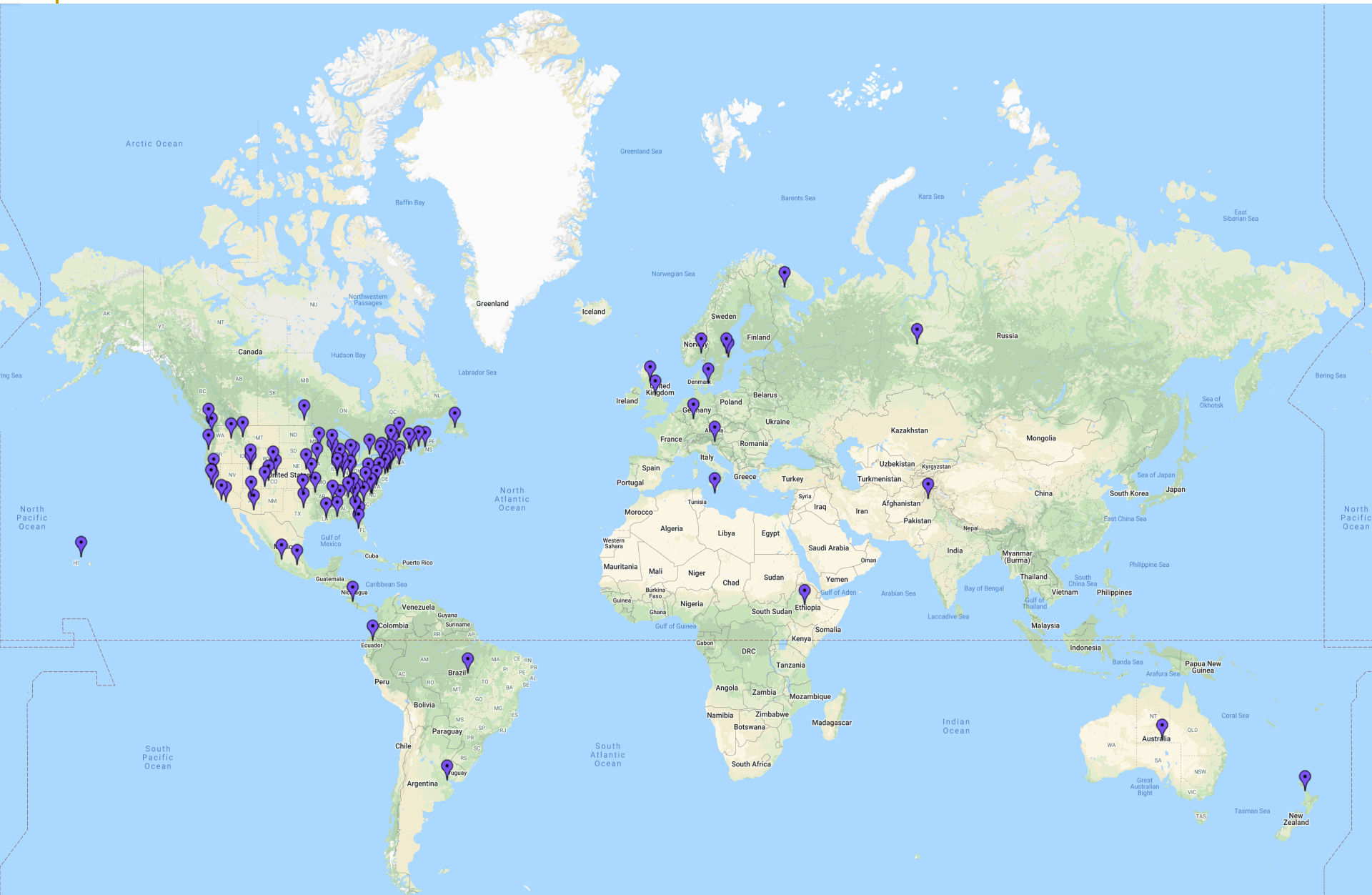
- **Microfungi Collections Consortium (MiCC) website now live**
- **fdex**: a simplified names database, primarily for projecting taxonomic hierarchy for fungal taxa.
- **NSF Press Release (#15-092)** - NSF awards fifth round of grants to enhance America's biodiversity collections
- **NSF Press Release (#12-082)** - US National Science Foundation awards support for The Macrofungi Collection Consortium, a collaboration of 35 institutions in 24 states for the purpose of databasing some 1.4 million dried scientific specimens of macrofungi (NSF ADBC 1206197).
- **December 2013** - 1,546,358 occurrence records supplied by 31 different data providers have been integrated into MyCoPortal.
- **NEW** - MaCC records are now part of the Zooniverse project *Notes from Nature*. Please help us by transcribing specimen labels ([link](#)).
- Image provided by New York Botanical Garden.

