

The Microfungi Collections Consortium

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Project
Consultant

iDigBio Summit
Gainesville, FL
2 October 2019



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 rubropunctus; 53411; D. Guravich 575.
Courtesy of: University of Michigan Herbarium.



News and Events

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

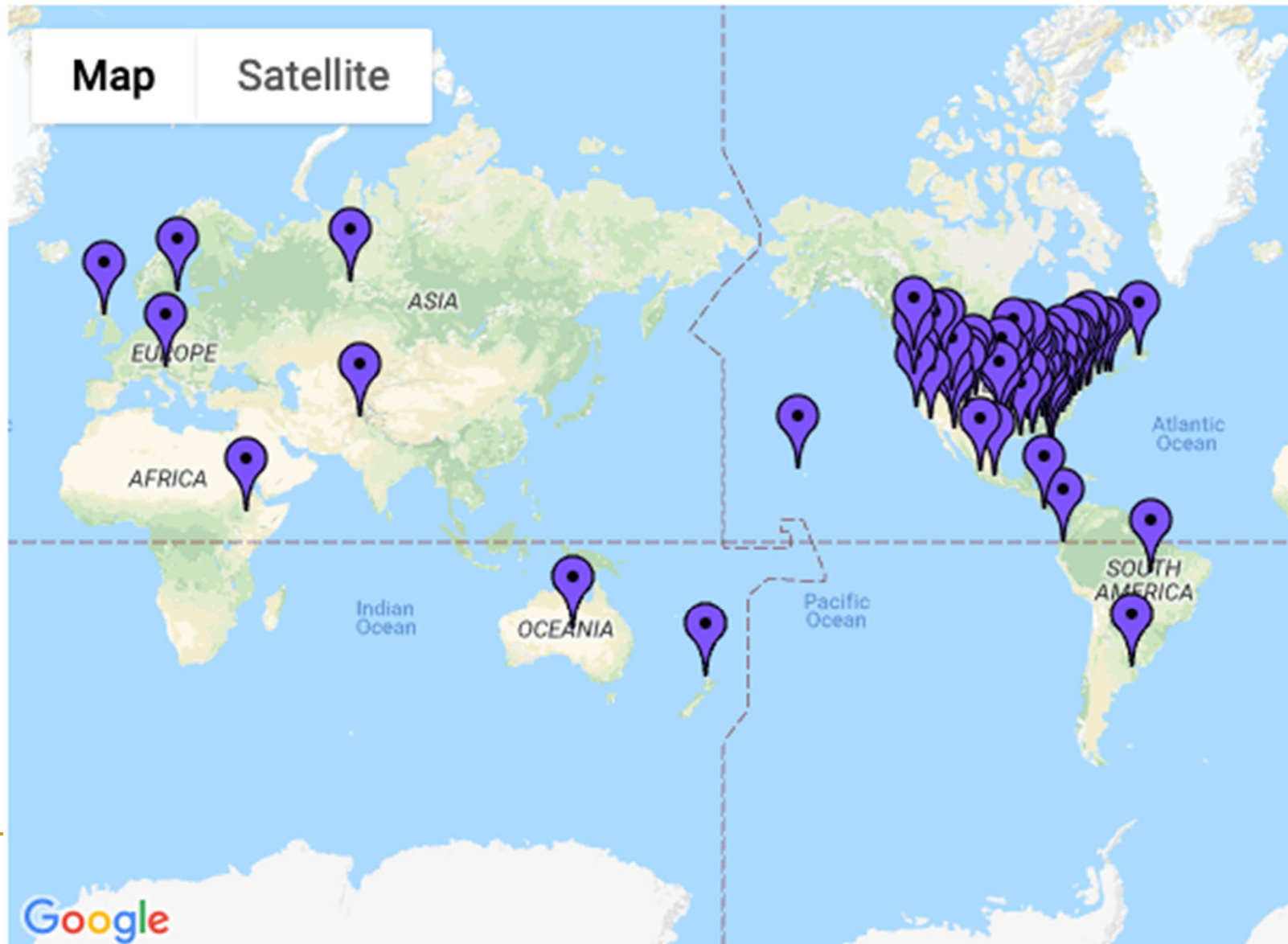
105 institutions!

