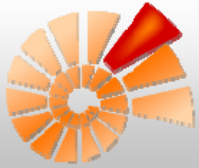


# DiversityCollection

Theorie, Projekte, Datenflüsse, Netzwerke und Dienste

Dagmar Triebel



# Datenbank-Framework Diversity Workbench

www.diversityworkbench.net

**Seit 1999**

beteiligt:

- Biologische Bundesanstalt Berlin
- Universität Bayreuth
- Botanische Staatssammlung München/ SNSB

**Main** Home | Changes | Index | Edit | Find:  Go

## Diversity Workbench – Software Components for Building and Accessing Biodiversity Information

The Diversity Workbench is work in progress, aiming at developing a set of information models and application components that collaborate through agreed software interfaces. That is, each component of the Workbench applications uses services from other applications, but at the same time does not need to know about the internal design and implementation of them (encapsulation principle). The goal is increased reuse and collaboration across project and national borders.

For each component of the Diversity Workbench we aim at providing a comprehensive documentation of the application and the information model online. The framework for these components is currently still under development as we continue to learn about the necessary components and the best approach to the modularization of biodiversity information. A draft version providing important insight into the [framework concept](#) is, however, available.

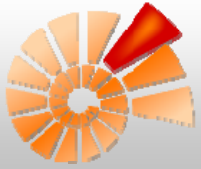
In an initial phase during the [GLOPP project](#), a set of prototypes was developed in Microsoft Access. The prototype applications are still available. With the exception of [DeltaAccess/DiversityDescriptions](#) they are by now largely obsolete. DeltaAccess predates the Workbench concepts and is actively used and under active development.

### Diversity Workbench online help and user guides

These are collected on a [separate Wiki web](#).

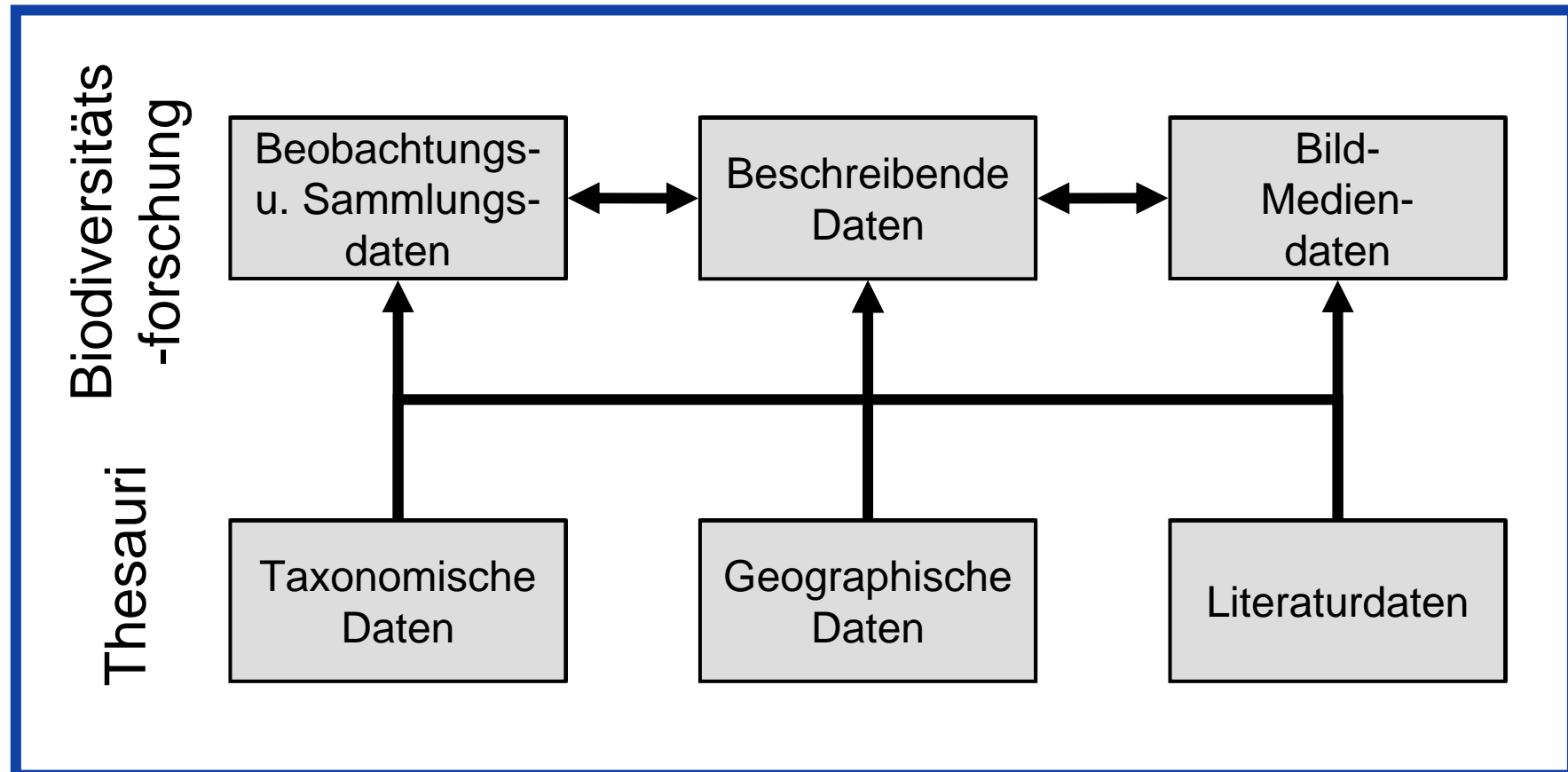
### Diversity Workbench information models