	Academy of Natural Sciences of Drexel University (PH) more info		University of British Columbia Herbarium (UBC) more info
	Acadia University, E. C. Smith Herbarium (ACAD) more info		University of California Berkeley, University Herbarium (UC) more info
	Atlas of Living Australia fungal data (N/A) more info		University of California Santa Cruz Fungal Herbarium (UCSC) more info
	Bamfield Marine Science Centre (BMSC) more info		University of California, Los Angeles (LA) more info
	Bishop Museum, Herbarium Pacificum (BISH) more info		University of Central Oklahoma Herbarium (CSU) more info
	Botanical Research Institute of Texas (BRIT) more info		University of Cincinnati, Margaret H. Fulford Herbarium (CINC) more info
	Brazil SpeciesLink Fungi data from iDigBio (N/A) more info		University of Florida Herbarium (FLAS) more info
	Brown University Herbarium (BRU) more info		University of Georgia, Julian H. Miller Mycological Herbarium (GAM) more info
	California State University Chico, Chico State Herbarium (CHSC) more info		University of Hawaii, Joseph F. Rock Herbarium (HAW-F) more info
	Clemson University Herbarium (CLEMS) more info		University of Illinois Herbarium (ILL) more info
	College of the Atlantic, Acadia National Park Herbarium (HCOA) more info		University of Illinois, Illinois Natural History Survey Fungarium (ILLS) more info
	Cornell University, Plant Pathology Herbarium (CUP) more info		University of Kansas, R. L. McGregor Herbarium (KANU-KU-F) more info
	Davis & Elkins College Herbarium (DEWV) more info		University of Maine, Richard Homola Mycological Herbarium (MAINE) more info
	Denver Botanic Gardens, Sam Mitchel Herbarium of Fungi (DBG-DBG) more info		University of Michigan Herbarium (MICH) more info
	Duke University, Herbarium Fungal Collection (DUKE) more info		University of Minnesota, Bell Museum of Natural History Herbarium Fungal Collection (MIN) more info
	Eastern Illinois University (EIU) more info		University of Mississippi (MISS) more info
	Ecuador Fungi data from FungiWebEcuador (QCAM) more info		University of Montana Herbarium (MONT) more info
	Facultad de Ciencias Exactas y Naturales (BAFC-H) more info		University of Nebraska State Museum, C.F. Messey Herbarium (NEB) more info
	Field Museum of Natural History (F) more info		University of New Mexico Herbarium Mycological Collection (UNM-Fungi) more info
	Foray Newfoundland and Labrador Fungarium (FNL) more info		University of North Carolina, Chapel Hill Herbarium (NCU) more info
	Fort Lewis College Herbarium (FLD) more info		University of Oklahoma (OU) more info
	Harvard University, Farlow Herbarium (FH) more info		University of Alabama Herbarium (USAM) more info
	Herbarium Amanitarum Rooseveltensis (RET) more info		University of South Carolina, A. C. Moore Herbarium (USCH-Fungi) more info
	Indiana University (IND) more info		University of South Florida Herbarium (USF) more info
	International Collection of Microorganisms from Plants (ICMP) more info		University of Tennessee Fungal Herbarium (TENN-TENN-F) more info
	Iowa State University, Ada Hayden Herbarium (ISC) more info		University of Tennessee, Chattanooga (UCHT) more info
	Jewell and Arline Moss Settle Herbarium at SUNY Oneonta (SUCO) more info		University of Vermont, Pringle Herbarium, Macrofungi (VT) more info
	Louisiana State University, Bernard Lowy Mycological Herbarium (LSUM-Fungi) more info		University of Washington Herbarium (WTU) more info
	Miami University, Willard Sherman Turrell Herbarium (MU) more info		University of Wisconsin-Madison Herbarium (WIS) more info
	Michigan State University Herbarium (MSC) more info		University of Wisconsin-Stevens Point Herbarium (UWSP) more info
	Museo Nacional de Costa Rica (CR) more info		University of Wyoming, Wilhelm G. Solheim Mycological Herbarium (RMS) more info
	Museum of Northern Arizona (MNA) more info		USDA Forest Service, Center for Forest Mycology Research (CFMR) more info
	Mushroom Mountain Fungarium (N/A) more info		USDA Forest Service, Rocky Mountain Research Station (FPF) more info
	National Herbarium of Mexico Fungal Collection (Hortobonario Nacional de México) (IBUNAM-MEXU:FU) more info		Utah State University, Intermountain Herbarium (USU-UTC) more info
	Natural History Museum of Utah Fungarium (UT) more info		Valdosta State University Herbarium (VSC) more info
	New Brunswick Museum (NBM) more info		Virginia Tech University, Massey Herbarium (VPI) more info
	New York Botanical Garden (NY) more info		Washington State University, Charles Gardner Shaw Mycological Herbarium (WSP) more info
	New York State Museum (NYS) more info		Western Colorado University Herbarium (WSC) more info
	New Zealand Fungarium (PDD) more info		Yugra State University Fungarium (YSU-F) more info
	North Carolina State University, Larry F. Grand Mycological Herbarium (NCSLG) more info		Addis Ababa University (ETH) more info
	Oregon State University Herbarium (OSC) more info		Atlas of Living Australia fungal data (N/A) more info
	Patuxent Research Refuge - Maryland (USFWS-PRR) more info		Foray Newfoundland and Labrador (FNL) more info
	Purdue University, Arthur Fungarium (PUR) more info		iNaturalist Research Grade Observations (iNat) more info
	Purdue University, Kriebel Herbarium (PUL) more info		Index of the C.G. Lloyd Mycological Collection Specimens Housed at BPI (BPI) more info
	René Pomerleau Herbarium (QFB) more info		
	Royal Botanic Garden Edinburgh (E) more info		
	Royal Ontario Museum Fungarium (TRTC) more info		
	Rutgers University, Chrysler Herbarium - Mycology Collection (CHRB) more info		
	San Francisco State University, Harry D. Thiers Herbarium (SFSU) more info		
	Slovenian Fungal Database (Mikoteka in herbarij Gozdarskega inštituta Slovenije) (LJF) more info		
	State University of New York College at Cortland (CORT) more info		
	State University of New York, SUNY College of Environmental Science and Forestry Herbarium (SYRF) more info		
	Swat University Fungarium (SWAT) more info		
	Swedish Museum of Natural History (S) more info		
	United States National Fungus Collections (BPI) more info		
	Universidad de Guadalajara (IBUG) more info		
	Université de Montréal, Cercle des Mycologues de Montréal Fungarium (CMMF) more info		
	University of Alabama Chytrid Culture Collection (UACCC) more info		
	University of Arizona, Gilbertson Mycological Herbarium (ARIZ) more info		
	University of Arkansas Fungarium (UARK) more info		