– 62 are “live”

– 43 are “snapshots”

Collections (105 institutions)

MyCoPortal Collections Map showing all collections in the MyCoPortal



MYCOLOGY COLLECTIONS PORTAL

Selected Collection Statistics

Display List of Collections Analyzed

- 6,328,136 occurrence records
- 3,842,793 (61%) georeferenced
- 2,143,743 (34%) imaged
- 5,080,372 (80%) identified to species
- 1,840 families
- 8,837 genera
- 120,990 species
- 128,214 total taxa (including subsp. and var.)

Show Statistics per Collection 

transcribed records

- 3,948,394 (62%) (locality)
- 4,183,463 (66%) (sciname, country, recordedBy, eventDate)
- 5,789,892 (92%) (sciname, country) * 29,374 (0.5%) = Expert Required

~192K type specimens representing ~46K taxa!

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. Sandstede [1 - 1886]
- Cryptogamae Cechoslovenicae Exsiccatae, K. Kavina and A. Hiltzer [1-300]
- Cryptogamae Exsiccatae editae a Museo Historiae Naturalis Vindobonensi, 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 Exsiccatae, 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 Abbl..., J.A.P. Hepp [1 - 716]
- Die Flechten Europas in getrockneten mikroskopisch untersuchten Exemplaren mit Beschreibung und Abbl..., 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 Crittogamico Italiano [Series I & II], F. Baglietto, V. de Cesati, G. de Notaris, and oth... [1-1500]
- Eumycetes Selecti Exsiccati, J. Weese [1-800]
- Exsiccata Hypodermaearum 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