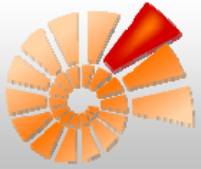
- [DiversityCollection](#)
- [DiversityDescriptions](#)
- [DiversityExsiccatae](#)
- [DiversityGazetteer](#)
- [DiversityResources](#)
- [DiversityReferences](#)
- [DiversityTaxonomy](#)
- [DiversityTaxonNames](#)



# Datentypen in der Biodiversitätsforschung

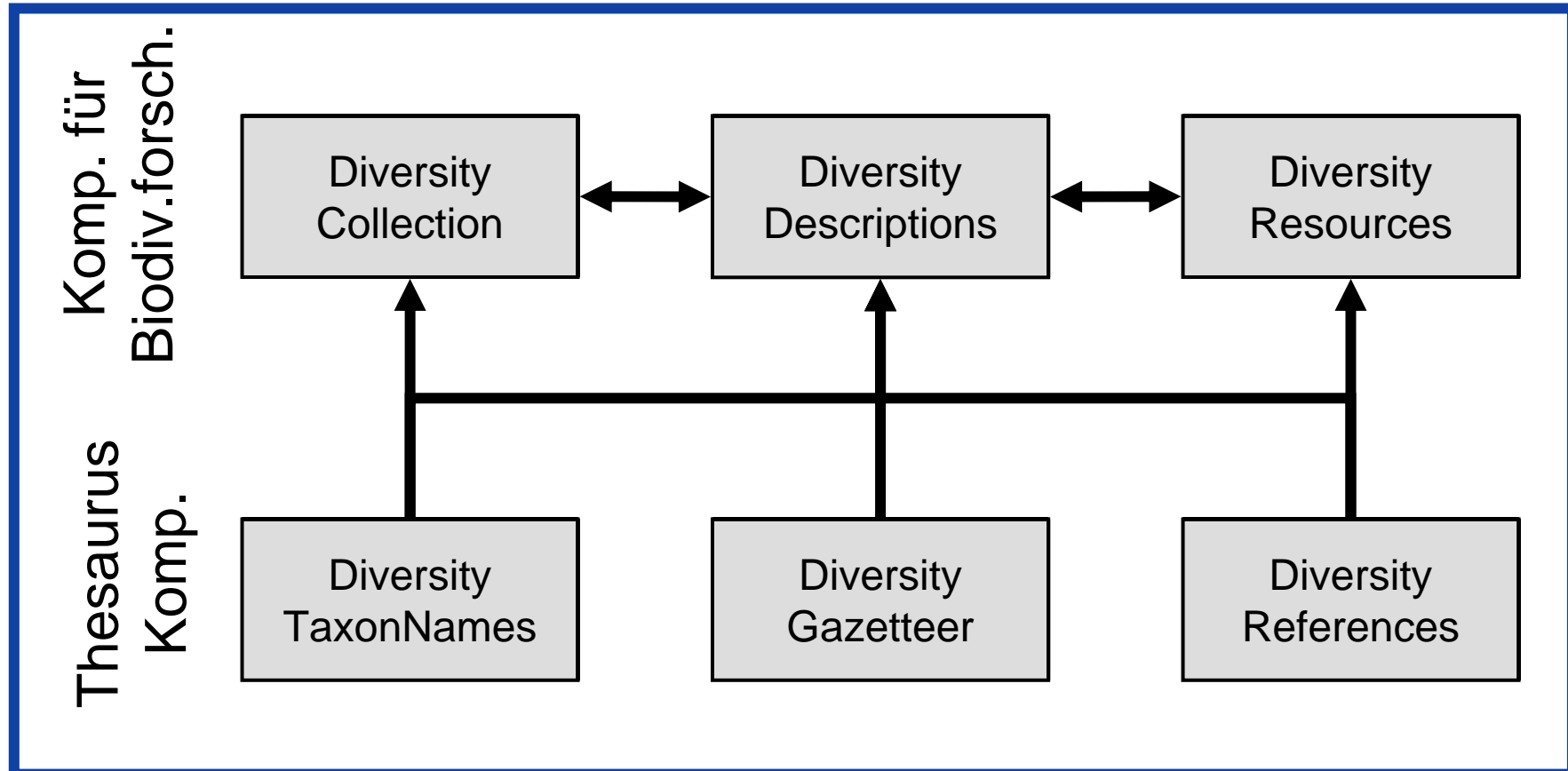
www.diversityworkbench.net

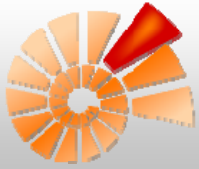




# Hauptkomponenten der Diversity Workbench

[www.diversityworkbench.net](http://www.diversityworkbench.net)

