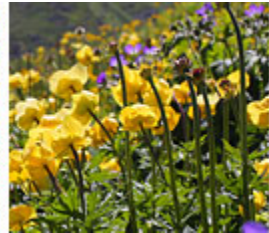
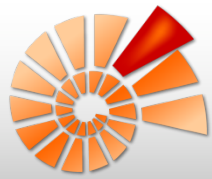


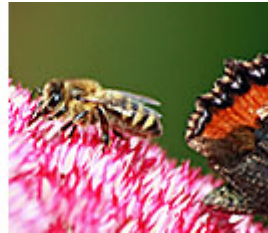
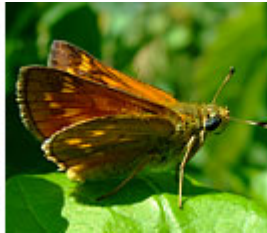
# Organisation regionaler Taxonlisten für Forschungsprojekte: Beispiele aus der DGfM und dem GBOL-Projekt

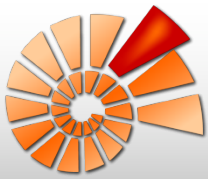
Konstanze Bensch, Tanja Weibulat, Frank Dämmrich, Juan  
Carlos Monje, Dagmar Triebel





## Monitoring / Inventory / Biodiversity research





# Taxon-Referenz-Listen

Verwendet als:

- Namens- und Klassifikationsvokabularien für Dateneinträge und zur Qualitätskontrolle
- Für Web presentation services (z.B. Scroll-Listen)
- Für maschinen-lesbare web services
- Als „backbone“ für mobile Apps und Analyse Tools in Forschungs- und Naturschutzprojekten

The screenshot shows the GBOL (German Barcode of Life) website interface. At the top, there is a navigation bar with links for 'Impressum', 'Kontakt', and 'Newsletter'. Below this is a header with the GBOL logo and the text 'Deutschlands Fauna und Flora in einer einzigartigen genetischen Bibliothek.' A navigation menu includes 'Das Projekt', 'DNA-Barcoding', 'Das Team', 'Die Ergebnisse', 'Mitmachen!', 'News & Publikationen', 'Links', and 'Kontakt'. The main content area is titled 'Fundstellen' and features a search bar with 'Aecidium ranunculii-acris' and a category dropdown set to 'Taxon / Art'. Below the search results, there is a list of taxa with their respective counts and a map of Europe showing the distribution of these taxa. The map includes labels for various countries and cities, and a legend for the data points. The bottom of the page shows the search results and a note about taxon lists services for GBOL.

Suche:  Kategorie:

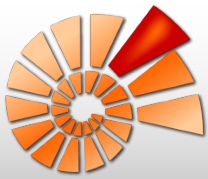
Taxa

Ampel-Legende: Anzahl **bekannte** / vorhandene / barcode Arten  
(Anzahl Individuen in Klammer).

- + **Animalia 39573/15615(188197) /13682(112693)**
- + **Plantae 2135/1389(6308) /1101(2648)**
- **Puccinales 464/451(7162) /90(290)** →
- Aecidium euphorbiae 1/1(69) /1(17)** →
- Aecidium philippianum 1/1(1) /0** →
- Aecidium pseudocolumnare 1/1(3) /0** →
- Aecidium ranunculacearum 1/1(2) /0** →
- Aecidium ranunculii-acris 1/1(26) /1(3)** →
- Aecidium senecionis-crispatis 1/1(1) /0** →
- Aecidium thalictri 1/1(5) /1(1)** →
- Caeoma allii-ursini 1/1(10) /1(5)** →
- Caeoma scillae 1/1(2) /0** →
- Chrysonyxa abietis 1/1(5) /0** →

\*Taxon lists services for GBOL

Suchergebnisse



# DTN Taxon List Service

- Service seit 2012 als eine Kooperation zwischen DiversityMobile/ IBF und GBOL Projekt
- Listen verwaltet in DiversityTaxonNames (=DTN) in Diversity Workbench (=DWB) in der virtuellen Server Umgebung "Taxon Names and Terms" (TNT)
- Seit 2014 Service erweitert im GFBio Kontext

## Regionalised and Domain-specific Taxon Lists

For further information and how to use this service please see the [documentation](#).  
Overview on Published Lists

### Animalia

[Taxon list of Annelida from Germany compiled in the context of the GBOL project](#)

TaxRefCode:  
TaxRef\_GBOL\_Annelida\_DE

[Taxon list of Araneae from Germany compiled in the context of the GBOL project](#)

TaxRefCode:  
TaxRef\_GBOL\_Araneae\_DE  
Curator:  
• Höfer, Hubert, Dr.