108 institutions!

- 61 are "live"
- 47 are "snapshots"

Collections (108 institutions)



MYCOLOGY COLLECTIONS PORTAL

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Exsiccati

- 100 Specimens of British Leaf-Fungi, M.C. Cooke
- A Century of Illustrative Fungi with Generic Synopses of the Basidiomycetes and Myxomycetes, L.M. Underwood [1-100]
- A Collection of Dried Plants, Named on the Authority of the Linnaean Herbarium and Other Original Col..., J. Dickson [1-100]
- A Set of English Agarics Collected and Mounted by Mr. Ch. E. Harkey-Smith [Fasc.1-4], C.E. Harkey-Smith [1-82]
- Anderson & Shushan: Lichens of Western North America, L.L. St. Clair; T.O. Ririe; C.C. Newberry [26 - 50]
- Anderson & Shushan: Lichens of Western North America, L.L. St. Clair; K.B. Knight; T.O. Ririe; C.C. N... [51 - 75]
- Anderson & Shushan: Lichens of Western North America, L.L. St. Clair; K.B. Knight; P. Ririe; T. Kitch... [76 - 100]
- Anderson & Shushan: Lichens of Western North America, L.L. St. Clair; P. Ririe; K.B. Knight [101 - 150]
- Ascomyceten, H. Rehm [1-2175, plus extras]
- Ascomycetes and Lower Fungi, G.W. Wilson and F.J. Seaver [1-100]
- Beitrage zur Mecklenburgischen Pilzflora [Heft 1-3], C.F.B. Fielder [1-157]
- Bermuda Fungi, H.H. Whetzel and J.McL. Waterston [1-200]
- British Fungi, M.J. Berkeley [1-350]
- British Fungi, Mycologia Britannica, P.B. Ayres [1-100]
- Caliciales Exsiccatae, Leif Tibell [1 - 250]
- California Fungi, Berkeley, CA, Herbarium of the University of California. [1- ? 1425]
- Canadian Lichens, J. Macoun [1 - ? 300]
- Caroli Wright Lichenes Insulae Cubae, Curante E. Tuckerman, E. Tuckerman [1 - 246]
- Cecidotheca Italica, Raccolte di Gallie Italiane Determinate, Preparate e Illustrate [Fasc. 1-20], A. Trotter [1-500]
- Central American Fungi, C.L. Smith [1-150, plus extras]
- Champignons des Iles de St. Thome et des Princes, G. Bresadola [1-62]
- Champignons du Tonkin, B.B. Balansa [1-165]
- Cladoniae Americanae Exsiccatae, S. Hammer [1 - 222]
- Cladoniae Europaeae Exsiccati. Supplement I, G.L. Rabenhorst [1 - 56]
- Cladoniae Europaeae. Die Cladonien Europa's in getrockneten Exemplaren. Unter Mitwirkung mehrere Fre..., G.L. Rabenhorst [1 - 260]
- Cladoniae Exsiccatae, H. Rehm [1 - 150]
- Cladoniae Exsiccatae, H. Rehm & F.C.G. Arnold [151 - 440]
- Cladoniae Exsiccatae, H. Sandstedt [1 - 1886]
- Cryptogamae Cechoslovenicae Exsiccatae, K. Kavina and A. Hilltzer [1-300]
- Cryptogamae Exsiccatae editae a Museo Historiae Naturalis Vindobonensis, U. Passauer [4701 - 5000]
- Cryptogamae Exsiccatae editae a Museo Palatino Vindobonensi [3201-4700], F. Petrak [3201- 4700]