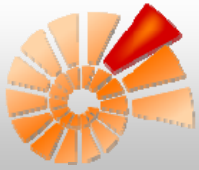




# Diversity Workbench-Entwicklungen in M

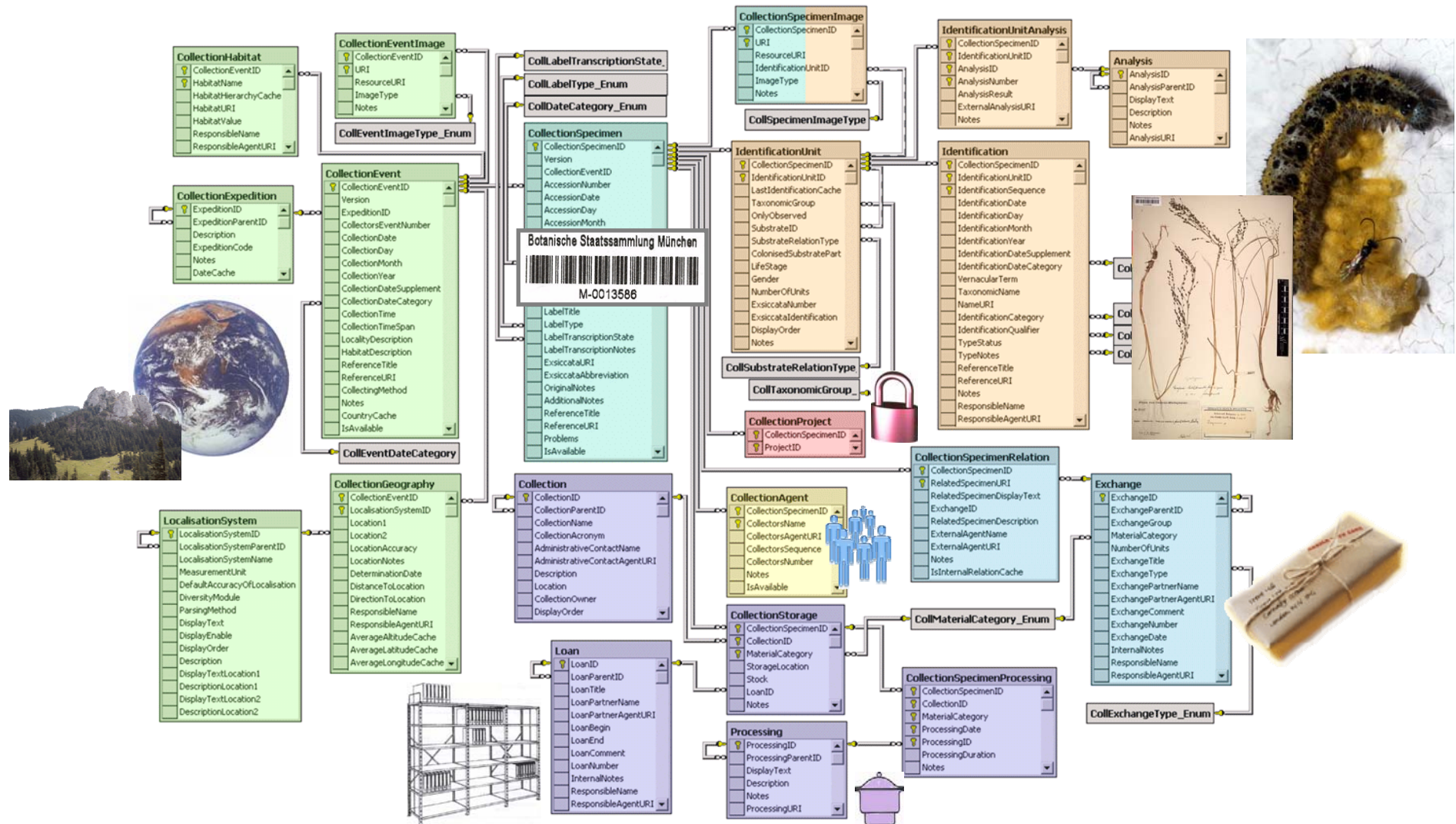
[www.diversityworkbench.net](http://www.diversityworkbench.net)

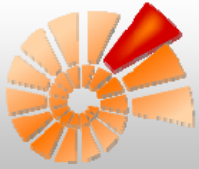
- Aktuelle Schwerpunkte:
  - Modellierung von Datenbanken
  - Entwicklung von .Net Clientsfür
  - Sammlungsdaten (seit 1999)
  - Taxonomische Daten (seit 2003)
  
- In Planung:
  - Deskriptive (inkl. organismenbezogene ökologische) Daten



# DiversityCollection - ER-Diagramm

www.diversityworkbench.net





# DiversityCollection: Projekte, Datenimport

[www.diversityworkbench.net](http://www.diversityworkbench.net)

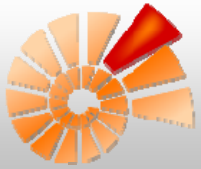


- Projekte/ Sammlungen

- Aktuell ca. 159.000 Datensätze
- 16 mykologische Projekte/ Samml. (davon 10 der BSM/SNSB)
- 9 botanische Projekte (davon 3 der BSM/SNSB)
- 2 zoologische Projekte (SAPM/SNSB)