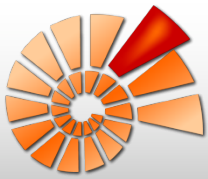
[Taxon list of Bryozoa from Germany compiled in the context of the GBOL project](#)

TaxRefCode:  
TaxRef\_GBOL\_Bryozoa\_DE

[Taxon list of Chilopoda from Germany compiled in the context of the GBOL project](#)

TaxRefCode:  
TaxRef\_GBOL\_Chilopoda\_DE  
Curators:  
• Spelda, Jörg, Dr.

[http://www.diversitymobile.net/wiki/DTN\\_Taxon\\_Lists\\_Services](http://www.diversitymobile.net/wiki/DTN_Taxon_Lists_Services)



# DTN Taxon-Listen

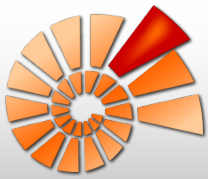
- 54 Listen online (umfassen fast alle Organismengruppen)
- Informationen für mehr als 100.000 Taxonnamen, mit ihren Synonymen, Klassifikation und deutschen Namen
- Inhalt kontinuierlich kuratiert und aktualisiert durch die Listenkuratoren
- Jede Liste mit eigener Geschichte und Objekten, unabhängig verwaltet

DTN taxon lists legend

Taxon list missing
Taxon list under curatorial quality check by list curator for import
ready for import
ready for replication to TNT server
imported, ready for quality check by list curator
ready to use

DTN taxon lists - Animalia (excluding Hexapoda and Vertebrata)

List title	List code	Taxonomic or biotic group	Region	Taxon names below genus level (number)	Synonyms (number); Higher classification above subgenus/ genus level (+/-)	Vernacular names - DE (number)	List curator(s)	Organisation(s) and /or project(s) supporting curation activities	Publications
Taxon list of Accelomorpha from Germany compiled in the context of the GBOL project	TaxRef_GBOL_Accelomorpha_DE	Accelomorpha	Germany					SNSB-ZSM; GBOL	
About "Taxon list of Annelida from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Annelida_DE (707)	Annelida s.l.	Germany	293	-; +	1		SNSB-ZSM; GBOL	Fauna Europaea
Taxon list of Arachnida from Germany compiled in the context of the GBOL project	TaxRef_GBOL_Arachnida_DE	Arachnida ["Rest", exkl. Araneae, Oribatida, Pseudoscorpiones, Opiliones]	Germany					SMNK, SMNS, ZFMK; GBOL	
About "Taxon list of Araneae from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Araneae_DE (701)	Araneae	Germany	1.100	36; +	-	Dr. Hubert Höfer	SMNK; GBOL	World Spider Catalog
About "Taxon list of Bryozoa from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Bryozoa_DE (708)	Bryozoa	Germany	16	-; +	1		SNSB-ZSM; GBOL	Fauna Europaea
About "Taxon list of Chilopoda from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Chilopoda_DE (703)	Chilopoda	Germany	61	-; +	1	Dr. Jörg Spelda, Dr. Thomas Wesener	ZFMK, SNSB-ZSM; GBOL	Voigtländer et al. (2011)
About "Taxon list of Cnidaria from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Cnidaria_DE (711)	Cnidaria	Germany	31	-; +	-		SNSB-ZSM; GBOL	Fauna Europaea
About "Taxon list of Crustacea from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Crustacea_DE (715)	Crustacea (excl. Ostracoda)	Germany	458	-; +	2		ZFMK; GBOL	Boxshall (2013)
About "Taxon list of Diplopoda from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Diplopoda_DE (704)	Diplopoda	Germany	135	-; +	1	Dr. Jörg Spelda, Dr. Thomas Wesener	ZFMK, SNSB-ZSM; GBOL	Voigtländer et al. (2011)
About the "Taxon list of Mollusca from Germany compiled in the context of the GBOL project"	TaxRef_GBOL_Mollusca_DE (712)	Mollusca	Germany	475	-; +	-	Katrin Koller	SNSB-ZSM; GBOL	Fauna Europaea (**Zitat nachgetragten, D.T. 24.4.16; teste)
Taxon list of Nemathelminthes from Germany compiled in the context of the GBOL project	TaxRef_GBOL_Nemathelminthes_DE	Nemathelminthes	Germany					SMNS; GBOL	
Taxon list of Nematoda from Germany compiled in the context of the GBOL project	TaxRef_GBOL_Nematoda_DE	Nematoda	Germany	173	-; +	-	Walter Traunspurger	ZFMK; GBOL	Mauch et al. (2003)



