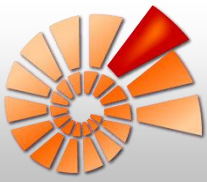


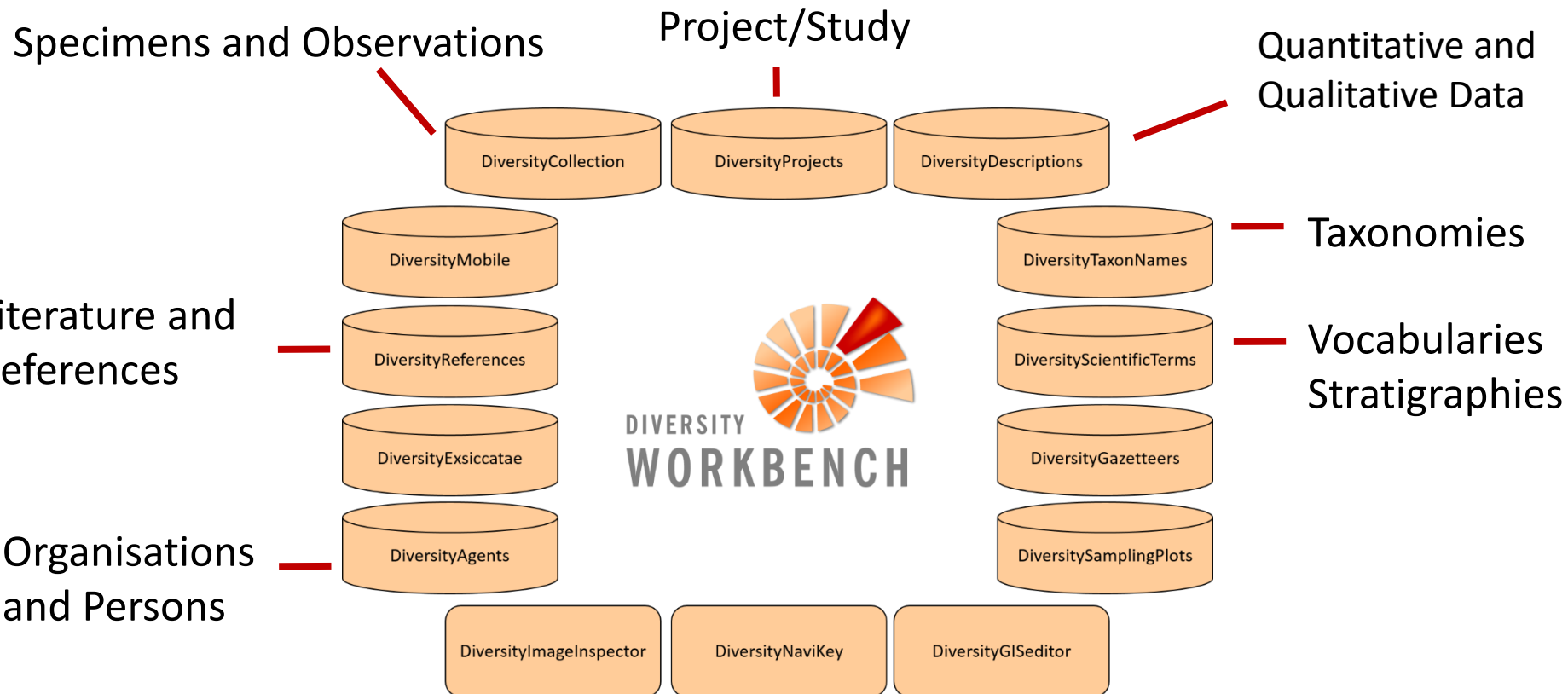
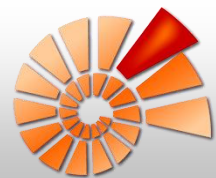
Diversity Workbench DWB