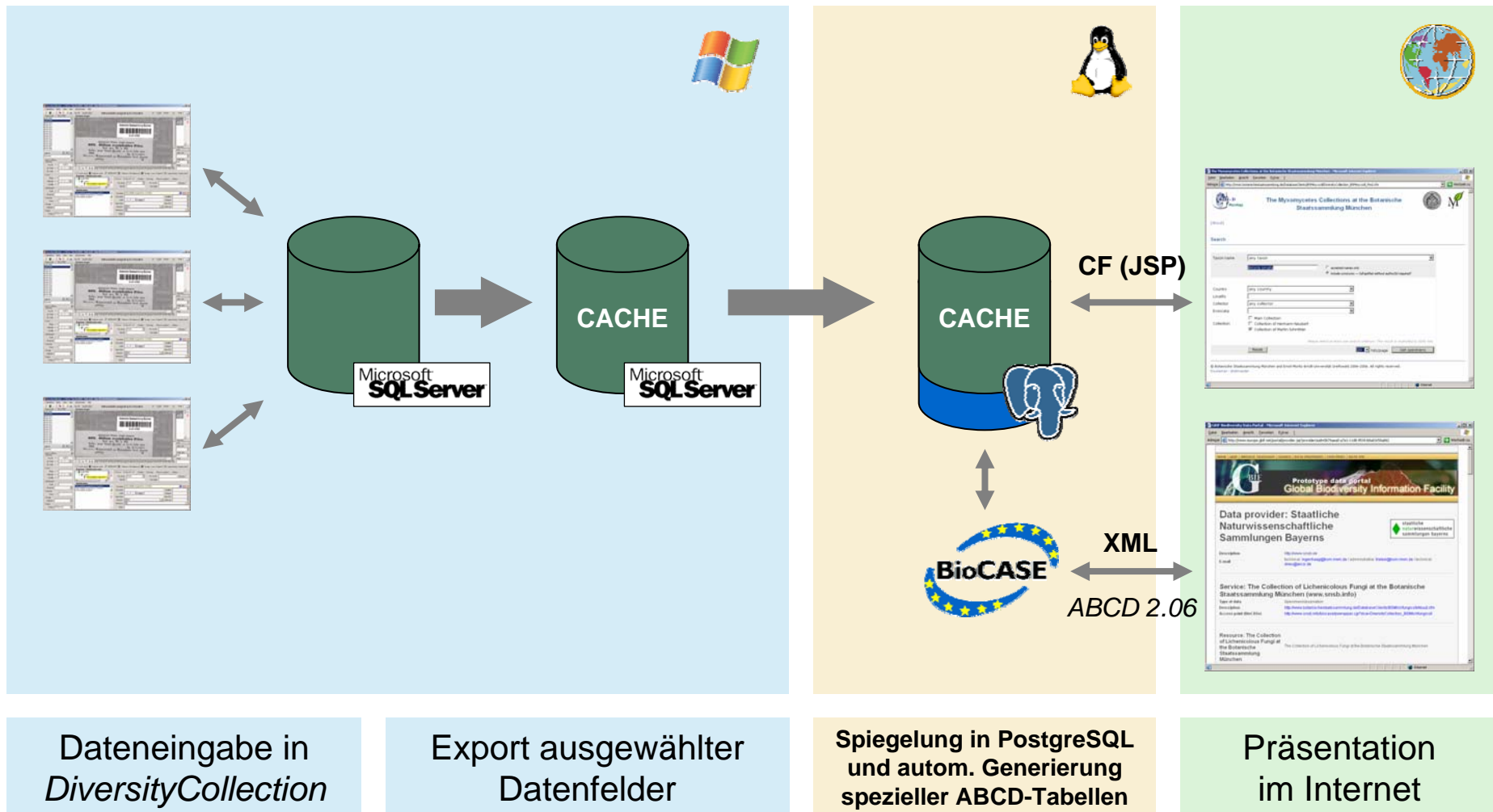
- Datenimporte laufend bzw. in Planung ...

- Paläontologische Sammlungen (BSPG/SNSB)
- Sammlungen von Kiesel- und Zieralgen (11.000 Belege; urspr. in MS Access bzw. Specify)

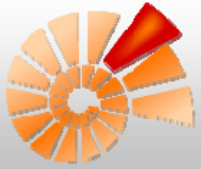


# DiversityCollection: Export, Datenfluss, Präsentation im Internet

www.diversityworkbench.net



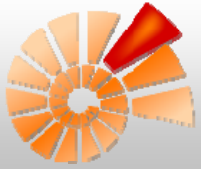




## DiversityCollection: Wege zur Präsentation von Projekten/ Sammlungen im Internet

[www.diversityworkbench.net](http://www.diversityworkbench.net)

- Projektspezifische „lokale“ Webschnittstellen
- GBIF International Portal
- Themen- oder organismenspezifische Portale



## Search

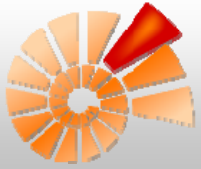
Taxon name

Country   
Locality   
Collector   
Exsiccata

Collection  Main Collection  
 Collection  
 Collection

## Projektspezifische „lokale“ Webschnittstellen

- Eigener Client für jedes Projekt (Sammlung) auf hausinternem Server
- Auf Eigenheiten des jeweiligen Projektes abgestimmt
- Anbindung von speziellen Webservices z. B. Visualisierung von Fundortdaten über *GoogleMaps* und *Generic Point Mapper*
- Einbindung von *DiversityTaxonNames*  
→ z. B. voller Zugriff auf alle Synonyme aus den Datenbanken  
*DiversityTaxonNames\_fungi/\_myxomycetes*





# DiversityCollection: Webschnittstellen – Suchmaske

www.diversityworkbench.net

Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem - Microsoft Internet Explorer

Adresse [http://www.gbif-mycology.de/DatabaseClients/Blettaucoll/DiversityCollection\\_Blettaucoll\\_Find.cfm](http://www.gbif-mycology.de/DatabaseClients/Blettaucoll/DiversityCollection_Blettaucoll_Find.cfm) Wechseln zu

 **Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem** 

[About]

### Search

Taxon name

accepted names only  
 include synonyms — full epithet without author(s) required!

Country

Locality

Collector

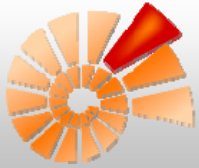
Phorophyte

Please select at least one search criterion! The result is restricted to 2000 hits.

hits/page

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Fertig Internet





# DiversityCollection: Webschnittstellen – Ergebnistabelle

www.diversityworkbench.net

Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem - Microsoft Internet Explorer

Adresse [http://www.gbif-mycology.de/DatabaseClients/Bleittaucoll/DiversityCollection\\_Bleittaucoll\\_List.cfm?TaxonNameMainUnit=Lecanora%2520conizaeoides%2520Nyl%252E%2520ex%2520](http://www.gbif-mycology.de/DatabaseClients/Bleittaucoll/DiversityCollection_Bleittaucoll_List.cfm?TaxonNameMainUnit=Lecanora%2520conizaeoides%2520Nyl%252E%2520ex%2520) Wechseln zu

 **Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem** 

[About]

**Search result**

4 specimens (1 taxon) were found for

Taxon name: Lecanora conizaeoides Nyl. ex Cromb.  
Country: any country  
Collector: any collector  
Phorophyte: any host plant

**New search**

Create map using ...    
*JavaScript required*

Items 1 to 4 :


**Lecanora conizaeoides Nyl. ex Cromb. (B 60 0025251)**  
Germany, Thüringer Wald.: Unweit Bahnhof Gehlberg, 650 m.

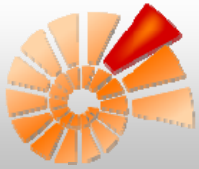
**Lecanora conizaeoides Nyl. ex Cromb. (B 60 0025254)**  
Germany, Thüringer Wald.: Sturmheide bei Ilmenau (600 m.)

