

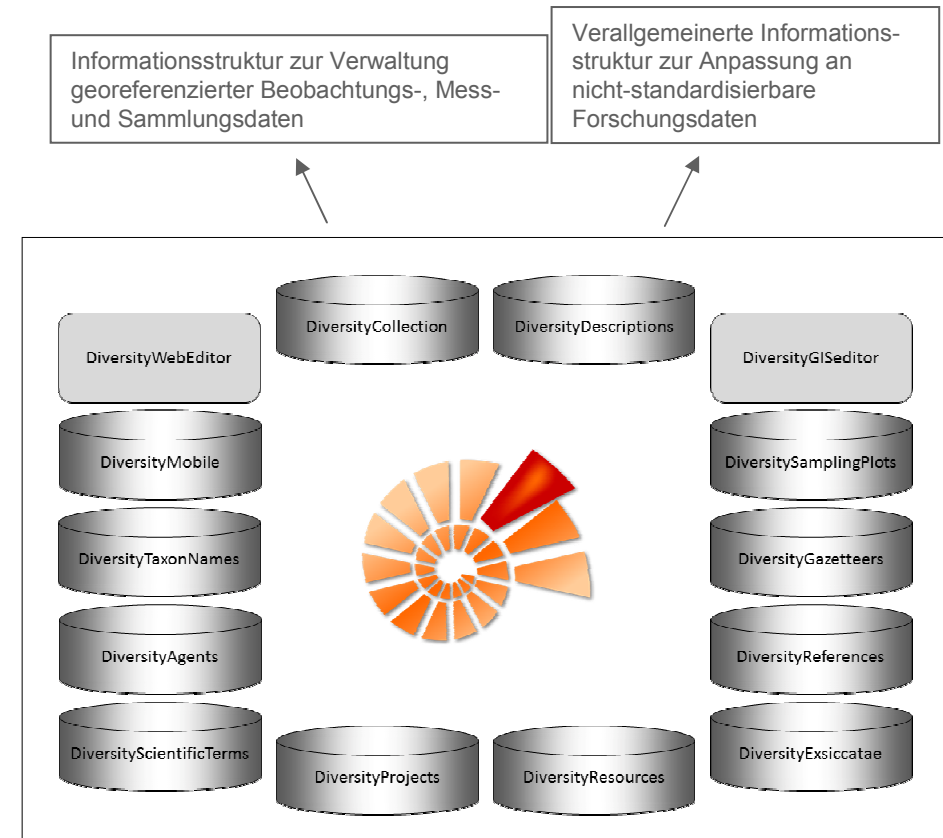
DiversityDescriptions

DD 3.0

Dagmar Triebel, Anton Link

DiversityDescriptions als Modul der DWB

- DeltaAccess / DD seit 1995
- Die erste Komponente der DWB (seit 1999)
- Modul zur Beschreibung von von Eigenschaften von Organismen, und jeglichen Objekten und Elementen der Diversitätsforschung



Datenmanagement von deskriptiven Daten und Messdaten

DiversityDescriptions DD

- Vorgänger-Version: v. 2.2 (MS Access); Entwickler Dr. G. Hagedorn
- Neue Version v. 3.0 (C# im .Net Framework; SQL Server) ab 2012
- **Letztes Release → November 2014**

Beschreibung **von Eigenschaften (descriptors, properties, characters)**

von Organismen, Forschungsobjekte, -ereignisse (item, element, entity)

Trait-Daten

Nukleinsäure- und Aminosäuresequenzen

Ökosysteme, pflanzensoziologische Einheiten usw.

(Sozioökonomische) Interviewdaten

Messreihen (measurement event series)