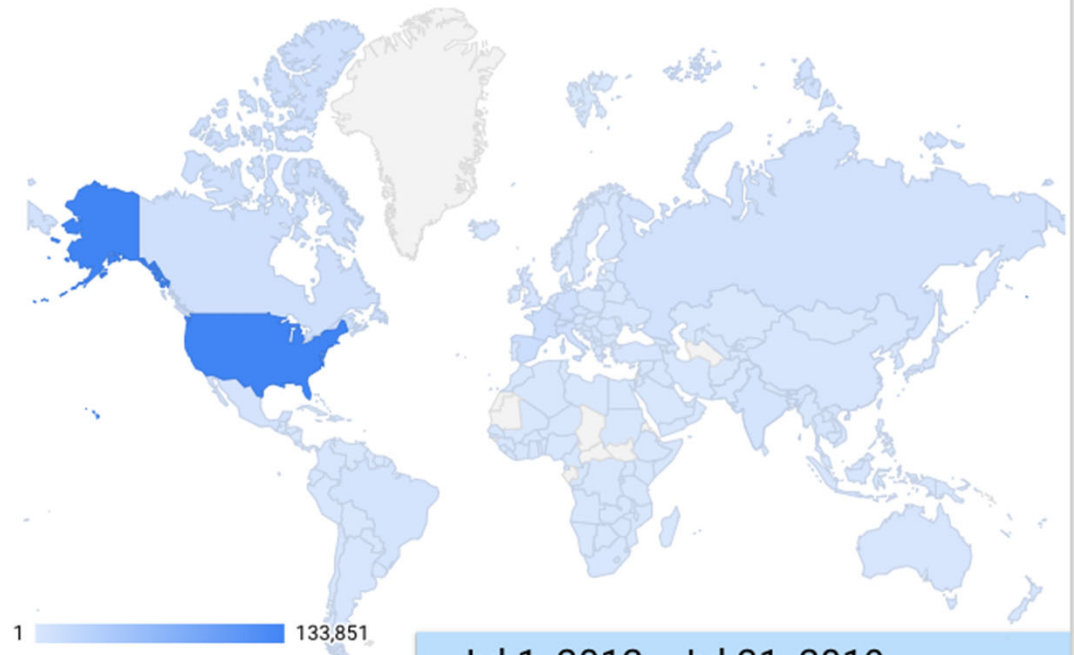
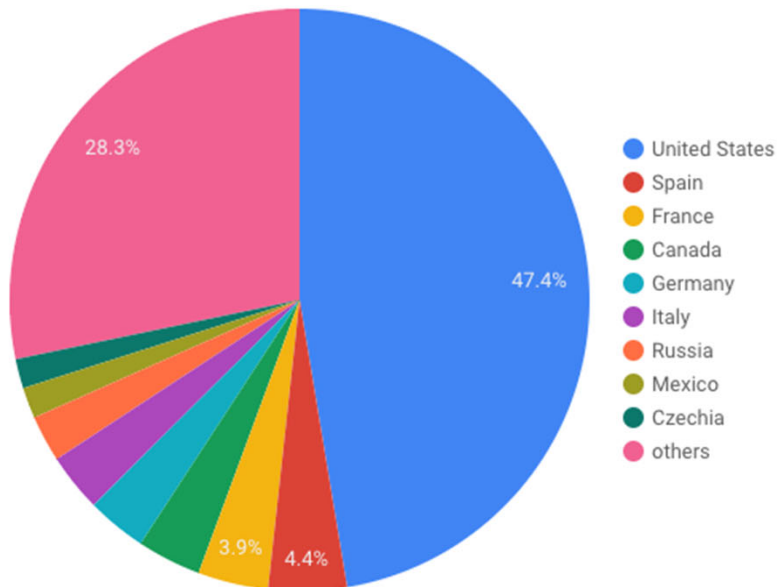
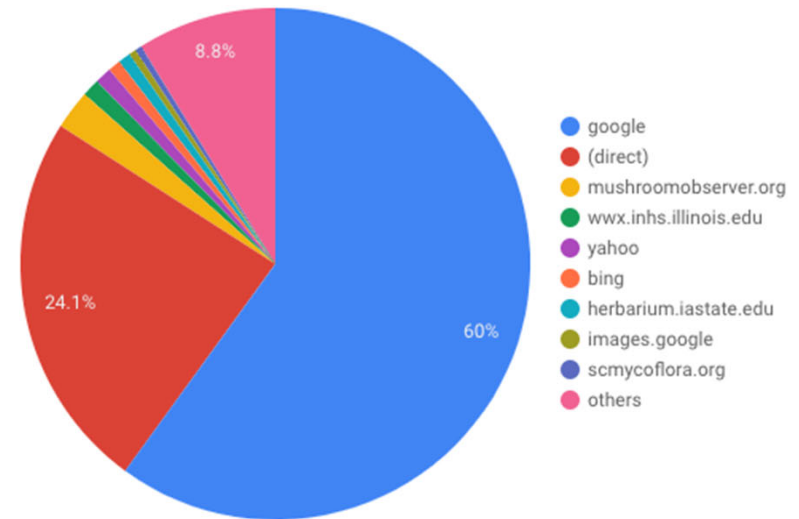
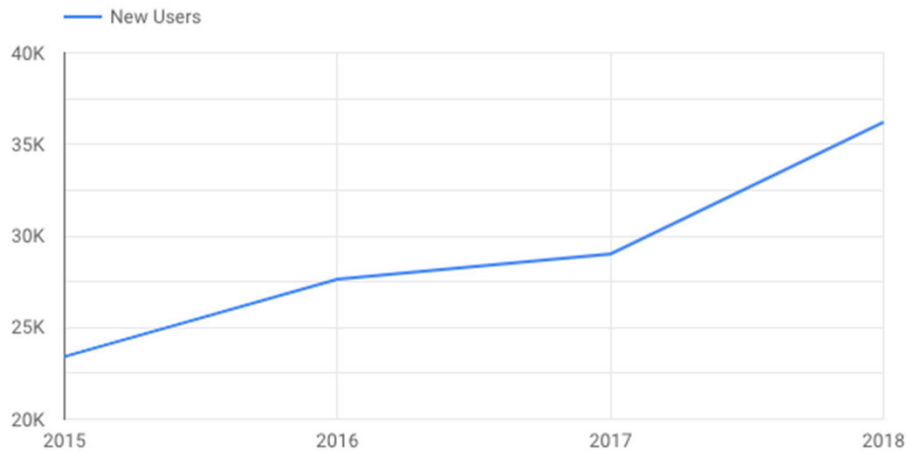
MyCoPortal Data Portal Statistics