**Lecanora conizaeoides Nyl. ex Cromb. (B 60 0111827)**  
Germany, Thüringen: Alteburgenanlagen bei Arnstadt, 320 m.

**Lecanora conizaeoides Nyl. ex Cromb. (B 60 0111827a)**  
Germany, Thüringen: 2) Kichberg bei Dannheim

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Fertig 



# DiversityCollection: Webschnittstellen – Detailansicht, Verknüpfung

www.diversityworkbench.net

**Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem**

[About]

**Specimen data**

Taxon name: Lecanora conizaeoides Nyl. ex Cromb.  
→ LIASnames

Acc. Number: B 60 0025254

Country: Germany

Locality: Thüringer Wald.: Sturmheide bei Ilmenau (600 m.)

Date: 1909-03-26

Collector: Lettau, G.

Phorophyte: Betula sp.

Phorophyte/Associations:

- Betula sp.
- Lecanora conizaeoides Nyl. ex Cromb.**
- Lecanora pulicaris (Pers.) Ach.
- Scoliosporum sarothamni (Vain.) Vězda

**Search Result**

Entered Name: Lecanora conizaeoides Nyl. ex Cromb.

Name ID: 1009522

Accepted Name: Lecanora conizaeoides Nyl. ex Cromb.

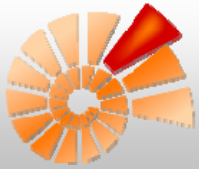
Synonyms:

- = Lecanora pityrea Erichsen
- = Lecanora pseudovariva Degel.

Classification:

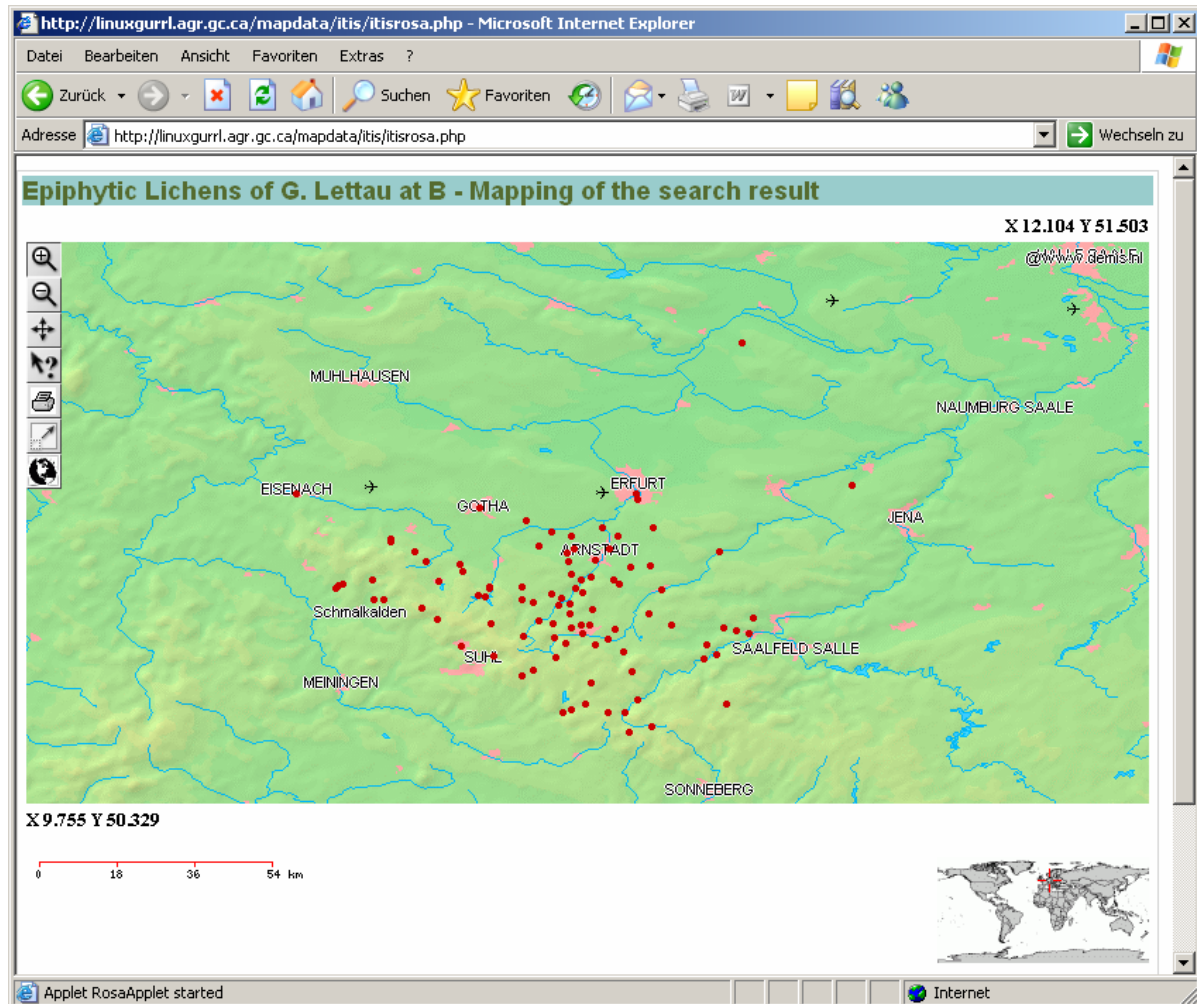
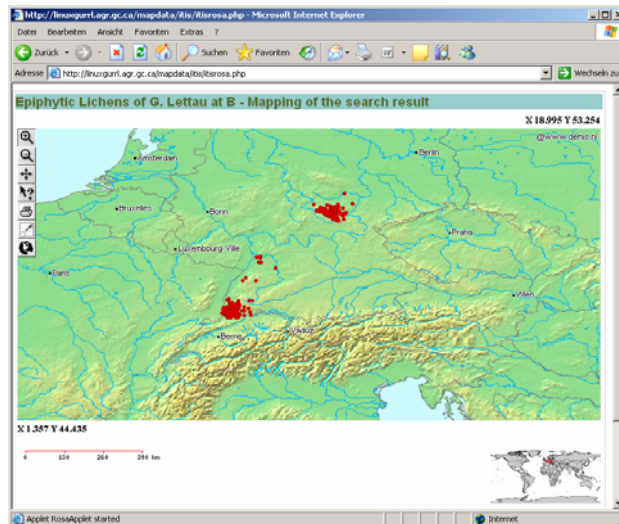
- Ascomycota
- Pezizomycotina
- Lecanoromycetes sensu Reeb et al. 2001
- Lecanoromycetidae
- Lecanorales Nannf. 1932
- Lecanoraceae Körb. 1855
- Lecanora Ach.
- Lecanora conizaeoides Nyl. ex Cromb.