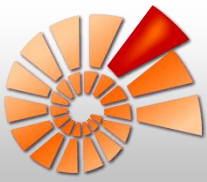


- Open source collection management system (CMS) for bio- and geodiversity

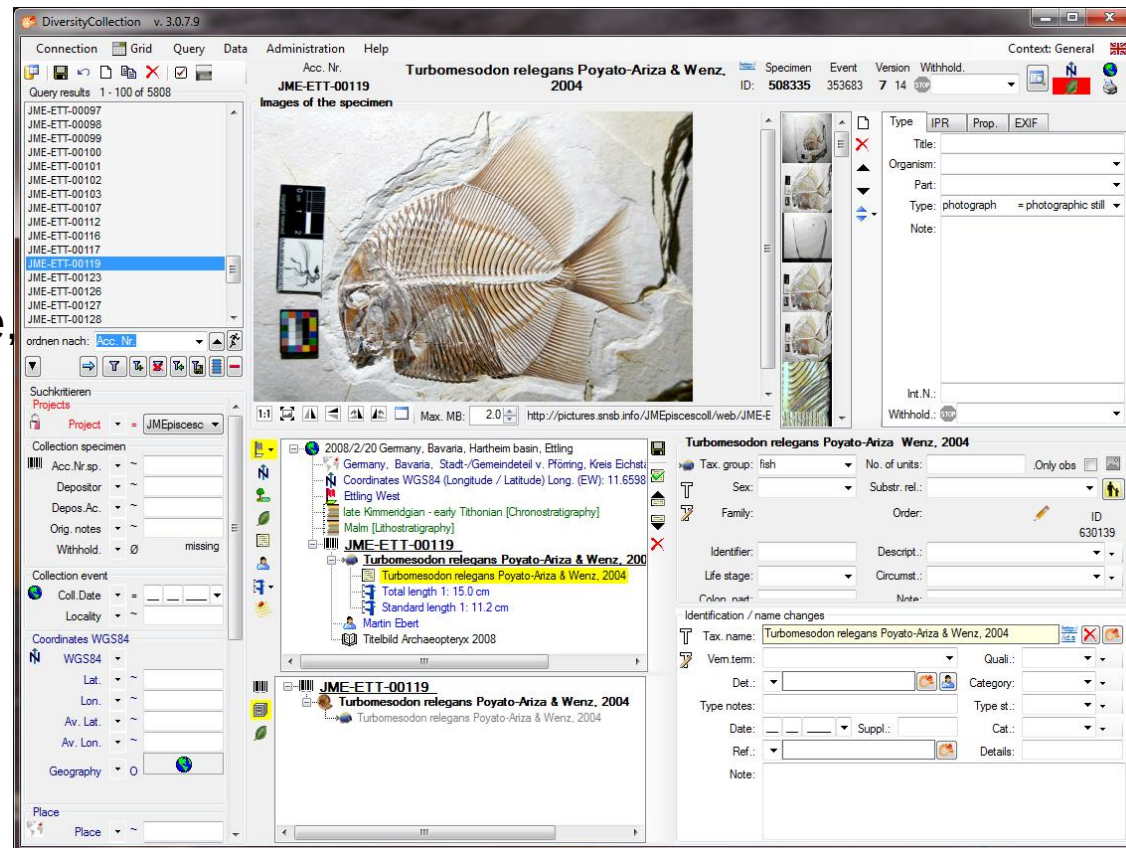
Developed and adapted to:

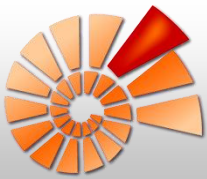
- Natural science collections
- Monitoring and conservation
- Taxonomies and checklists
- Descriptions and traits
- Geosciences und stratigraphies