# DTN Taxon-Listen

- Alle Listen mit standardisiertem About:
  - Characteristic of the list
  - Technical info
  - General info

## About "Taxon list of fungi and fungal-like organisms from Germany"

### Taxon list of fungi and fungal-like organisms from Germany compiled by the DGfM

(TaxRefCode: TaxRef\_DGfM\_Fungi\_DE, Projects\_TNT ID: 1140)

#### Characteristics of the taxon list

- Info about Fungi in Wikipedia under <https://de.wikipedia.org/wiki/Pilze> and <https://en.wikipedia.org/wiki/Fungus>
- Number of species estimated worldwide: more than 5,000,000
- Number of taxon names below genus level in this list: more than 29,500
- Synonyms: yes
- German vernacular names: more than 3,600
- Higher classification is included.
- List curator(s): Frank Dämmrich

#### Technical info

The DTN Taxon lists services concept is described under [http://www.diversitymobile.net/wiki/DTN\\_Taxon\\_Lists\\_Services](http://www.diversitymobile.net/wiki/DTN_Taxon_Lists_Services) and the freely accessible services with a dynamic data flow involving DTN data bases [DTN Software](#) and [DTN Information model for Taxon Lists](#), shortly "DTNtaxonlists", is developed ([Starting page and documentation](#)). The services are offered via the SNSB IT Center, are registered in the [BiodiversityCatalogue](#) and accessed by the [GFBio Terminology Server](#).

#### General info

The activities to create and publish regional DTN lists started in 2012 as cooperation between the DiversityMobile/IBF project and the [German Federation for Biological Data](#) (=GFBio) project with involvement of the [SMNS](#), [SNSB](#) and [ZFMK](#).

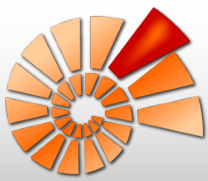
The following organisations and projects are active in supporting curation activities of the Fungi list:

- [Deutsche Gesellschaft für Mykologie](#) – list curation
- [German Federation for Biological Data](#) (GFBio) – coordination of taxon list mobilisation and curation: Joachim Holste Weibulat (SNSB)

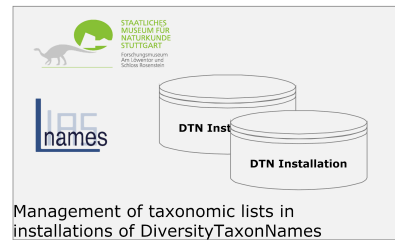
The list should be cited as: Dämmrich, F. (2015 onwards). Taxon list of fungi and fungal-like organisms from Germany compiled by the DGfM. DDB-DNB REST Webservice for Taxon Lists under <http://services.snsb.info/DTNtaxonlists/rest/v0.1/static/api-doc.html> or as

The list is offered under [Creative Commons License CC BY 3.0 DE](#).

In parallel, the list is published as GBIF checklist dataset (doi:10.15468/gtvmjw) and available under <http://www.gbif.org/dataset/9d9e900bc6c8>.