www.mycportal.org

Data from Google Analytics

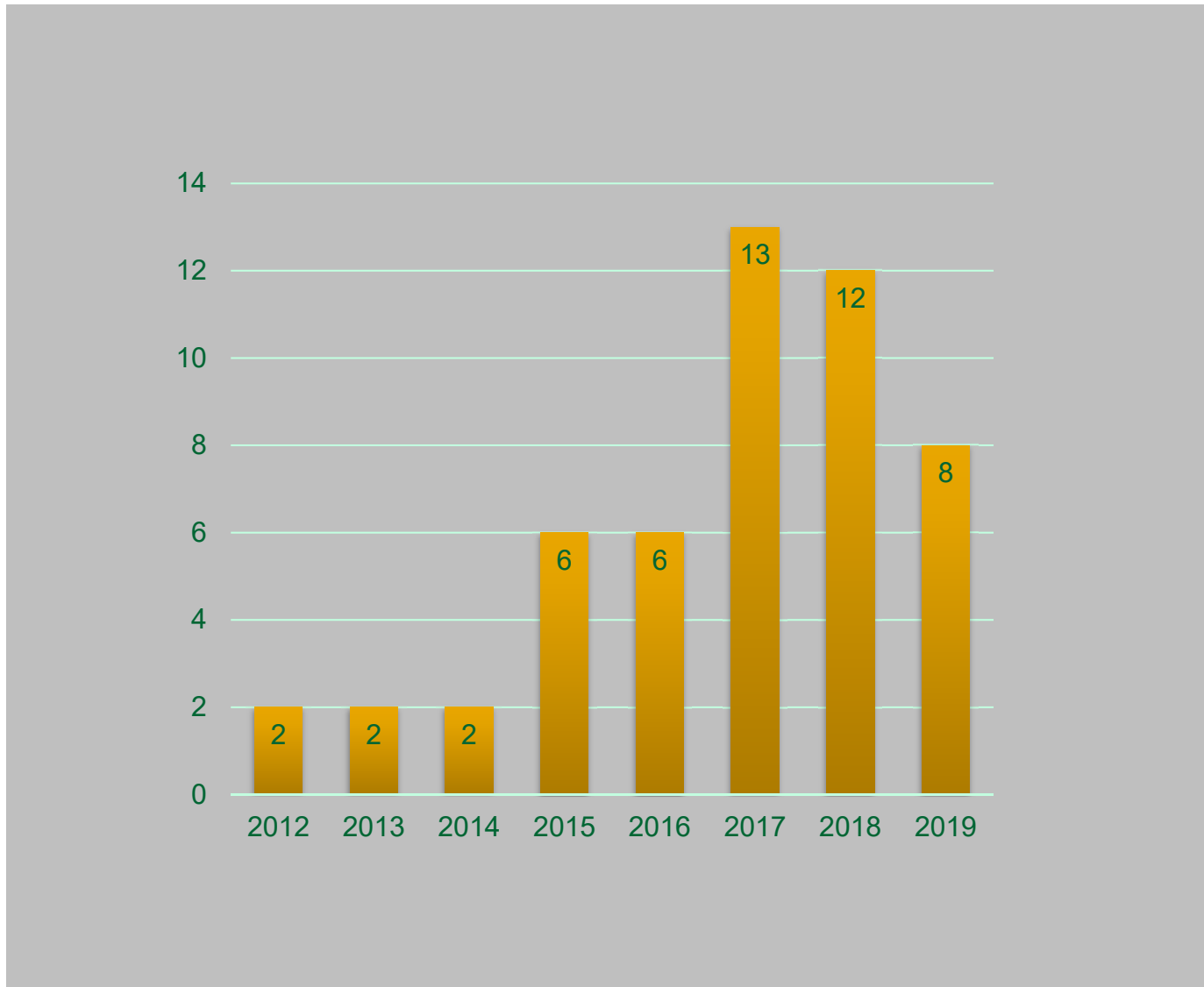
MYCOLOGY COLLECTIONS PORTAL

Users	New Users	Sessions	Number of Sessions per User	Pageviews	Pages / Session	Avg. Session Duration	Bounce Rate
92,588	132,561	282,531	3.05	836,918	2.96	00:03:13	55.56%



Jul 1, 2012 - Jul 31, 2019


Peer-reviewed publications citing the MyCoPortal



***51 publications in 29 journals since 2012**



The protochecklist of North American nonlichenized Fungi

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^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



R Package

rMyCoPortal - an R package to interface with the Mycology Collections Portal

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Academic editor: Scott Chamberlain