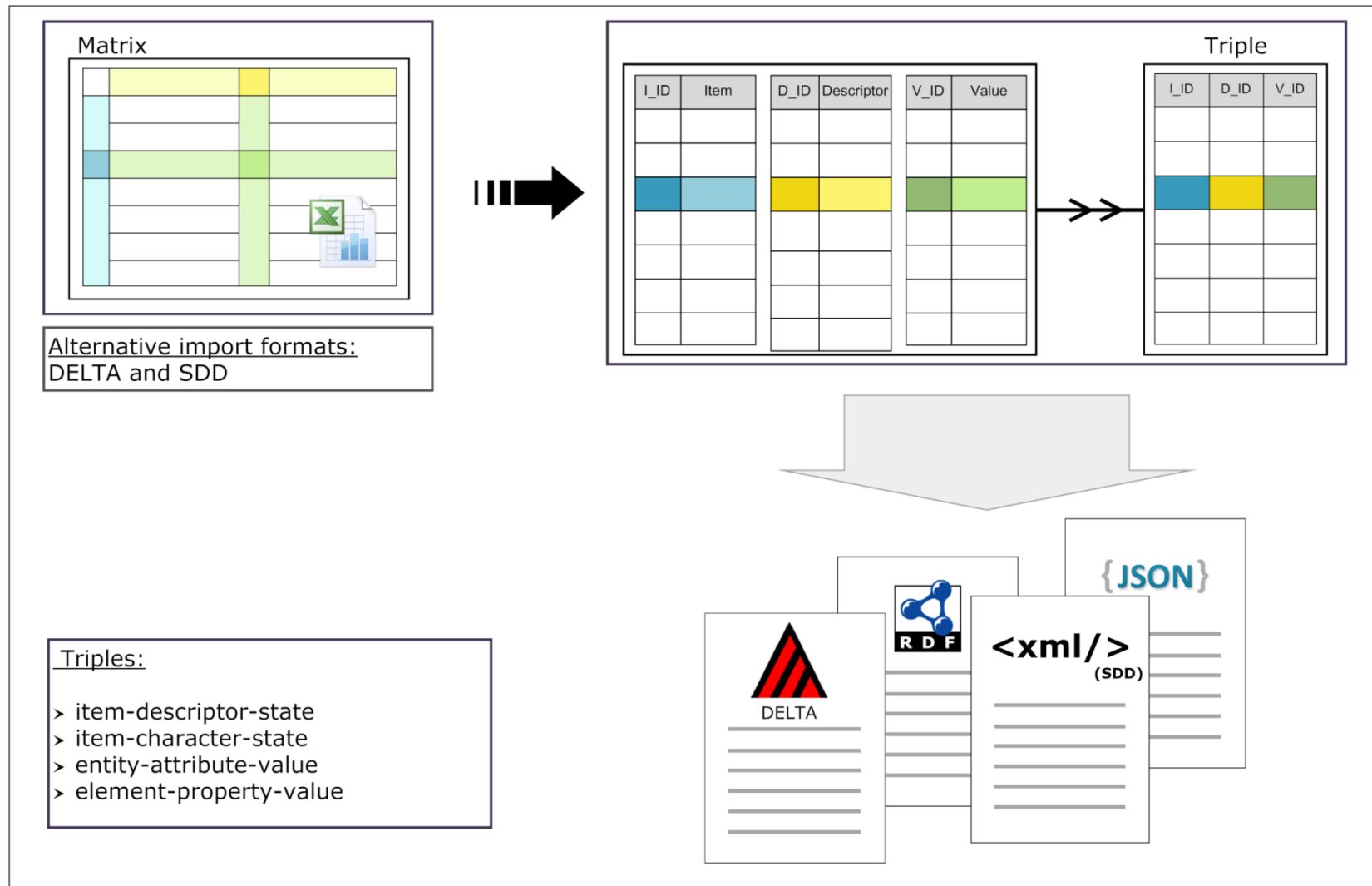
Datenmanagement von deskriptiven Daten und Messdaten

DiversityDescriptions DD

- Triple-Structure: **item (element, entity) – descriptor (character, trait, variable, attribute, property, factor) – state/value**
- Deskriptoren betreffen alle Typen von Merkmalen und Eigenschaften, d. h. Variablen
- Generelle Unterscheidung von kategorialen (qualitativen) und quantitativen Merkmalen (,Deskriptoren', Messwerte z. B. aus Messreihen)
- Merkmalsstruktur ist frei definierbar

Datenmanagement

Matrixdaten → Daten in Triple-Structure



DiversityDescriptions – Matrix-based data to triple-structured data

DiversityDescriptions – Datenbeispiel

Trait-Daten

DiversityDescriptions, Database: DiversityDescriptions3_0_6_Erythroneura v. 3.0.0.7