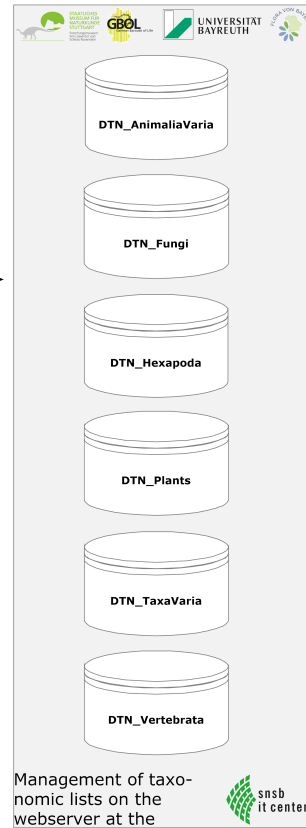


# Datenfluss

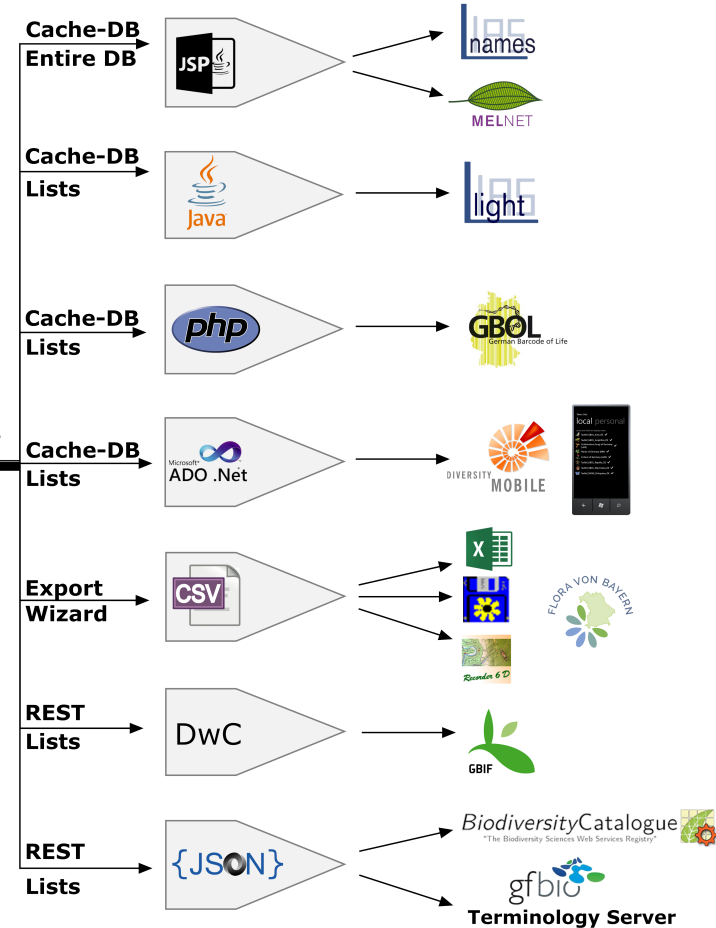


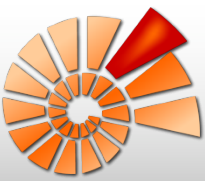
Replication

Import Wizard



- 1.) Classification
  - 2.) Taxon Lists
  - 3.) Common Names
- 
- 4.) Additional Information (e.g., Synonyms, Red List Status)





# Datenmanagement in DiversityTaxonNames

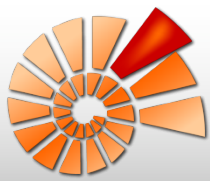
The screenshot displays the DiversityTaxonNames database interface (v. 3.0.2.18) for the taxon *Abortiporus biennis* (Bull.) Singer. The interface includes a navigation menu (Connection, Query, Table views, Data, Administration, Help) and a search results list on the left. The main record view shows the following details:

- Taxon:** *Abortiporus biennis* (Bull.) Singer, ID: 100814150, Vers.: 1
- Taxonomic name:** Genus/supragen: *Abortiporus*, Species epithet: *biennis*, Aut.: Bull., Bas. auth.: Singer, Comb. auth.: Singer, Publ.: , Sanct.: Bull., Concept:
- Nomenclature:** Code: Botany (incl. Mycology), Status: , Creation type: , Comment:
- Taxonomic reference / Protologue:** Volume: , Issue: , Pages: , Details: , D. M. Y. of P.: 1944, Suppl.: , Use ref.: , on P.: , Protol.:
- Hierarchy:** Sup.tax.: *Abortiporus* Murrill, Ref.: , Det.: , Notes:
- Synonymy overview:** *Abortiporus biennis* (Bull.) Singer (1944), *Daedalea biennis* Bull., *Heteroporus biennis* (Bull.) Lázaro Ibiza
- Typification:** Rötender Wirtling
- Geography:** Name: Rötender Wirtling, Lang.: German, Country: Germany
- Taxon lists:** TaxRef\_DGfM\_Fungi\_DE, Germany, *Abortiporus biennis* (Bull.) Singer



- Verwaltung wissenschaftlicher Namen
- Verwaltung von Synonymen, akzept. Namen, Klassifikation und Typisierung
- Erstellen von Taxon-Referenzlisten od. Checklisten





# Datenmanagement in DiversityCollection

DiversityCollection v. 3.0.8.6

Connection Grid Query Data Administration Help

Acc. Nr. **Lichen confluens Weber Neotype** [http:](http://) Specimen Event Version Withhold.

ID: 451966 318572 8 6

Query results 1 - 71

M-0023491  
M-0024109  
**M-0024414**  
M-0059523  
M-0059551  
M-0068115  
M-0103293  
M-0123438  
M-0123439  
M-0123980  
M-0123981  
M-0123982  
M-0123984  
M-0124002  
M-0126334  
M-0126335

ordnen nach: Acc. Nr.

Suchkriterien

Project

Project **Project** + BSMlich +

Specimen

Acc.Nr.spe.

Depositor

Depos.Acc.

Event

Coll.Date

Place

Locality  %Germany

Named

Gazetteer

Organism

Last ident.

Retrieval

Family

Taxonomic group

Tax.group

Identification

Type status  present

Substrate

Taxon

Collector

Collector

Storage

Collection

Image

Presence  present

Notes  %high

Images of the specimen

204 Lichen confluens (Weber) Ach. (Lecideaceae)

NEOTYPUS

1992/8/27 Germany: Sachsen-Anhalt, Harz Mts., Hochharz National Park, ...

Altitude (mNN): 1070 m NN

Germany, Brocken

Coordinates WGS84 (Longitude / Latitude) Long. (EW): 10.61666666

M-0024414

Lecidea confluens (Weber) Ach.

Lichen confluens Weber - Neotype [respons.: Hertel, H., Ulrich, H., Vieth, P.]

M-0259252

1992/8/27 Germany: Sachsen-Anhalt, Harz Mts., Hochharz National Park, ...

Altitude (mNN): 1070 m NN

Germany, Brocken

M-0024414

Lecidea confluens (Weber) Ach.

Lecidea confluens (Weber) Ach.

Schema file:

Title:

Conversion:

Restrict to collection

Restrict to material

Regard stock for dupl

Lecidea confluens (Weber) Ach.

Tax. group: lichen No. of units:  Only obs

Sex:  Substr. rel.:

Family: Lecideaceae Order: Lecanorales ID 552198

Ascomycota | Pezizomycotina | Lecanoromycetes | Lecanoromycetidae | Lecideaceae | Lecidea | Lecidea confluens

Identifier:  Descript.:

Life stage:  Circumst.:

Identification / name changes

Tax. name: Lichen confluens Weber <http://> <http://>

Vern.term:  Quali.:

Det.: Hertel, H. <http://> <http://> Category:

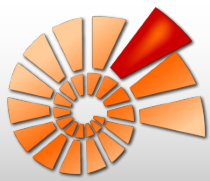
Type notes:  Type st.: neotype

Date:  Suppl.  Cat.:

Ref.:  Details:

Note:

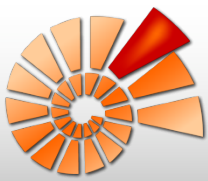
- Verwaltung von Beobachtungs- und Sammlungsdaten
- Administration von Multimedia Daten