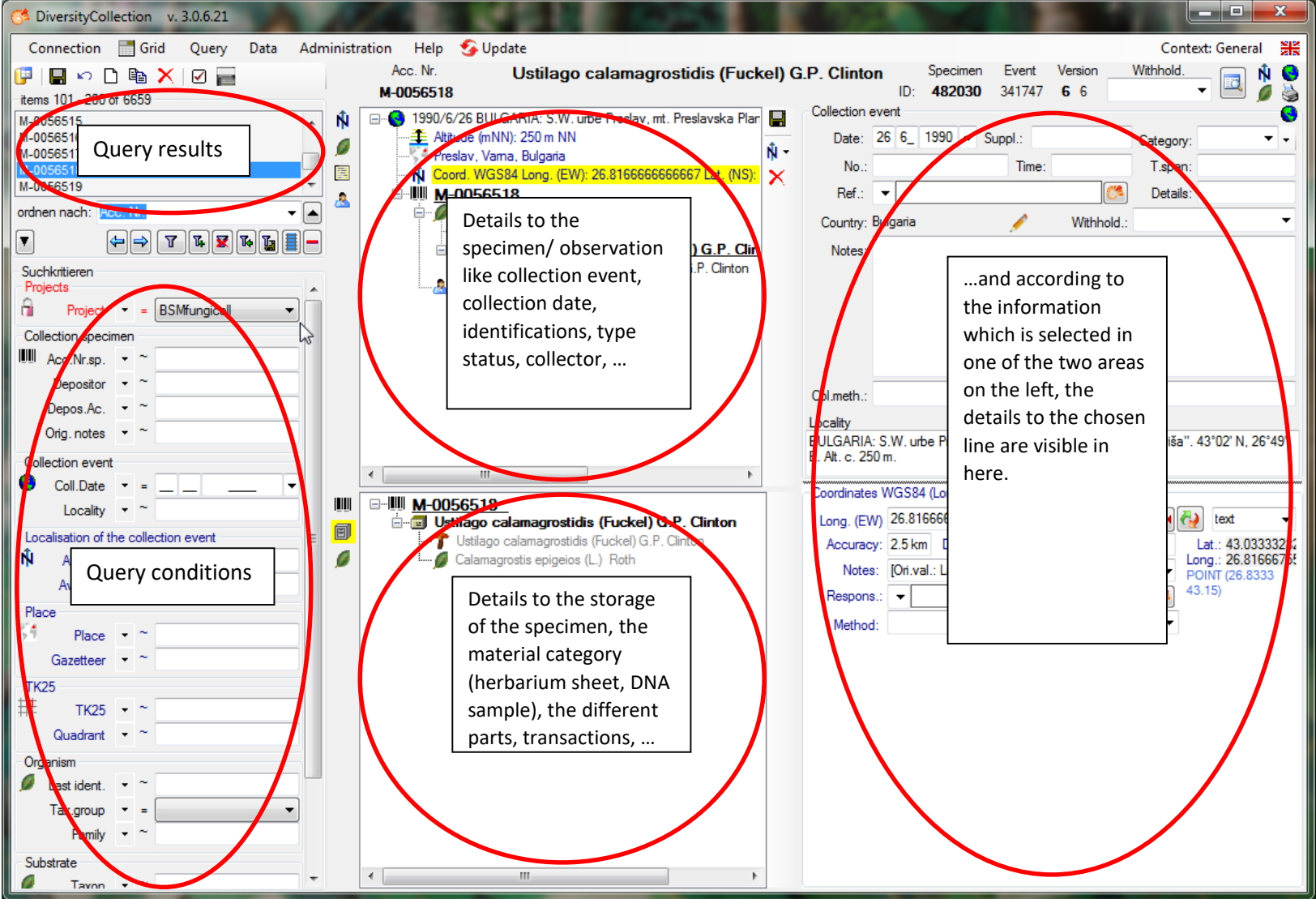


- Collection events
- collection objects and observations
- experiments and analyses
- Parts, identifications
- object transfer or exchange, loan, permits
- preparation and storage of specimens
- multimedia files
- relations
- IPM
- label printing,
- distribution maps
- statistics





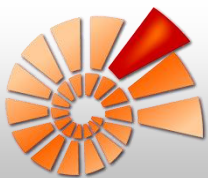
Areas of the DWB Clients



The screenshot shows the DiversityCollection v. 3.0.6.21 interface. Red circles highlight three main areas:

- Query results:** A list of items (M-0056515 to M-0056519) in the left sidebar.
- Query conditions:** A form in the left sidebar for filtering results by project, collection specimen, collection event, and other criteria.
- Details to the specimen/ observation:** A central panel showing details for specimen M-0056518, including collection date, location, and collector.
- Details to the storage of the specimen:** A bottom panel showing details for specimen M-0056518, including material category (herbarium sheet, DNA sample), different parts, transactions, and storage location.
- Collection event details:** A right panel showing details for the collection event, including date, time, category, and coordinates.

...and according to the information which is selected in one of the two areas on the left, the details to the chosen line are visible in here.



DiversityCollection, Database: DiversityCollection_Workshop v. 4.4.15

Connection Grid Query Data Administration Help

Query results 1 - 10 of 1991

ID: 446568
ID: 407965
ID: 407826
ID: 407224
ID: 407177
ID: 407030
ID: 389142
ID: 201690
ID: 201391
ID: 201383

order by: Acc. Nr.

Query conditions

Projects

Project ~ +
Creat. date =

SpecimenAndParts

Acc. Nr. ~

Collection specimen

Acc. Nr. ~

ID =

Acc. date ~

Depositor ~

Original ~

Additional ~

Internal ~

Problems ~

Withhold. ~

Creat. by ~

Cre. dat. ~

Chang. by ~

Changed at ~

Tilia cordata P. Mill.

Images of the specimen



1:1 Max. MB: 2.0 URI: <http://pictures.snsb.info/IBFgallscoll/web/43561/9994ab38f4>

2012-07-18 Deutschland, Bayern, R.-Bez. Oberfranken, LK Bayreuth, Waldrand in der Umgebung

Coordinates WGS84 (Longitude / Latitude) Long. (EW): 11.461597 Lat. (NS): 49.95073

[ID: 446568]

Tilia cordata P. Mill.