- Cryptogamae Formationum Coloradensium, F.E. Clements and E.S. Clements [1-615]
- Cryptogamae Parasiticae in Insula Java Lecte Exsiccatiae, M. Raciborski [1-150]
- Cryptogames de L'empire Colonial Francais, R. Heim [1-20]; Series A, R. Heim [1-20]
- Cryptogames de L'empire Colonial Francais, R. Heim [1-20]; Series B, R. Heim [1-20]
- Cryptogames de L'empire Colonial Francais, R. Heim [1-20]; Series C, R. Heim [1-20]
- Cryptogames Recueillies dans la Provence de Namur par A. Belynyck, de la Compagnie de Jesus, A. Belynyck [1-200]
- Cryptogamic Herbarium, Department of Botany and Plant Pathology, Oklahoma...
- Cryptogamische Gewächse des Fichtelgebirg's, H.C. Funck [1-125]
- Cryptogamische Gewächse des Fichtelgebirg's. Edition II., H.C. Funck [1-865]
- Cryptogams Distributed by the Farlow Herbarium of Harvard University. Reliquiae Farlowianae., R. Thaxter and D.H. Linder [1-1000]
- Cryptotheca Lusitana, F.M.J. Welwitsch [1 - ? 125]
- Cryptogamen-Herbarium, H. Wagner and A. Wagner [1-10]
- Decades Fungorum Brasiliensium, F. Theissen [1-300]
- Decades Mycologicae Italicae, C. Spegazzini [1-120]
- Decades of North American Lichens, C.E. Cummings & A.B. Seymour [1 - 150]
- Decades of North American Lichens, C.E. Cummings; T.A. Williams; A.B. Seymour [151 - 360]
- Deutsche Lichenen, gesammelt und mit Anmerkungen herausgegeben von H. G. F., H.G. Floerke [1 - 60]
- Deutsche Lichenen, gesammelt und mit Anmerkungen herausgegeben von H. G. F., H.G. Floerke [61 - 200]
- Deutschlands Schwämme in Getrockneten Exemplaren, C.F. Holl, J.C. Schmidt, and G. Kunze [1-225]
- Die Flechten Europas in getrockneten mikroskopisch untersuchten Exemplaren mit Beschreibung und Abbi..., J.A.P. Hepp [1 - 716]
- Die Flechten Europas in getrockneten mikroskopisch untersuchten Exemplaren mit Beschreibung und Abbi..., J. Müller [717 - 962]
- Discomycetae Exsiccatae, R.P. Korf [1-25]
- Dr. Phil Wirtgen: Herbarium Plantae Criticae, Selectae, Hybridae Florae Rhenanae, H. Andres [1-100]
- Dupla Fungorum, C. Scheuer
- Dupla Fungorum, Supplementum (2003), C. Scheuer [1-330]
- Dupla Graecensia Fungorum, C. Scheuer [1-450]
- Dupla Graecensia Lichenum, W. Obermayer [1 - 1190]
- Economic Fungi, A.B. Seymour and F.S. Earle [1-550, plus extras]
- Elvellacei Britannici Exsiccati, W. Phillips [1-201]
- Enumeratio fungorum Nassoviae a Leopoldo Fuckel collectorum. Ser. I. 1860, L. Fuckel
- Erbario Critogamico Italiano [Series I & II], F. Baglietto, V. de Cesati, G. de Notaris, and oth... [1-1500]
- Eumycetes Selecti Exsiccati, J. Weese [1-800]
- Exsiccata Hypodermeorum Galliae Orientalis, R. Maire [1-50]
- Flora Bavarica, K. Starcs