Connection Edit Query Data Administration Help

Erythroneura aclys McAtee Project: Erythroneura Language: en

Suchergebnisse 1 - 54

Suchkriterien

ordnen nach: Description

Suchkriterien

Description

Title ~

Project Erythroneura

Descriptor

Categoric. =

Quantitati. =

Text =

Data status

= +

Scope

Taxon =

Geography =

Specimen =

Observati. =

Reference =

Other =

Description: Erythroneura aclys McAtee DB key: 868

Main attributes Descriptor view Continuous view Resource links

ID	Type	Descriptor name
1	categorical	Ground color of dorsum
2	categorical	Coloration of vertex
3	categorical	Coloration of vertex midline
4	categorical	Anteclypeus coloration
5	categorical	Pronotum color pattern
6	categorical	Color pattern of mesonotum
7	categorical	Coloration of thoracic venter
8	categorical	Presence of crossbands on forewings
9	categorical	Presence of oblique pattern on forewings
10	categorical	Presence of a brown spot in forewing inner apical cell
11	categorical	Presence of distal spot in forewing apical cell II
12	categorical	Clavus color pattern
13	categorical	Length of forewing outer apical cell
14	categorical	Length of 2S abdominal apodemes (Males)
15	categorical	Length of aedeagus preatrium (Males)
16	categorical	Dorsal apodeme of aedeagus in ventral view (Males)
17	categorical	Presence of teeth in distal part of aedeagal shaft (Males)
18	categorical	Width of aedeagal shaft in lateral view (Males)
19	categorical	Position and length of aedeagus ventral processes (Males)
20	categorical	Position and length of aedeagus distal processes (Males)
21	categorical	Shape of pygofer dorsal appendages (Males)
22	categorical	Shape of pygofer lobe (Males)
23	categorical	Apex of aedeagus in ventral view (Males)
24	categorical	Apical vestiture of aedeagus (Males)

Categorical states

x	ID	State	Modifier	Frequency	Notes
☐	1	entirely pale			
☐	2	pale, with dark late...			
☒	3	entirely dark			
☐	4	pale, with dark bro...			

Media view



<http://ctap.inhs.uiuc.edu/dmitriev/images/aclys1.gif>

Edit description

DiversityDescriptions – Datenbeispiel

Nukleinsäure- und Aminosäuresequenzen

e.g., FASTA format

```
>AB000263 |acc=AB000263|descr=Homo sapiens mRNA for prepro cortistatin like peptide, complete cds.|len=368  
ACAAGATGCCATTGTCCCCGGCCTCCTGCTGCTGCTGCTCTCCGGGGCCACGGCCACCGCTGCCCTGCC  
CCTGGAGGGTGGC  
CTCCTGACTTTCT  
AAGCTCGGGAGGT  
CTGCAGGAACTTC  
TTTAATTACAGACC
```

The screenshot displays the DiversityDescriptions software interface. The main window is titled "Test sequence 1" and shows a list of descriptors for the sequence. The descriptors are organized into a table with columns for "Nr.", "Type", and "Descriptor name". The "5_base" descriptor is selected, and its categorical states are shown in a separate table on the right. The interface also includes a search bar, a filter section, and a status data table.

Nr.	Type	Descriptor name
1	text	gi
2	text	accession
3	text	description
4	quantitative	length
5	categorical	5_base
6	categorical	6_base
7	categorical	7_base
8	categorical	8_base
9	categorical	9_base
10	categorical	10_base
11	categorical	11_base
12	categorical	12_base
13	categorical	13_base
14	categorical	14_base
15	categorical	15_base
16	categorical	16_base
17	categorical	17_base
18	categorical	18_base
19	categorical	19_base
20	categorical	20_base
21	categorical	21_base
22	categorical	22_base
23	categorical	23_base
24	categorical	24_base

x	Nr.	State	Notes
☒	1	A (adenine)	
☐	2	W (A T (weak bonds))	
☐	3	B (G T C (all but A))	
☐	4	D (G A T (all but C))	
☐	5	H (A C T (all but G))	
☐	6	V (G C A (all but T))	
☐	7	N (A G C T (any))	
☐	8	C (cytosine)	
☐	9	G (guanine)	
☐	10	T (thymine)	
☐	11	R (G A (purine))	
☐	12	Y (T C (pyrimidine))	
☐	13	K (G T (keto))	
☐	14	M (A C (amino))	

x	ID	Status
☒	!	To be checked
☐	o	Not to be recorded
☐	-	Not applicable
☐	?	Data unavailable
☐	#	Not interpretable
☐	\$	Data withheld
☐	0	Missing data

DiversityDescriptions – Datenbeispiel

(Sozioökonomische) Interviewdaten

- ☐ 10: Tomato
- ☐ 11: Adenophora triphylla var. japo
- ☐ 12: Pimpinella brachycarpa (Kom.)
- ☐ 13: Spinach
- ☐ 14: Cabbage
- ☐ 15: Perilla seed
- ☐ 16: Broccoli
- ☐ 17: Chinese goose
- ☐ 18: Codonopsis lar
- ☐ 19: Lettuce
- ☐ 20: Sweet pepper
- ☐ 21: Red cabbage
- ☐ 22: Phaseolus ang
- ☐ 23: Pleurospermum
- ☐ 24: Aster scaber T
- ☐ 25: Leek
- ☐ 26: Aster scaber T
- ☐ 27: Cirsium sp.
- ☐ 28: Allium microdic
- ☐ 29: Maize
- ☐ 30: Platyon Codon
- ☐ 31: Kalopanax pict
- ☐ 32: Bracken
- ☐ 33: Aralia elata
- ☐ 34: Cucumber
- ☐ 35: Rice
- ☐ 36: Carrot
- ☐ 37: Onion
- ☐ 38: head lettuce
- ☐ 39: Sesam vegetab
- ☐ 40: Shallot
- ☐ 41: Chinese cabb