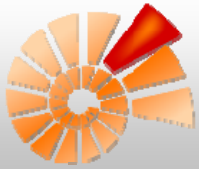
Unter diesem Namen  
wird der Beleg geführt



# DiversityCollection: Webschnittstellen – Generic Point Mapper Webservice

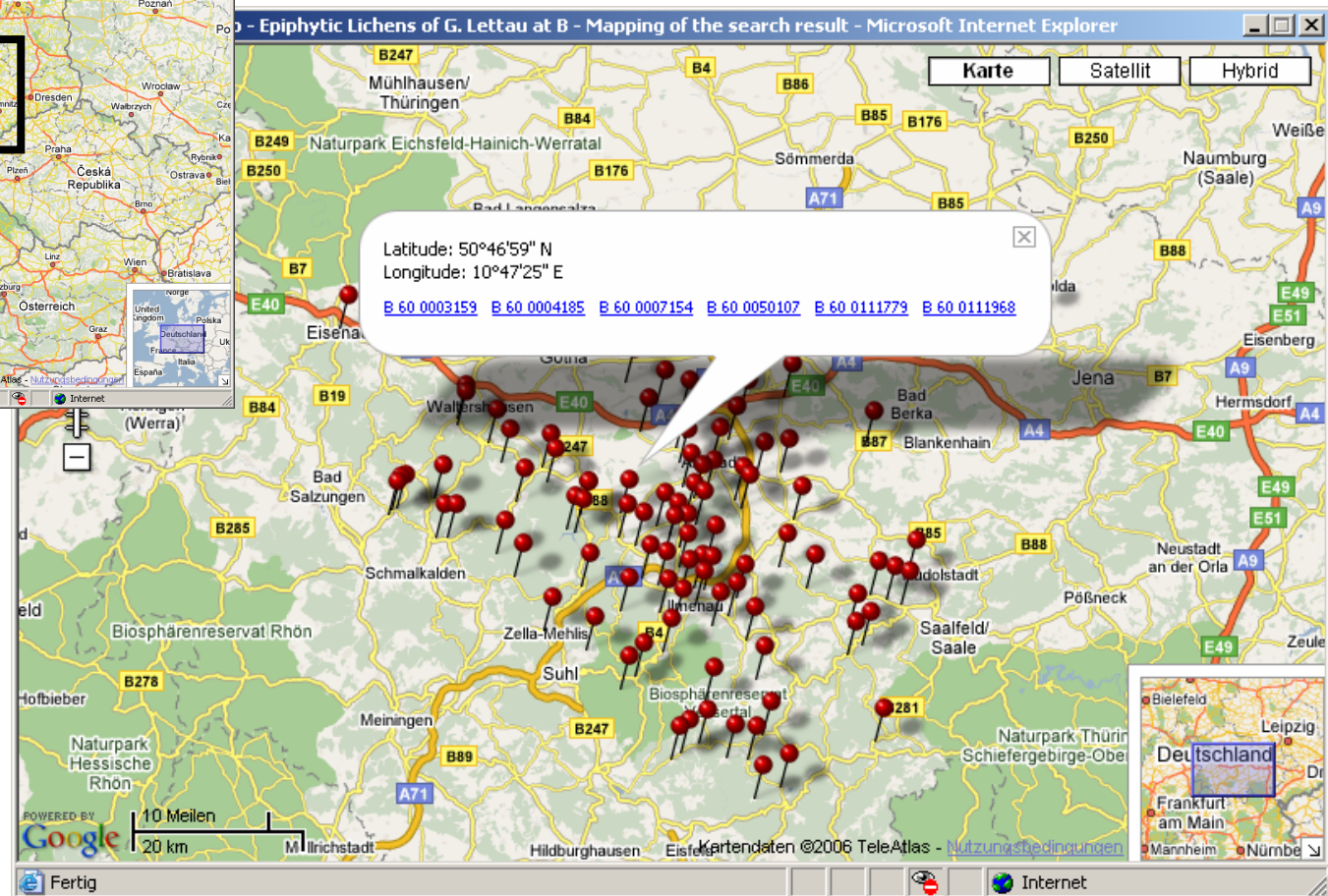
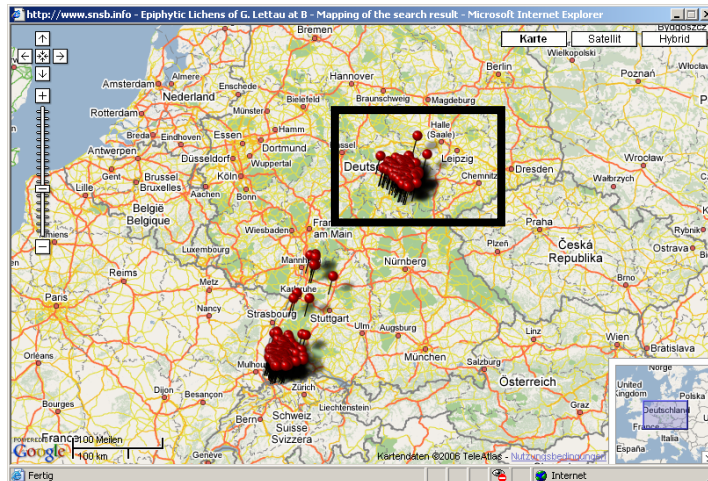
www.diversityworkbench.net