Options

Search:

Display only those w/ specimens

Display and sort by:

Title Abbreviation




491 exsiccate titles

Selected Collection Statistics

Display List of Collections Analyzed

- 7,081,895 occurrence records
- 4,175,823 (59%) georeferenced
- 2,250,987 (32%) imaged
- 5,305,162 (75%) identified to species
- 1,913 families
- 9,368 genera
- 136,563 species
- 146,214 total taxa (including subsp. and var.)

Show Statistics per Collection 

~164K type specimens representing ~46K taxa!

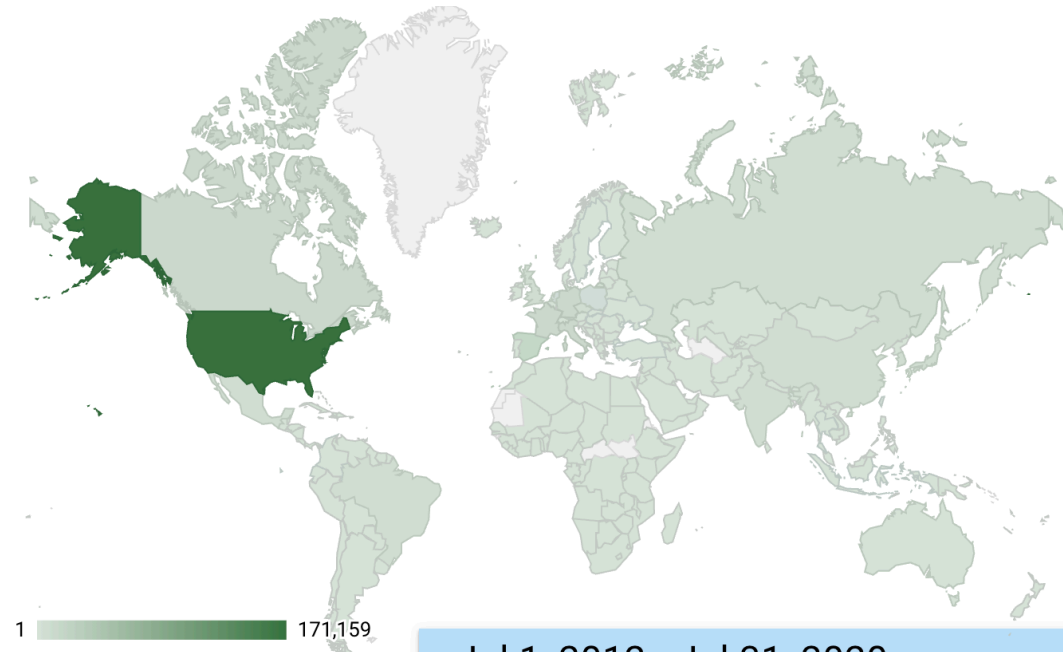
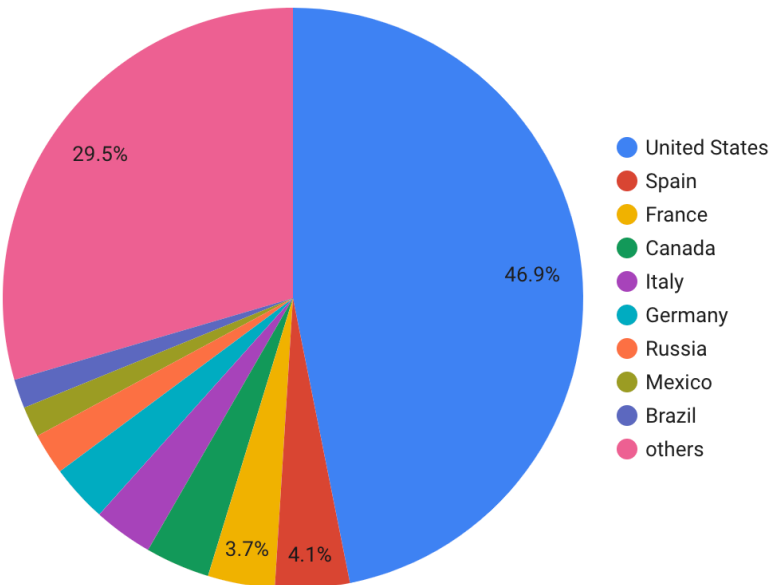
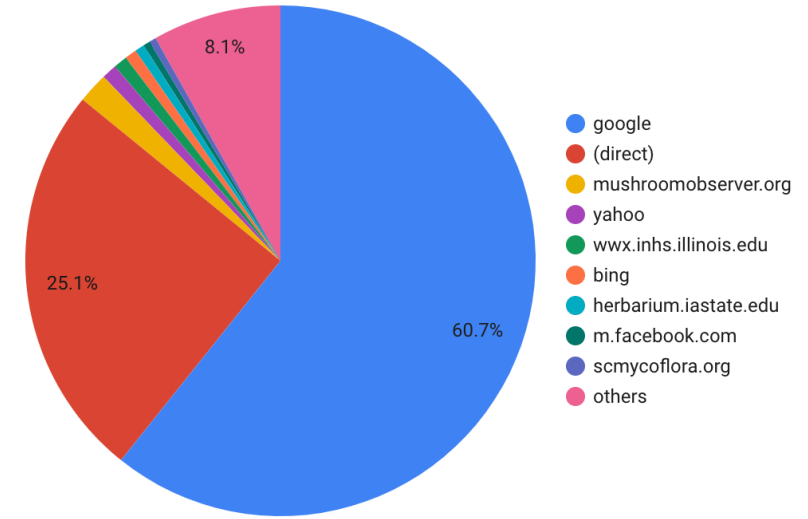
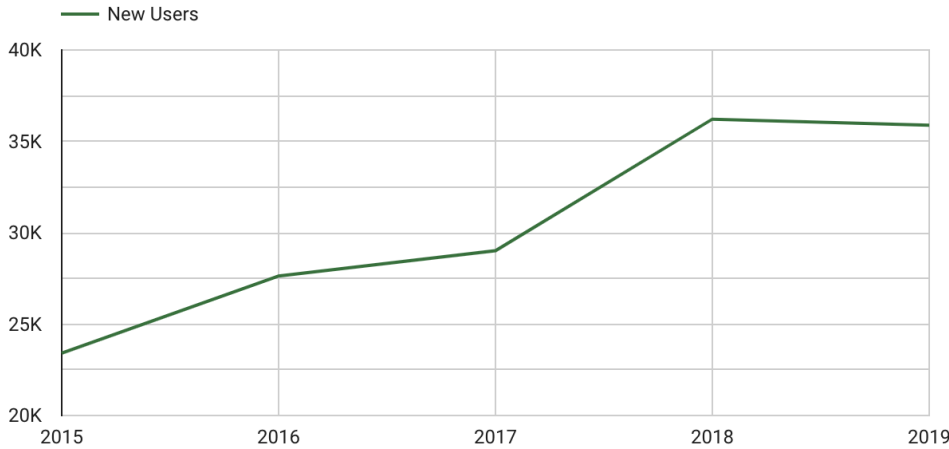
MyCoPortal Data Portal Statistics