- ☐ 74: Pilose Asiabell
- ☐ 75: Madonna Lily '9288' added to
- ☐ 76: Sesam vegetable 2

- ☐ 1: Low profit
- ☐ 2: Increased number of imported a
- ☐ 3: Because of affecting areas caus

DiversityDescriptions, Database: DiversityDescriptions3_0_8_Interview v. 3.0.0.9

Connection Edit Query Data Administration Help

Suchergebnisse: 1 - 100 von 238

101

Project: B19_WP4_02_int Language: en

DB key: 2707

Description: 101

Main attributes Descriptor view Continuous view Resource links

Nr.	Type	Descriptor name
1	categorical	[SQ1] Interview partner - Living site district [Where d...
2	categorical	[SQ2] Interview partner - Living location in the same...
3	categorical	[SQ2-1] Interview partner - Fam areas where famer...
4	categorical	[SQ2-2] Interview partner - Famland location admini...
5	quantitative	[A1] Interview partner - Years of faming experience ...
6	categorical	[A2] Interview partner - Designated distributors or m...
7	categorical	[A3] Interview partner - Cultivated main crops in 201...
8	categorical	[A4] Interview partner - [obsolete]
9	categorical	[A4-1] Interview partner - Conventional faming - Cult...
10	categorical	[A4-2] Interview partner - Conventional faming - Cult...
11	categorical	[A4-3] Interview partner - Conventional faming - Cult...
12	categorical	[A4-4] Interview partner - Conventional faming - Cult...
13	categorical	[A4-5] Interview partner - Conventional faming - Cult...
14	quantitative	Cultivated area 1 - Rice paddy - [obsolete]
15	quantitative	Cultivated area 1 - Annual crops - [obsolete]
16	quantitative	Cultivated area 1 - Perennial crops - [obsolete]
17	quantitative	Cultivated area 1 - Vinyl greenhouse crops - [obsolete]
18	quantitative	Cultivated area 1 - Others - [obsolete]
19	categorical	Faming techniques - Rice paddy 1 - [obsolete]
20	categorical	Faming techniques - Annual crops 1 - [obsolete]
21	categorical	Faming techniques - Perennial crops 1 - [obsolete]
22	categorical	Faming techniques - Vinyl greenhouse crops 1 - [ob...
23	categorical	Faming techniques - Others 1 - [obsolete]
24	categorical	[A4-6] Interview partner - Environmental friendly fam...

ordnen nach: Description

Suchkriterien

Description

Title ~

Project = Project: B1

Descriptor

Categoric. =

Quantitati. =

Text =

Data status

=

Scope

Taxon =

Geography =

Specimen =

Observati. =

Reference =

Categorical states

x	Nr.	State	Notes
☐	1	Rice paddy	
☒	2	Annual crops	
☐	3	Perennial crops	
☐	4	Vinyl greenhouse crops	
☐	5	Others	

Status data

x	ID	Status
☒	!	To be checked
☐	o	Not to be recorded
☐	-	Not applicable
☐	?	Data unavailable
☐	#	Not interpretable
☐	\$	Data withheld
☐	0	Missing data

Edit description

DiversityDescriptions – Datenbeispiel LIAS

Phänotypische Daten: Webschnittstelle NaviKey

The screenshot shows the 'LIAS light - NaviKey Module for Identification' web interface. At the top, there's a row of flags representing various countries. Below this, a 'NOTES' section contains information about submitting PDF files and language support. The main heading is 'Identifying lichen species of the World', with a sub-note about an experimental subset of taxa. A paragraph explains the requirements for running the applet (Java Runtime Environment) and provides instructions for Mac OS X users. Another paragraph mentions the database's use and requests feedback.