Tilia cordata P. Mill. [det. by Alexander Guhr]

Eriophyes lateannulatus Schulze

Eriophyes lateannulatus Schulze [det. by Alexander Guhr]

Cre. dat.: 2014-01-09 by BOTSAMML40/Alex
Last changes: 2014-01-09 by Owner of database

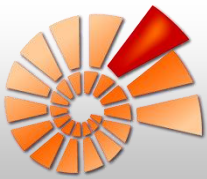
Specimen 446568 Event 316817 Version 11 19 Withhold. reason STOP



Type	IPR	EXIF
Title:		
Organism: Eriophyes lateannulatus Schulze		
Part:		
Type:		
Note:		
Int.N.:		
Withhold.: STOP		
D.ord.: 1		

Collection event

Date:	18 7 2012	Suppl.:		Category:	
End:		Time:		T.span:	
Ref.:		Details:			
No.:		Withhold.:			
Notes:					
Country: Germany					
Col.meth.:					
Locality: Deutschland, Bayern, R.-Bez.					
Verbatim: Habitat:					
Methods:					
Mark.:					



Collection

Query results 1 - 21

- ZSM | Ento | InVa | Odonata | Bay.Lib. |
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Calopteryx haemorrhoid.
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Calopteryx splendens
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Calopteryx virgo
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes barbarus
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes virens
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes viridis
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes viridis | Bemried**
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes viridis | Garching
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes viridis | Hof
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 1 | Lestes viridis | Oraison
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 10
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 2
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 3
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 4
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 5
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 6
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 7
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 8
- ZSM | Ento | InVa | Odonata | Bay.Lib. | 9

order by: Hierarchy

Query conditions

Collection

Name ~

Collection ~ Δ Odonata

Acronym ~

Description ~

Location ~

Contact ~

Plan ~

Bemried

Plan: Width: Height: Date: 2023-01-24

Lestes viridis
Große Binsenjungfer

53%

Collection

- Odonata
 - Bayerische Libellensammlung
 - ZSM-InVa-D1626 (Bayerische Libellensammlung)
 - Lestes viridis
 - Bemried
 - Lestes viridis - ZSM-InVa-D1626-06 - 1955/8/ : Deutschland, Bayern, Bemried

Name: Bemried

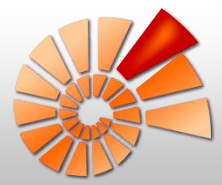
Type: area Display order: Acronym: ID 1081

Contact:

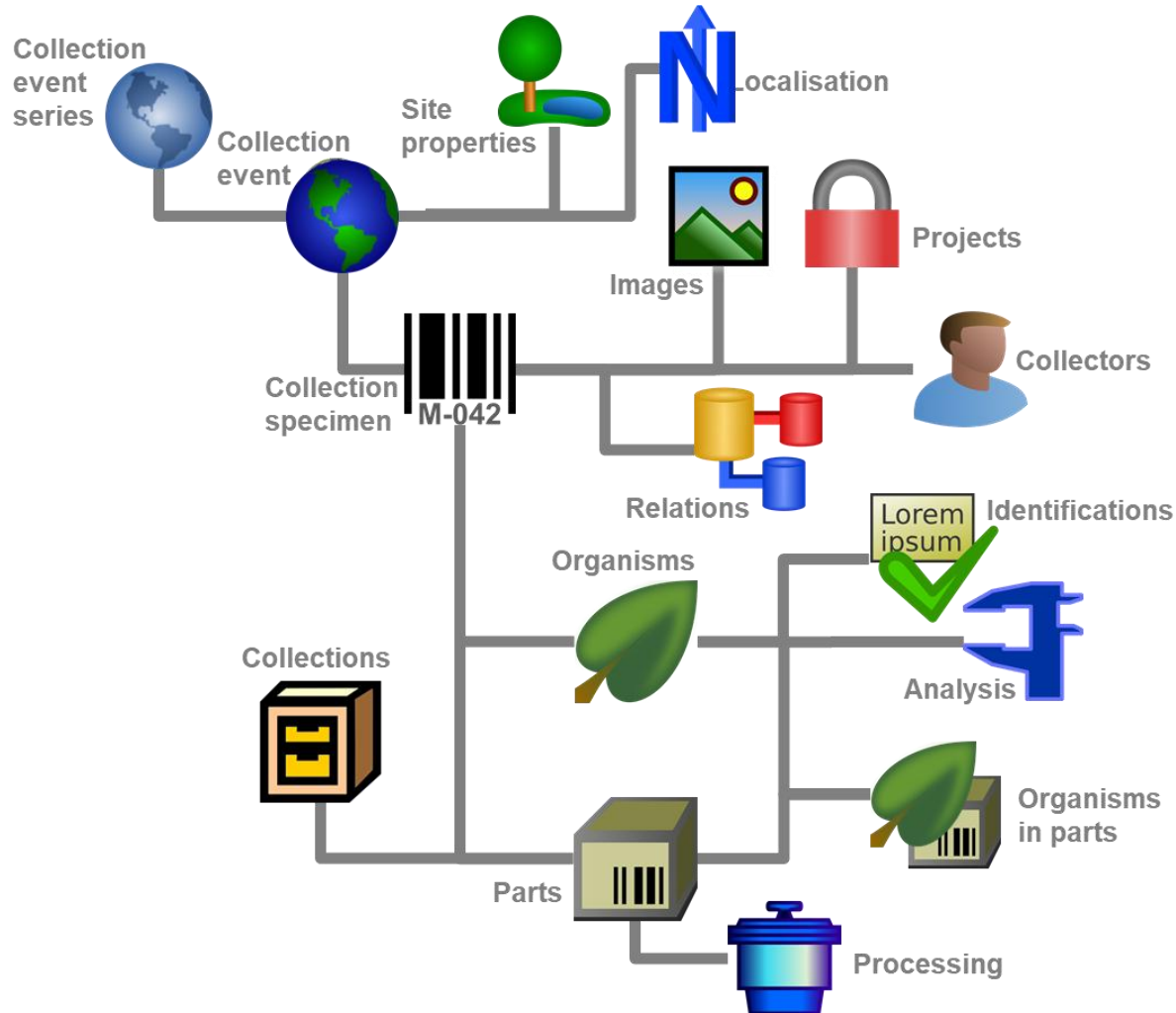
Description:

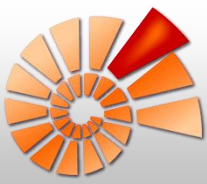
Location:

Owner:



DiversityCollection



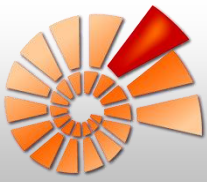


To describe

- traits with values of individual organisms and summarized data for taxa
- characters of any research items (entities/objects)
- Descriptions are characterized by a triple structure, e.g. 'item-descriptor-value'

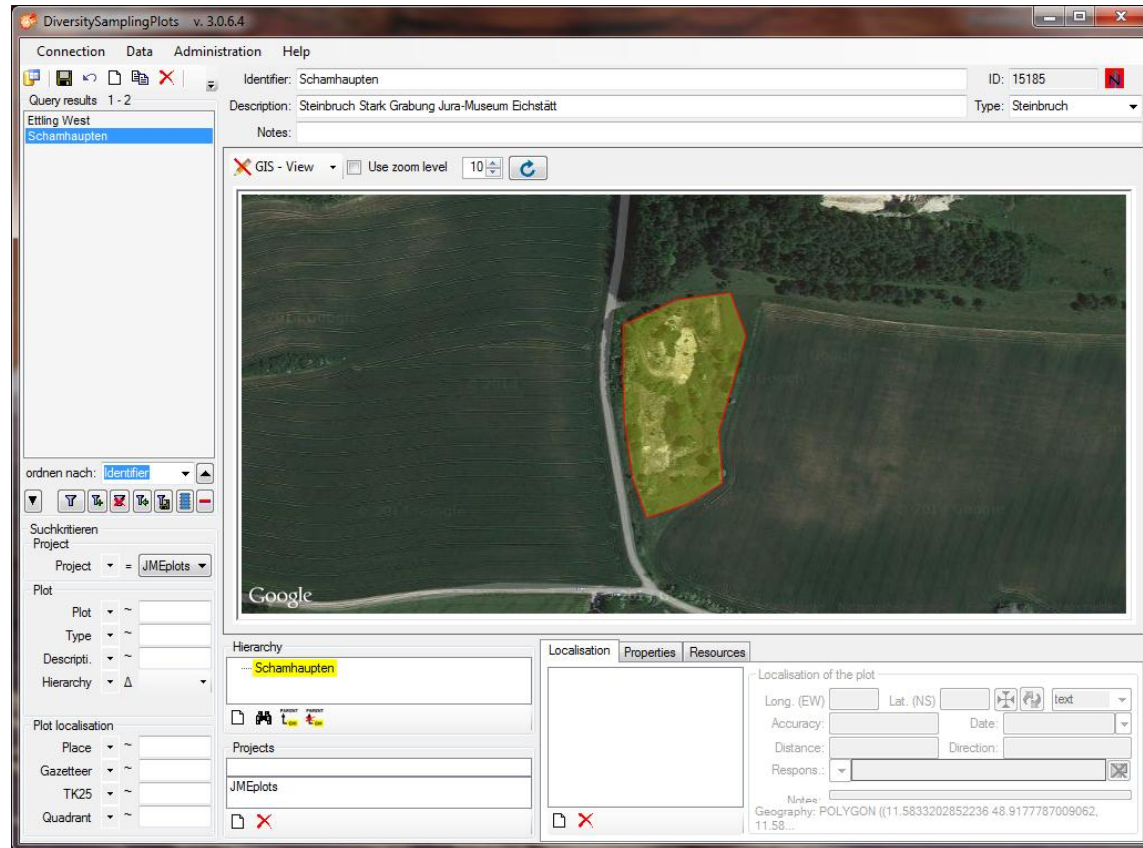
The screenshot displays the DiversityDescriptions application window. The title bar indicates the database is 'DiversityDescriptions_GFBIO v. 3.0.1.9'. The main window is titled 'Aridibacter kavangonensis Ac_23_E3' with ID 343. The interface is divided into several panels:

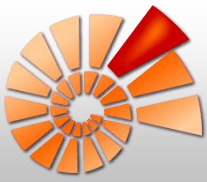
- Left Panel:** A list of query results showing various bacterial strains. 'Aridibacter kavangonensis Ac_23_E3' is selected.
- Top Panel:** A description field for 'Aridibacter kavangonensis Ac_23_E3'.
- Main Panel:** A table of descriptors for the selected organism. The table has columns for 'Nr.', 'Type', and 'Descriptor name'. The selected descriptor is '21 sequence • Partial ribosomal sequence 16S'.
- Right Panel:** The molecular sequence for the selected descriptor, showing a long string of nucleotides (AGAGTTGATCCCTGGCTCAGAAACACGCTGGCGGCGTCCCTCAGACATGAGTCGACGATTAACTCTCCCTCGGGAGAGATATAAGTGGCGCACGGGTAGTAACACGTAAATCTACCTCGAGTGGGGAATTAACACGGAAACGGTTGCTAATACCGCATATGCAGCGCATCGCGAGATGACAGTTGTTAAAGATTTTATTCGCTTGAAGAGGAGCTTCGGGAGATAGCTAGTTGGTAAGGTAAAGGCTTACCAAGGCGACGATCTGATCCGGCTTAAGAGGAGGTCGGACACACTGACACTGAATACGGGTTCAGACTCTACGGGAGGCGAGTCGGGAATTTTGGGCAATGGGCAAGCTGACCCAGCAACGCCCGGTGAAGGATGAAGTTCTTCGGAATGTAACCTTCGTAAGATGGGAAGATAAATGACGGTACCAATTTGTAAGCTCCGGCTAATACGTGCCAAGCAGCGCGGTAAACGTAGGGAGCAGCGTTGTTTCGGATTCTAGCGGTAAAGGGCGGTAGCGGCAATTCAGGTGAGTGTGTAATCTCCGGCTTAACTCGGAACGGTCAGCTGATGCTTTGCTAGAGTGCAAGAGGGGCAATCGGAATCTTGGTGTAGCGGTGAATGCGTAGATATCAAGAGGAACCTGAGGTGAAGACGGTTGCTGGGCTGACCTGACGTGAGGCGGAA).
- Bottom Panel:** A table of status data with columns for 'x', 'ID', 'Status', and 'Notes'. The status data includes various flags and their corresponding meanings.



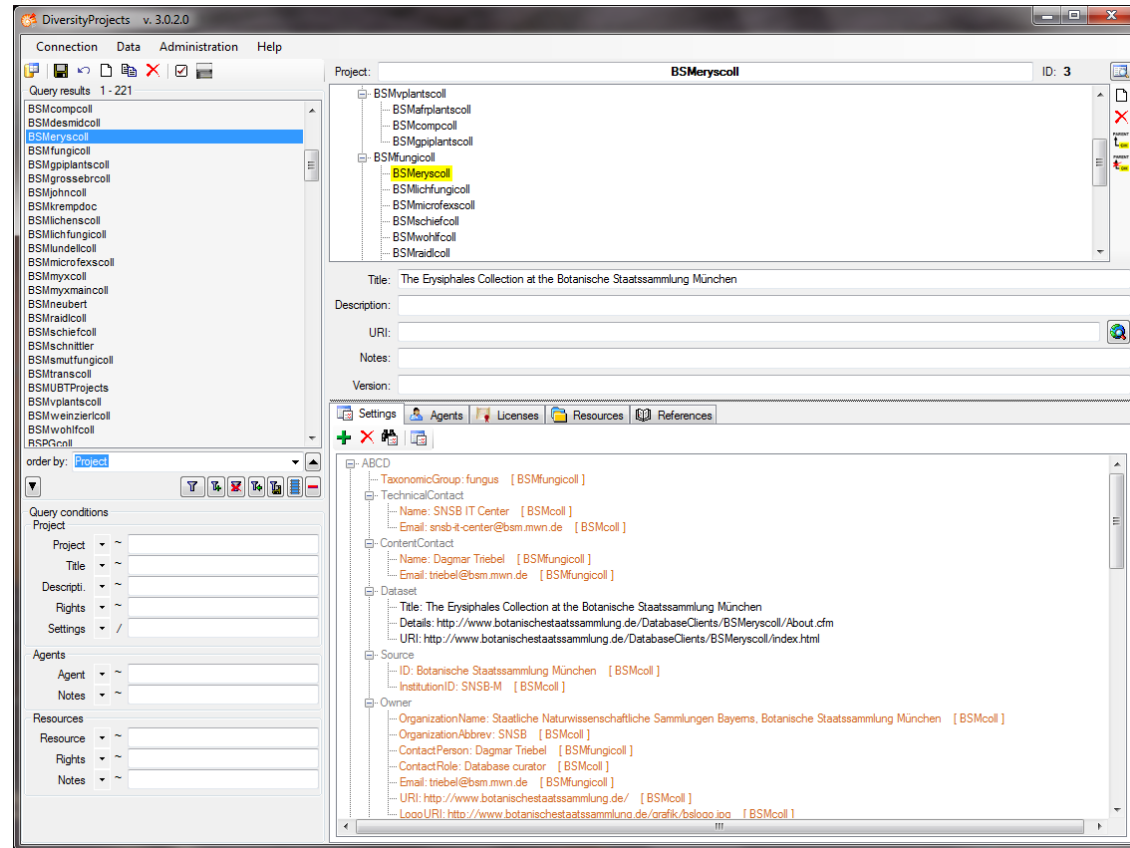
Designed to document the geographical position of geoobjects and the geometry of the plots as well of georeferenced objects on the plots