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Abstract

The understanding of the biodiversity and biogeographical distribution of fungi is still limited. The small number of online databases and the large effort required to access existing data have prevented their use in research articles. The Mycology Collections Portal was established in 2012 to help alleviate these issues and currently serves data online for over 4.3 million fungal records. However, the current process for accessing the data through the web interface is manual, therefore slow, and precludes the extensive use of the existing datasets. Here we introduce the software package rMyCoPortal, which allows users rapid, automated access to the data. rMyCoPortal makes data readily available for further computations and analyses in the open source statistical programming environment R. We will demonstrate the core functions of the package, and how rMyCoPortal can be employed to obtain fungal data that can be used to address basic research questions. rMyCoPortal is a free and open-source R package, available via GitHub.

Darwin Core Archive Publishing

University of Tennessee Fungal Herbarium

Use the controls below to publish occurrence data within this collection as a Darwin Core Archive (DwC-A) file. A metadata are optional. Fields within the occurrences.csv file are defined by the Darwin Core exchange standard.

RSS Feed: <http://mycoportal.org/portal/webservices/dwc/rss.xml>

Title: TENN-TENN-F DwC-Archive ✗

Description: Darwin Core Archive for University of Tennessee Fungal Herbarium

EML: <http://mycoportal.org/portal/collections/datasets/emlhandler.php?collid=7>

DwC-Archive File: http://mycoportal.org/portal/content/dwca/TENN-TENN-F_DwC-A.zip