www.mycportal.org

Data from Google Analytics

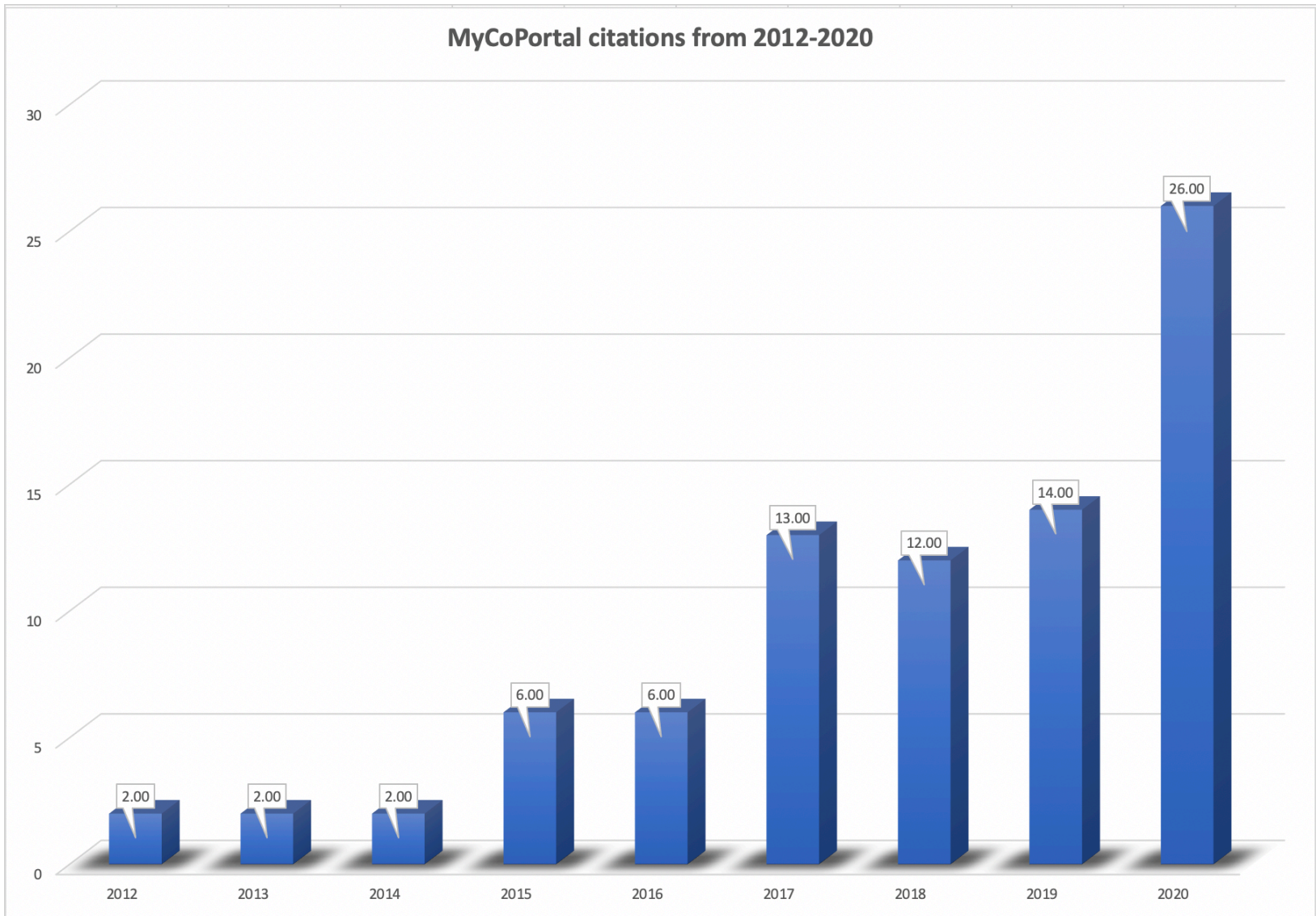
MYCOLOGY COLLECTIONS PORTAL

Users	New Users	Sessions	Number of Sessions per User	Pageviews	Pages / Session	Avg. Session Duration	Bounce Rate
140,188	181,799	365,318	2.61	1,047,672	2.87	00:03:06	57.48%



Jul 1, 2012 - Jul 31, 2020



Peer-reviewed publications citing the MyCoPortal



***83 publications in 35 journals since 2012**



The protochecklist of North American nonlichenized Fungi

Scott T. Bates ^a, Andrew N. Miller ^b, and the Macrofungi Collections and Microfungi Collections Consortia

^aDepartment of Biological Sciences, Purdue University Northwest, Westville, Indiana 46391; ^bIllinois Natural History Survey, University of Illinois Urbana-Champaign, Champaign, Illinois 61820