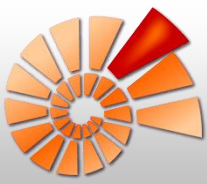
- Management of the hierarchical relation between plots and subplots





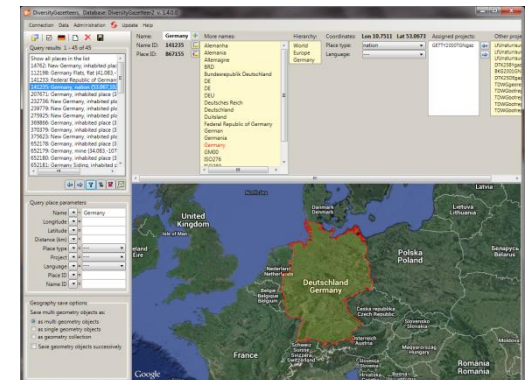
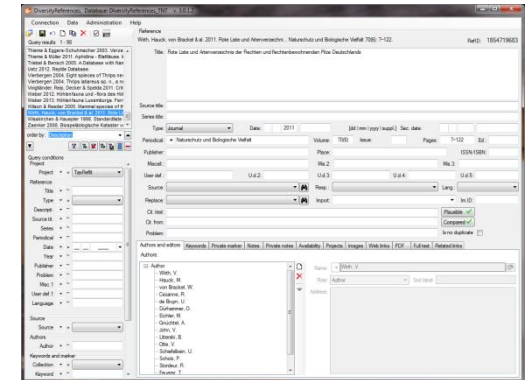
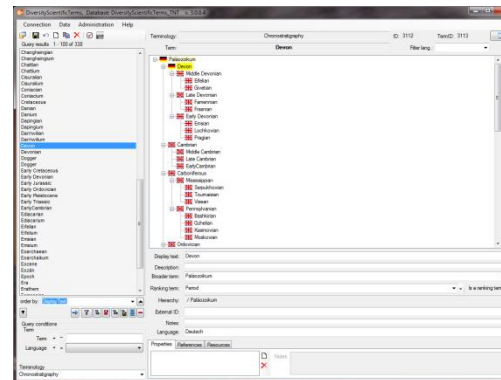
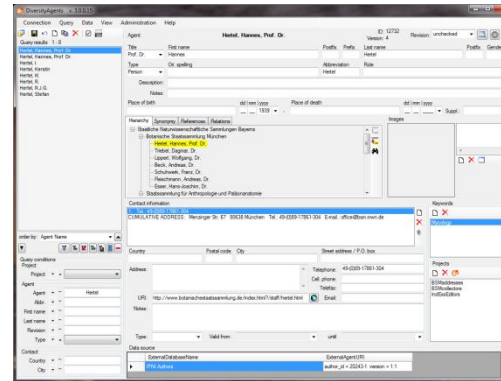
- SQL-database and rich client for the management of research projects and data sets defined and used by components of the Diversity Workbench
- Designed to document basic information about the projects, data packages, their relations and hierarchy, settings, data assets like documents and resources
- All metadata on data set level are processed here, e.g. data set owner, licenses

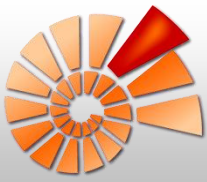




Ontologies

- **DiversityAgents** is the component for the management of persons and organisations.
- **DiversityReferences** is the component for the management of literature references and literature resources.
- **DiversityScientificTerms** is the component for the management of scientific ontologies, vocabularies, terminologies and terms.
- **DiversityGazetteers** is the component for the management of geographic thesauri like the GettyThesaurus.