Publication Date: Fri, 03 May 2019 12:50:33

Publishing Information

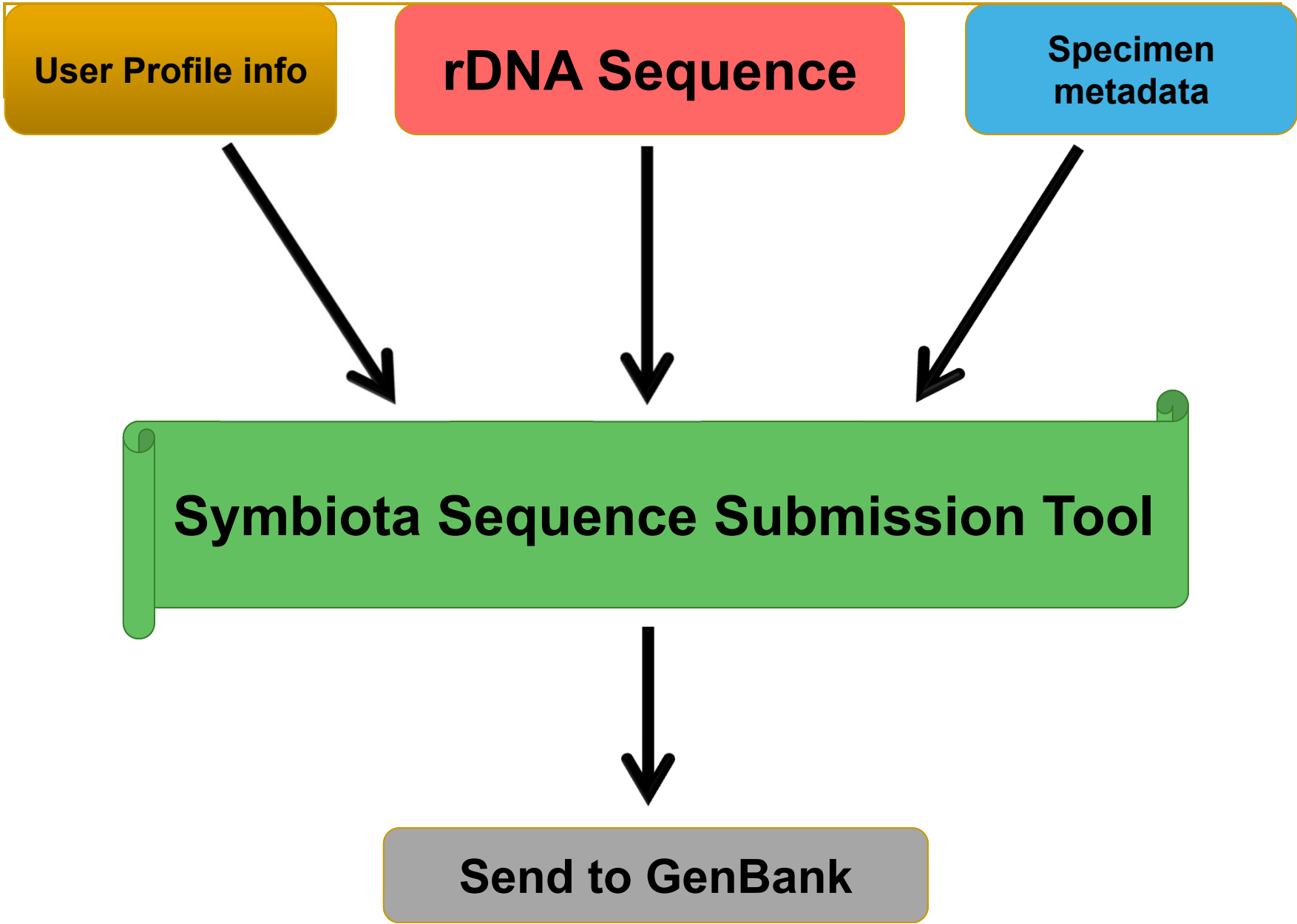
GUID source: symbiotaUUID

GBIF Dataset page: <http://www.gbif.org/dataset/032f1fbc-d21f-407d-be46-5cd1bb1ea397>



GBIF

Global Biodiversity
Information Facility



LOCUS Xylaria_corniformis 536 bp DNA linear 18-JUN-2018

DEFINITION [gene]=large subunit ribosomal RNA.

ACCESSION

VERSION

KEYWORDS

SOURCE Xylaria corniformis

ORGANISM Xylaria corniformis
Unclassified.

REFERENCE 1 (bases 1 to 536)

AUTHORS Miller,A.N. and Bates,S.T.

TITLE Fungal DNA Barcoding in the Great Smoky Mountains National Park

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 536)

AUTHORS Miller,A.N.

TITLE Direct Submission

JOURNAL Submitted (18-JUN-2018) Illinois Natural History Survey, University of Illinois, 1816 South Oak Street, Champaign, IL 61820, United States

COMMENT ##Assembly-Data-START##
Sequencing Technology :: Sanger dideoxy sequencing
##Assembly-Data-END##

##SymbiotaSpecimenReference-START##
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Record ID :: 782f1928-8e2f-4a49-ad2f-17ef6b9f46f9
Institution Code :: ILLS
Catalog Number :: ILLS00121140
Other Catalog Numbers :: 81579
##SymbiotaSpecimenReference-END##

FEATURES

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/specimen_voucher="ILLS00121140"
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/lat_lon="30.9742 N 91.4517 W"
/altitude="99 m"
/collection_date="2007-Sep-05"
/collected_by="A.N. Miller, S.M. Huhndorf & T.J. Atkinson"
/identified_by="A.N. Miller"

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ORIGIN

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121 aaccaacagg gattgcccta gtaacggcga gtgaagcggc aacagctcaa atttgaatc
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481 gaccagacct ttcttagcg gatcatccgg tgttctcacc ggtgcacttc gctagg

//

publication author(s) →

submission author →

institution and address automatically pulled from Symbiota User Profile info →

Structured Comment specifically developed for Symbiota portals →

specimen metadata automatically pulled from DwC fields in Symbiota →

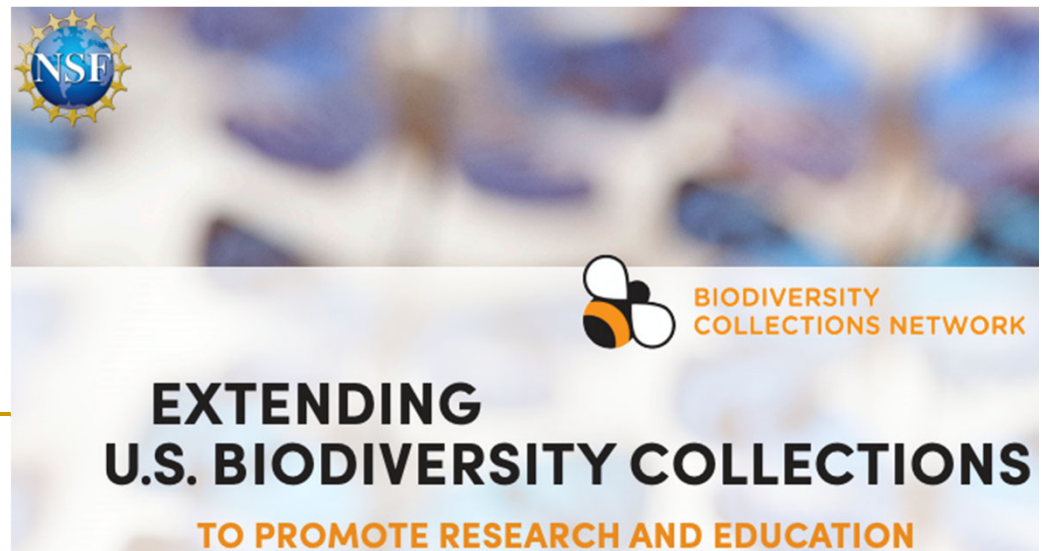
The “Extended” or “Next-generation” specimen