ABSTRACT

Fungi are the second largest group of eukaryotic organisms on Earth, providing essential ecosystem services throughout the world. Although early attempts were made in the 20th century to document various components of the mycota of North America, no extensive list of taxonomic names has ever been compiled for this region. This paper represents the first comprehensive checklist for nonlichenized Fungi from North America, which is defined here as Canada, Mexico, and the United States (and its territories), and is based on the efforts of 75 fungaria that deposited their data online in the Mycology Collections Portal (MyCoPortal). This protochecklist is compiled from nearly 2.2 million records and includes 44 488 fungal names based on the MycoBank taxonomic thesaurus, with differences discussed that reflect discrepancies from the estimate of 46 118 taxa derived from a second list based on the Index Fungorum thesaurus. Approximately 114 000 type specimens (i.e., holo-, iso-, lecto-, syntypes, etc.) representing more than 52 000 typified taxa occur in the MyCoPortal, and of these, ca. 53 000 type specimens representing more than 18 000 typified taxa are described from North America. Several known problems exist with this protochecklist, including orthographical errors, unresolved synonymies, and incomplete taxonomy. The result offers a list of taxonomic names for discussion and provides a foundation for future systematic and taxonomic revisions and the discovery of new records and novel taxa for the region. Furthermore, this protochecklist serves as a baseline for documenting fungal taxa in North America more effectively and comprehensively.

ARTICLE HISTORY

Received 17 May 2018
Accepted 21 August 2018

KEYWORDS

Ascomycota; Basidiomycota;
database; natural history
collections; taxonomy

- 2.2M fungal records
- 44,488 fungal taxa in Canada, Mexico and USA
- almost half are type specimens
- 20,254 are macrofungi

fdex

| fdex |

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[github repository](#)

query term:

field:

Submit Query

Show entries

	taxon	authors	mb number	other ID	rank	taxonomic status	current taxon	current mb number	current other ID	current taxon status	parent taxon	parent mb number	parent other ID	record source
	Gyromitra montana	Harmaja	314835	755847C7-AA4F-4E38-9723-BCFDA676E1DF	sp.	Assumed legitimate	Discina montana	313274	E1E4BFDD-9902-4740-907F-2E19D9543439	Stable	Gyromitra	2184	1CB18C4E-36B9-11D5-9548-00D0592D548C	Index Fungorum
	Gyromitra montana	Harmaja	314835	272676	sp.	Assumed legitimate	Discina montana	313274	272675	Stable	Gyromitra	2184	56646	Mycobank

Showing 1 to 2 of 2 entries

Previous

1



Next

query term:

field:

Submit Query

Show entries

	taxon	authors	mb number	other ID	rank	taxonomic status	current taxon	current mb number	current other ID	current taxon status	parent taxon	parent mb number	parent other ID	record source
	Gyromitra montana	Harmaja	314835	755847C7-AA4F-4E38-9723-BCFDA676E1DF	sp.	Assumed legitimate	Discina montana	313274	E1E4BFDD-9902-4740-907F-2E19D9543439	Stable	Gyromitra	2184	1CB18C4E-36B9-11D5-9548-00D0592D548C	Index Fungorum
	Gyromitra montana	Harmaja	314835	272676	sp.	Assumed legitimate	Discina montana	313274	272675	Stable	Gyromitra	2184	56646	MycoBank

Showing 1 to 2 of 2 entries

Previous Next



```
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MyCoPortal adding a new virtual server



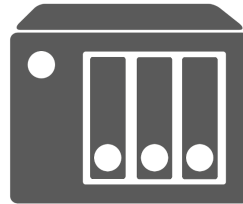
mycoportal.org

- **Secure (HTTPS)**
- **Drag and drop uploads**
- **Fdex taxonomic integration**
- **Secondary mySQL**



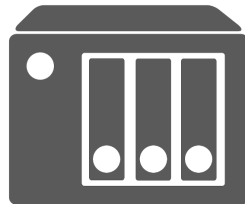
mySQL

- **Upgraded**
- **Optimized for 7+ million records**



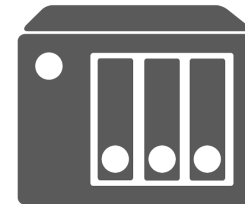
NAS (Synology RAID)

- **Images**



NAS (Synology RAID)

- **SOLR (map search)**
- **Automated daily backup (24/7)**
- **Borgbackup**



NAS (Synology RAID)

- **Secondary Borgbackup**

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