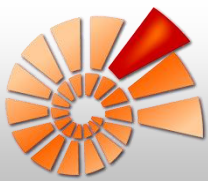




- SQL-database and rich client for the management of taxonomic names and related information
- Designed to document taxonomic names with nomenclature, accepted names, synonyms, classification, typification and common names
- It is appropriate to create taxon reference lists, checklists with geographical or nature conservation categories as well as with other parameters

The screenshot displays the DiversityTaxonNames software interface. The main window shows the entry for *Biatora sylvana* Korb. The interface is divided into several sections:

- Left Sidebar:** A list of taxa, including *Biatora plicata* Fr., *Biatora poetschiana* Korb., *Biatora pontica* Printzen & Tensberg, *Biatora porphyroplaca* Hinteregger & Po., *Biatora porphyrosopoda* Anzi, *Biatora propinqua* (Nyl.) Arnold, *Biatora pullata* Norman, *Biatora pyracea* var. *saxicola* Hepp, *Biatora pyrophthalma* Mont., *Biatora rhododendri* (Hepp) Arnold, *Biatora rhodopis* Tuck., *Biatora rufidula* (Graewe) S. Ekman & P., *Biatora rufoscula* Anzi, *Biatora rugulosa* Hepp, *Biatora scorigena* (Müll. Arg.) Ramb., *Biatora scotopholia* Tuck., *Biatora similis* A. Massal., *Biatora sorediosa* Rambold, *Biatora sphaeroides* (Dicks.) Hornem., *Biatora sphaeroides* (Dicks.) Korb., *Biatora sphaeroidiza* (Vain.) Printzen & I., *Biatora straminea* Stenh., *Biatora subconcolor* Anzi, *Biatora subdiffracta* Arnold, *Biatora subduplex* (Nyl.) Printzen, and *Biatora subduplex* (Nyl.) Räsänen ex.
- Main Data Entry Form:** Contains fields for Taxonomic name, Species epithet, Aut., Bas. auth., Comb. auth., Publ. auth., Sanct., Rank, On. orthogr., Ana-/Teleomorph., Notes, Is hybrid, Code, Status, Creation type, Comment, Taxonomic reference / Protologue, Typification, Geography, Common names, Projects, and Synonymy.
- Bottom Section:** Includes a Synonymy overview and External data sources.



DiversityCollection – ImportWizard

Import specimen data

File: C:\Users\Sanz\Documents\Purpurascences\Schmidt-Stohn-Purpurascences Nr. 1-41_150521_fin.txt
Encoding: ANSI Start line: 2 End line: 42
☒ First line contains column definition Language / Country: US
Schema: C:\Users\Sanz\Documents\Purpurascences\Schmidt-Stohn-Purpurascences Nr. 1-41_150521_fin_20150611_142709.xml

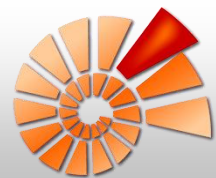
Schedule for import of tab-separated text files into DiversityCollection
Target within DiversityCollection: **Specimen**
Schedule version: 1 Database version: 02.05.58
Lines: 2 - 42 First line contains column definition: ☒
Encoding: ANSI Language: US

Tables

CollectionEvent (CollectionEvent)
Merge handling: **Insert**

Column in table	Key	Copy	Pre	Post	File pos.	Transformations	Value	Source	Table
CollectionEventID								Database	
CollectionDay	?				7	Split at Pos. Dir. 1 ⇌		File	
CollectionMonth	?				7	Split at Pos. Dir. 2 ⇌		File	
CollectionYear	?				7	Split at Pos. Dir. 3 ⇌		File	

	Specimen	Part 1 StorageLocation Organism 1	Event CountryCache	Event LocalityDescription	Agent 1 CollectorsName Agent 2 CollectorsName	Agent 1 CollectorsNumber	Event CollectionDay Event CollectionMonth Event CollectionYear	Event LocalityDescription Event HabitatDescription
	AccessionNumber	LastIdentificationCe Identification 1.1						
1	Nr.	M-Nummem	Art	Land	Fundort	Sammler	Koll.-Nr.	Datum
2	1	M-0275820	Cortinarius purpur...	Ungarn	Szentendre	B. Dima	DB3362	16.10.2008
3	2	M-0275821	Cortinarius purpur...	Ungarn	SzSzb, Bátorliget	L. Albert & B. Dima	DB1339	02.10.2004
4	3	M-0275822	Cortinarius purpur...	Deutschland	Kýffhäuser/Leop...	G. Schmidt-Stohn	SS07-211	09.10.2007
5	4	M-0275823	Cortinarius subpu...	Italien	Matschatsch	C. Rossi	Rossi4034	03.10.1998
6	5	M-0275824	Cortinarius purpur...	Italien	S. Vito Comedo	C. Rossi	Rossi4906	22.10.2000
7	6	M-0275825	Cortinarius purpur...	Italien	Calangianus	C. Rossi	Rossi5053	02.11.2000



DWB Links

<http://diversityworkbench.net>

<https://www.snsb.info/Services.html>

<https://www.diversityworkbench.de/manual/dwb/>