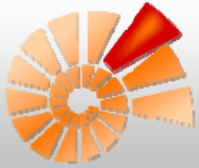




# DiversityCollection: Webschnittstellen – GoogleMaps Webservice

www.diversityworkbench.net





# DiversityCollection: Webschnittstellen – Bilder

www.diversityworkbench.net

BIOTA Southern Africa - The Collection of Lichens

Specimen data

Taxon name: *Toninia lutosa* (Ach.) Timdal  
→ LIASnames

Acc. Number: M-0038388

Country: Republic of South Africa

Locality: Republic of South Africa, Northern Cape Province, Quaggafontein 478 (Soebatsfontein). From village Soebatsfontein into road to Wallekraal (BIOTA Observatory no. 22; hectare plot no. xx). 30°11'43.18" S, 17°33'13.6" E (by GPS). Alt. about 390 m a.s.l.

Date: 2001-04-05

Collector: Zedda, L.

Association: *Toninia lutosa* (Ach.) Timdal

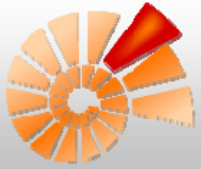
New search

Create map using ...    
JavaScript required

Notices of errors of any kind are much appreciated by the editorial staff.

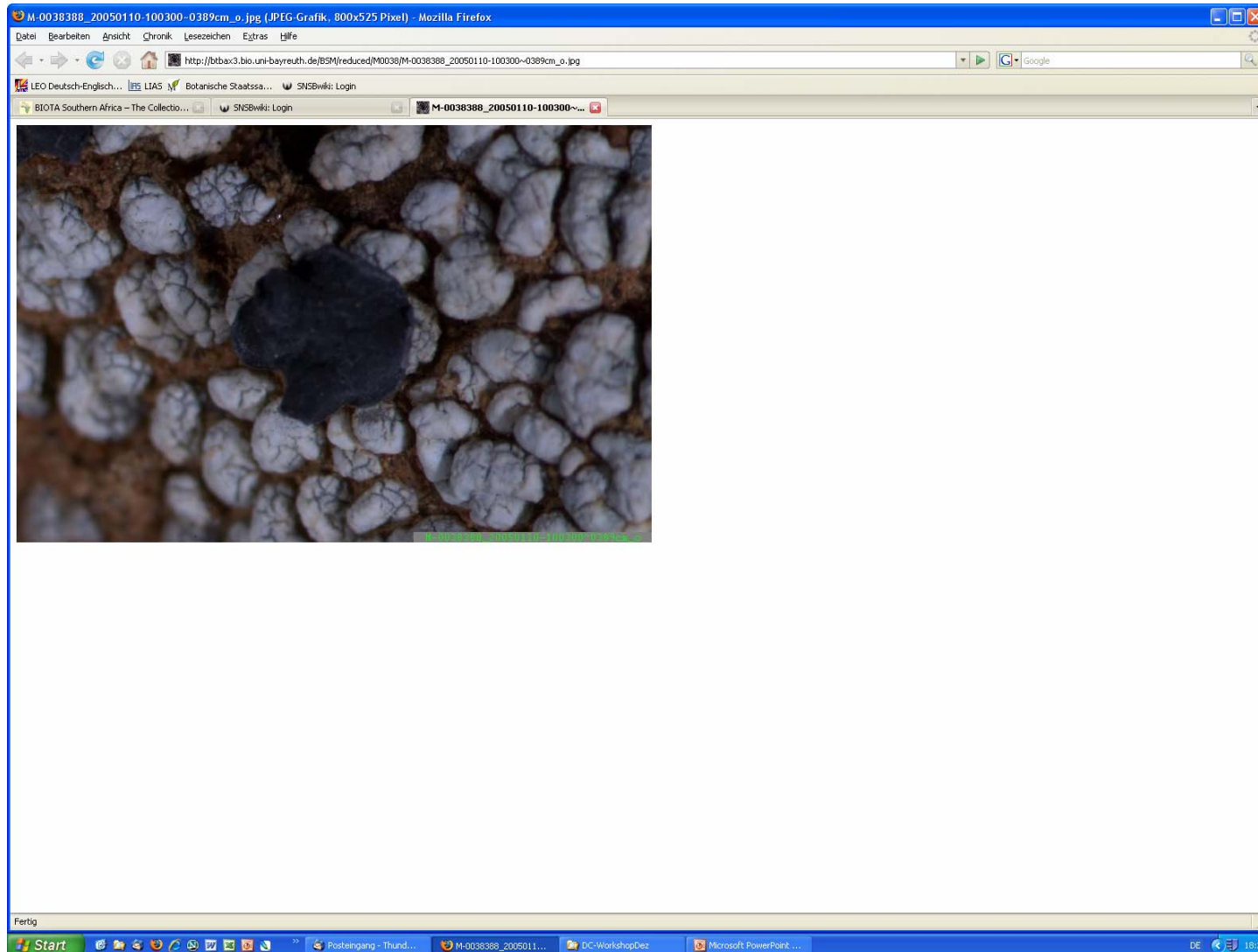
© BIOTA Southern Africa and University of Bayreuth, Department of Mycology and Lichenology, 2001-2008. All rights reserved.  
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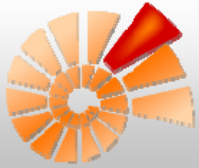