beyond the physical specimen...

Provide linkages to associated data:

- * Genetic (sequences and genomes)
- * Phenotypic (observational data)
- * Environmental (biotic interactions and abiotic data)
- * Media (images, videos, blogs)
- \$ Life histories (ecological data)
- \$ Publications (H-index)

* MyCoPortal developed
\$ planned development



Details Genetic Data 4 Comments Linked Resources Edit History


University of Arizona, Gilbertson Mycological Herbarium

Catalog #: AN 043440
Secondary Catalog #: AN 043440, 273184
Taxon: *Morchella brunnea* M. Kuo
Family: Morchellaceae
Determiner: Teresa A. Clements
Collector: Teresa A. Clements
Date: 2017-03-28
Locality: United States, Arizona, Yavapai
Substrate: on soil under Arizona cypress, ash, ponderosa pine & oak
Description: [Original observation #273184](#) (Mushroom Observer)



Usage Rights: CC0 1.0 (Public-domain)
Record ID: 66dc1911-e0aa-472b-b8e2-4e419bbcae9d
Occurrence ID (GUID): 66dc1911-e0aa-472b-b8e2-4e419bbcae9d
 For additional information on this occurrence, please contact: A. Elizabeth
 Do you see an error? If so, errors can be fixed using the Occurrence Editor



Details Genetic Data 4 Comments Linked Resources Edit History

GenBank

Identifier: MG547872
Locus: internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence
URL: <https://www.ncbi.nlm.nih.gov/nuccore/MG547872>
Notes:

Morchella brunnea voucher MO 273184 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence
 GenBank: MG547872.1
[FASTA](#) [Graphics](#)

Morchella brunnea voucher MO 273184 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence

Go to:

LOCUS MG547872 675 bp DNA linear PLN 23-NOV-2017
DEFINITION Morchella brunnea voucher MO 273184 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence.
ACCESSION MG547872
VERSION MG547872.1
KEYWORDS .
SOURCE Morchella brunnea
ORGANISM [Morchella brunnea](#)
 Eukaryota; Fungi; Dikarya; Ascomycota; Pezizomycotina; Pezizomycetes; Pezizales; Morchellaceae; Morchella.
REFERENCE
AUTHORS Clements, T.A.
TITLE Direct Submission
JOURNAL Submitted (18-NOV-2017) Scientific Committee, AMS, 1430 W. Wagon Wheel Rd, Cottonwood, AZ 86326, USA
COMMENT ##Assembly-Data-START##
 Sequencing Technology :: Sanger dideoxy sequencing
 ##Assembly-Data-END##
FEATURES
 source
 Location/Qualifiers
 1..675
 /organism="Morchella brunnea"
 /mol_type="genomic DNA"
 /isolation_source="soil under cypress, ash, pine and oak"
 /specimen_voucher="MO 273184"
 /db_xref="taxon:1174671"
 /country="USA: Arizona, Yavapai Co."
 /collection_date="28-Mar-2017"
 /collected_by="Teresa A. Clements"
 <1..675
 /note="contains internal transcribed spacer 1, 5.8S ribosomal RNA, and internal transcribed spacer 2"

Customize view

Analyze this sequence

Run BLAST

Pick Primers

Highlight Sequence Features

Find in this Sequence

Related information

Taxonomy

LinkOut to external resources

Mycology Collections Portal

[Mycology Collections Portal]