# TNT Listen frei zugänglich und verfügbar

- Listen werden periodisch exportiert und zum freien download als csv, xsl, xml Dateien auf dem GBOL Portal, dem DiversityMobile Wiki, dem GFBio Portal und dem BiodiversityCatalogue angeboten

The screenshot displays the BiodiversityCatalogue website interface. At the top, there is a navigation bar with links for Home, Content, Developer Section, Tools, and About. Below this, the main content area features the BiodiversityCatalogue logo and a search bar. The current page is titled "DTN Taxon Lists Services" and includes a "REST" label. The page content is organized into several sections: "Overview", "Rest Services (21)", "Examples", "Monitoring", and "History". The "Overview" section provides details about the service, including the provider (SNSB), location (Munich, Germany), submitter (S. Seifert), and base URL. A sidebar on the right contains sections for "Members Responsible for this Service" (S. Seifert), "Tags (4)" (GFBio, synonym, taxonomy, vernacular), "Favourited By (0)", and "Similar Services (27)" (Oxford Batch Operation Engine, BGBM CDM Catalogue of Life REST API).



# TNT Listen frei zugänglich und verfügbar

- Listen werden periodisch exportiert und zum freien download als csv, xsl, xml Dateien auf dem GBOL Portal, dem DiversityMobile Wiki, dem GFBio Portal und dem BiodiversityCatalogue angeboten
- Listen publiziert via GBIF mit DOI Vergabe
- Listenkuratoren sind Autoren dieser Publikationen

The screenshot displays the GBIF (Global Biodiversity Information Facility) website. At the top, the GBIF logo and name are visible, along with navigation links for Data, News, Community, and About. A search bar is present on the right. The main heading is "Taxon list of fungi and fungal-like ...", with a subtitle "Checklist dataset published by Staatliche Naturwissenschaftliche Sammlungen Bayerns". To the right of the heading, there are two statistics: "17,410 Species" and "32,679 Taxa", with a "View species" button below them. Below the heading, there are tabs for "Information" and "Stats". The "Information" tab is active, showing a "Summary" section. The summary includes the full title, description, additional information, language of metadata, and originator. On the right side of the summary, there is a "DOI" field with the value "doi:10.15468/gtvmjw" and a list of related links and documents.

GBIF Global Biodiversity Information Facility

Data - News - Community - About -

17,410 Species | 32,679 Taxa

View species

Information Stats

### Summary

**FULL TITLE**  
Taxon list of fungi and fungal-like organisms from Germany compiled by the DGfM

**DESCRIPTION**  
The DTN Taxon lists services concept is described under [http://www.diversitymobile.net/wiki/DTN\\_Taxon\\_Lists\\_Services](http://www.diversitymobile.net/wiki/DTN_Taxon_Lists_Services). The taxon lists are offered via several open and freely accessible services with a dynamic data flow involving DTN data bases DTN Software and DTN Information model.

**ADDITIONAL INFORMATION**  
[http://www.diversitymobile.net/wiki/About\\_%22Taxon\\_list\\_of\\_fungi\\_and\\_fungal-like\\_organisms\\_from\\_Germany\\_compiled\\_by\\_the\\_DGfM%22](http://www.diversitymobile.net/wiki/About_%22Taxon_list_of_fungi_and_fungal-like_organisms_from_Germany_compiled_by_the_DGfM%22)

**LANGUAGE OF METADATA**  
ENGLISH

**ORIGINATOR**  
*Frank Dämmrich*

**DOI** doi:10.15468/gtvmjw

**PUBLISHED BY**  
[Staatliche Naturwissenschaftliche Sammlungen Bayerns](#)

**REGISTRATION DATE**  
Mar 23, 2016

**SERVED BY**  
[DiversityTaxonNames Server](#)

**NETWORKS**  
- [GBIF Backbone Sources](#)

**LINKS**  
- [Dataset homepage](#)

**EXTERNAL DATA**  
- [Darwin Core Archive](#)

**METADATA DOCUMENTS**  
- [GBIF annotated version \(EML\)](#)