# DiversityCollection: Webschnittstellen – Bilder

www.diversityworkbench.net

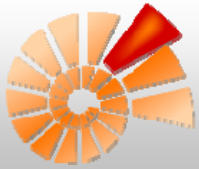




### GBIF International Portal

- Daten über gemeinsames Portal präsentiert, aber „lokal“ in jeweiliger Institution (also auf Server an SNSB) gehostet
- Standardisierte Datenabfrage via BioCASE-Wrapper über ABCD-Protokoll
- Einheitliche Datenstruktur für alle Projekte bzw. Sammlungen (zur Zeit über 300 Datenprovider)
- Von SNSB aktuell 46 *Concepts* (= Datenfelder) an GBIF International geliefert



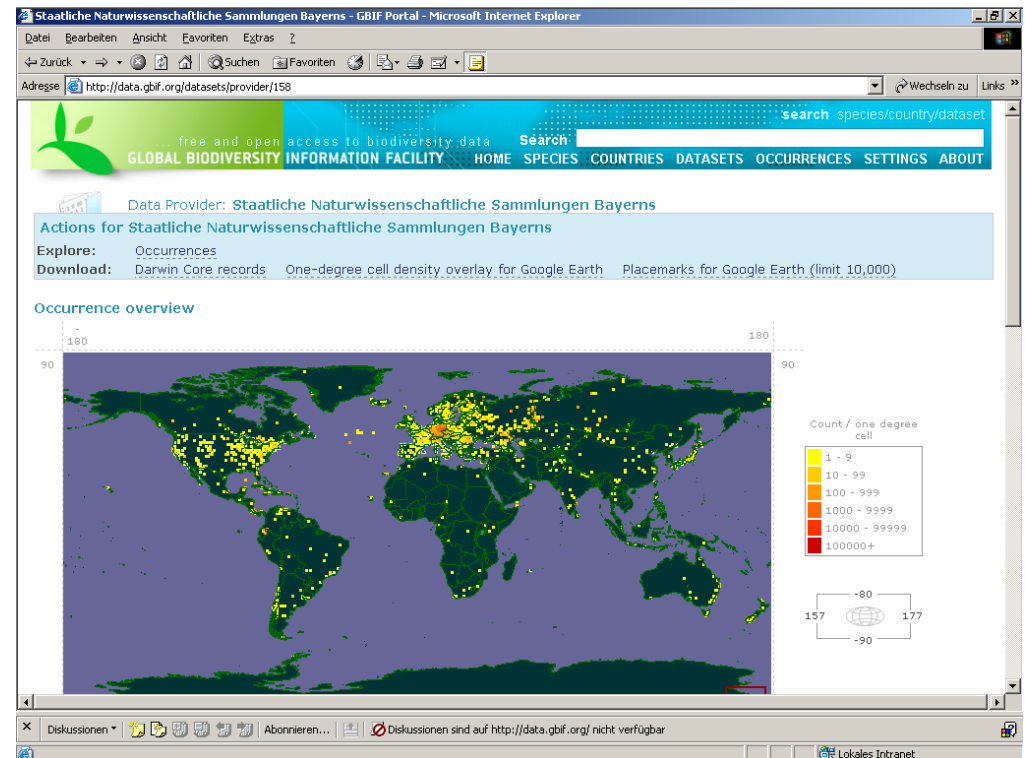


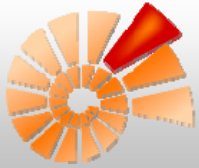
# DiversityCollection: GBIF International Portal

www.diversityworkbench.net



- 12 Projekte bzw. Datenquellen
- 130.000 Belege
- ~ 102.000 Belege mit Koordinaten
- ~ 9.500 Taxa
- 100% an GBIF-Namensindex angeschlossen





## Themen- oder organismenspezifische Portale

- Mycology.Net
- API-Portal (Mellon-Foundation, kein „open access“)
- Portale auf Basis von BioCASE/ABCD
  - Deutsches GBIF-Portal Mykologie (in Planung, entsprechend dem Deutschen GBIF-Portal Botanik)



[Contacts](#)

[Bibliography](#)

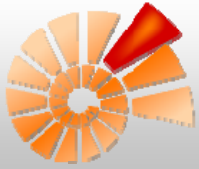
[Systematics](#)

[Identification](#)

[Collections](#)

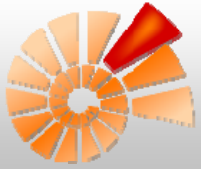
[Biogeography  
and Ecology](#)

[Resources](#)



### **Dienste am IT Zentrum, Primärdatenrepositorium**

- Zentrale Datenhaltung und zentrale/ direkte Datenanbindung der SNSB-Sammlungen (und Sammlungen des GBIF-D Knotens Mykologie) an GBIF-Netzwerk, daher keine „Datenzwischenhändler“ mehr nötig
- Projektspezifische Optimierung von Arbeitsabläufen vor Ort
- Importe, Exporte, Thesauri, Backup, Archivierung, Bildverwaltung, Druck von Etiketten und Listen
- Projektbasierte Rechteverwaltung



# DiversityCollection: Workshop heute

[www.diversityworkbench.net](http://www.diversityworkbench.net)

Infos unter

unter <http://www.snsb.info>, dort link zu **IT Workshops**