Recent activity

Turn Off Clear

- Morchella brunnea voucher MO 273184 internal transcribed spacer 1, partial Nucleotide
- Cladophialophora mycetomatis strain CBS 454 82 28S ribosomal RNA gene, pE Nucleotide
- Cladophialophora matsushimae partial 28S rRNA gene, strain MFC-1P384 Nucleotide
- Cladophialophora potulitorum strain CBS 112222 18S ribosomal RNA gene, pNucleotide
- eu0035409 (0) Nucleotide

MUSHROOM OBSERVER

Q Find Observations Search Advanced Search Login Create Account

[Prev](#) | [Index](#) | [Next](#)

Google Images Occurrence Map Send Observer a Question

Observation 273184: *Morchella brunnea* M.Kuo

When: 2017-03-28
Collection location: Yavapai Co., Arizona, USA [\[Click for map\]](#)
Who: Terri Clements/Donna Fulton (pinonbistro)
Specimen available
Herbarium record: TAC 1501 @ Teresa Clements (pinonbistro@mshn.com); Personal Herbarium
Sequences: ITS - GenBank #MG547872 [\[Show Archive Record\]](#) | [Run BLAST@](#)
Notes:
 This will be sequenced. My bet is that it will turn out to be either *M. brunnea* or *Mel-8*. *M. brunnea* is described by Kuo et al. 2012 as having a conical cap attached with a sinus, ridges that are dark brown to black in young fruit bodies, a mealy to granulated stem, and "appearing under hardwoods, including *A. menziesii* and *Quercus* spp.; probably also to be expected in non-burned conifer forests." In fact we did find a specimen of *M. brunnea* (sequenced) under ponderosa pine in AZ. The obs was collected in an area of pine, cypress and oak. Regarding the similarity of *M. brunnea* and *Mel-8* Kuo et al 2012 says: "Among the species that are similar in appearance to *M. brunnea*, only the poorly known *Morchella* sp. *Mel-8* apparently inhabits similar western habitats." *Mel-8* was found under incense cedar, a member of the cypress family.

About *Morchella brunnea* M.Kuo
 MycoPortal
 MycoBank
 Observations of:
 This Name (27)
 This Taxon, any name (27)
 Other Taxa, this name proposed (20)
 Other Taxa, this taxon proposed (20)
 Species in *Morchella* Dill. ex Pers. (101)
 Public Description (Default) [Edit]
 Draft For Macrotungi of The Pacific Northwest By Chaetohms (Private)

Species Lists
 TAC AZ Vouchered Specimens
 TAC AZ Sequenced Specimens

External Links
 MycoPortal

Map [Hide thumbnail map.](#)

Proposed Names

Name	User	Community Vote
Morchella brunnea M.Kuo	pinonbistro	94% (3)
Morchella Dill. ex Pers.	amanitarita	61% (2)
Morchella sect. <i>Distantes</i> Boud.	pinonbistro	57% (1)

Recognized by sight
 Recognized by sight
 Recognized by sight



Fieldguide employing AI and ML technology

The screenshot displays the Fungi Fieldguide app interface. At the top, there is a search bar with the text "Following" and a filter icon. The main content area is a grid of mushroom photos, each with a user profile picture, name, and a "Follow" button. The photos are labeled with the mushroom's name and scientific name. The labels are: "Dyer's Polypore" (*Phaeolus schweinitzii*), "Black Trumpet" (*Craterellus cornucopioides*), "Indigo milk cap" (*Lactarius indigo*), and "Amanita novinupta" (*Amanita*). The interface also includes a sidebar with navigation options like "Publish", "Most recent", "Browse categories", "Streams", "Following", "Everything", "You", "Guides", "Fieldguide for everything", "Leps butterflies & moths", "Birds", "Getting started", and "Terms & privacy".

<https://fungi.fieldguide.ai>



Fieldguide employing AI and ML technology

- Need ~100 "good" images for machine learning
 - 30 images minimum
 - NAMP could serve as a resource to provide images
- Cryptic species (morphologically identical images to human eye)
 - ~80% accuracy in distinguishing genetic species
 - unknown what computer program is using to identify taxa



<https://fungi.fieldguide.ai>

Lesson learned



balance between quantity and quality

MYCOLOGY COLLECTIONS PORTAL