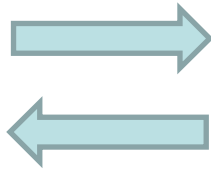
The interface features a tabbed menu with 'Identification', 'Options', and 'About'. The 'Identification' tab is active, showing a 'Characters available' list on the left and a 'Character states available' list on the right. The 'Characters available' list includes options like 'genus <taxon>', 'family <taxon>', 'global occurrence <continent>', 'substrate <kind>', 'thallus <growth habit>', 'thallus <compartmentation>', '[th] upper surface <colour>', '[th] upper surface <pruinosity>', '[th] marginal and upper surface] specific structures <presence>', '[th margin] cilia, cilioid structures <presence>', '[th upper surface] isidia, isidioid structures <presence>', '[th upper surface] soredia, soralia, soraloid structures <presence>', '[th] morphol substructures (eg areoles, lobes, branches) width [mm]', and '[th] morphol substructures (eg areoles, lobes, branches) upper surface <structure>'. The 'Character states available' list is currently empty. A 'Select' button is located between the two lists.

Below the character lists is a 'Resulting items' section. It contains a list of lichen species names, including 'Absconditella antarctica', 'Absconditella celata', 'Absconditella delutula', 'Absconditella lignicola', 'Absconditella pauxilla', 'Absconditella sphagnorum', 'Absconditella trivialis', 'Acanthothecis abaphoides', 'Acanthothecis africana', and 'Acanthothecis aquilonia'. At the bottom, there are 'Remove Selection' and 'Remove All' buttons. The status bar at the very bottom indicates 'All items: 10001' and 'Resulting items: 10001'. The NaviKey logo is visible in the bottom right corner.

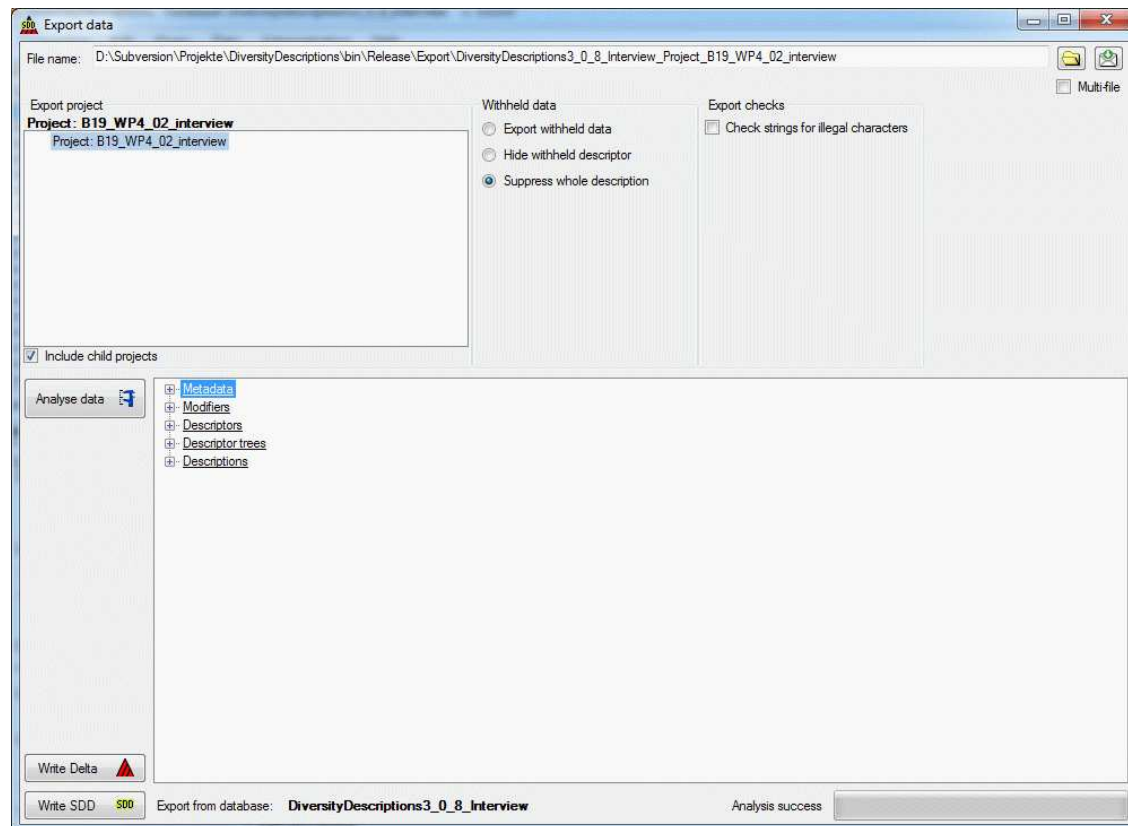
DiversityDescriptions – Import, Export

- Datenaustauschformate

DELTA
und
SDD



Biodiversity
Information
Standards
T D W G



DiversityDescriptions V. 3

- Software-Demonstration: Anton Link

