

#SK+ Main form

Sample code	nád1	nád2	nád3	nád4	nád5	nád6
Date	1988	1988	1988	1988	1988	1988
ACRO	0	0	0	0	0	0
ACON	0	0	0	0	0	0
ADEL	0	0	1	0	0	0
AGIB	0	0	0	0	0	0
ALAN	0	0	0	0	1	0
ALAE	0	0	0	0	0	0
AFRO	0	0	0	0	0	0
ALAP	0	0	0	0	0	0
ALIN	0	0	0	0	0	0
AMIN	0	0	0	0	1	0
AMIN	105	33	76	162	103	25
APLO	0	0	0	0	0	0
ACOF	0	0	0	0	0	0
ACOM	0	0	0	0	1	0
ANOR	0	0	0	0	0	0
AOVA	0	2	1	0	0	2
AOPE	1	0	0	1	3	2
AMPE	0	0	0	0	0	0
AMPS	0	0	0	0	0	0

General data

Sample code: nád1

Date: 1988

Ind: 328

Species number: 34

Shannon diversity: 3,88

Evenness: 0,76

TDIL: 3,66 N %: 23,53

SCIL: 11,26 N %: 32,35

TI: 2,01 N %: 20,59

S: 1,35 N %: 29,41

Buttons: Store left, Store all, Contract, Print, Export

Status bar: 100% C:\19 R:199 Index calculation C:\Documents and Settings\Hajnal\Dokumentumok\itdkatlagkóddal5.csv

Menu bar

File

- Open
- Save
- Save as
- Print sheet
- Print sample
- Print basic data
- Close
- Exit

Samples

- View

Utilities

- Basic data

Mainform

\$ Main form

K main menu;file;Sample;Utilities

+ Dilstore_1

Code conversion
Language
Change DB password
Save settings

Help

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About

Buttons

V

You can hide or show taxon names in the table.

Store left

You can store the first visible data column into the database.

Store all

You can store the whole data sheet into the database. This option is not accessible if the header of the table is not correct.

Contract

The data sheet can be reduced with deleting unnecessary rows (filled with zero abundances).

Print

Export

Data areas

Sample code

Date

Ind

Species number

Shannon diversity

Evenness

TDIL

SCIL

TI

S

N%

Status bar

First area

Second area

Contains the number of columns and rows in your sheet.

Third area

System messages

Fourth area

File path

#SK+ List samples form

ID	Sample code	Date	Individuals	Species number	Shannon diversity	Ho
1	nád1	1999.03.15.	328	34	3,88	
2	nád1	1999.03.15.	328	34	3,88	

Code	Rec ID	Species number
ADEL	1	0
ALAN	2	0
AMIN	3	0
AMIN	4	105
ACOM	5	0
ADVA	6	0
ADPE	7	1
ASPH	8	0
1	9	5
CDIM	10	0
CPLE	11	1
CKUT	12	0
CMEN	13	0
CAFF	14	14

This form lists the previously calculated and stored samples. If sample code and date boxes are empty it lists all the stored data records. If the sample code or date are filled, the “OK” button lists the queried data records.

Buttons






Transfer

It transfers the listed samples into the main grid and may recount indices.

Back

You can leave this form, and retain to the main form.

The navigation bar buttons are:




-  : go to the first record;
-  : go to the previous record
-  : go to the next record
-  : go to the last record
-  : delete record

listsamples

§ List samples form

K stored data;date; sample code;query

+ Dilstore_2

-  : edit record
-  : commit the changes of the data record
-  : cancel changes of the record

#SK+ List basic data

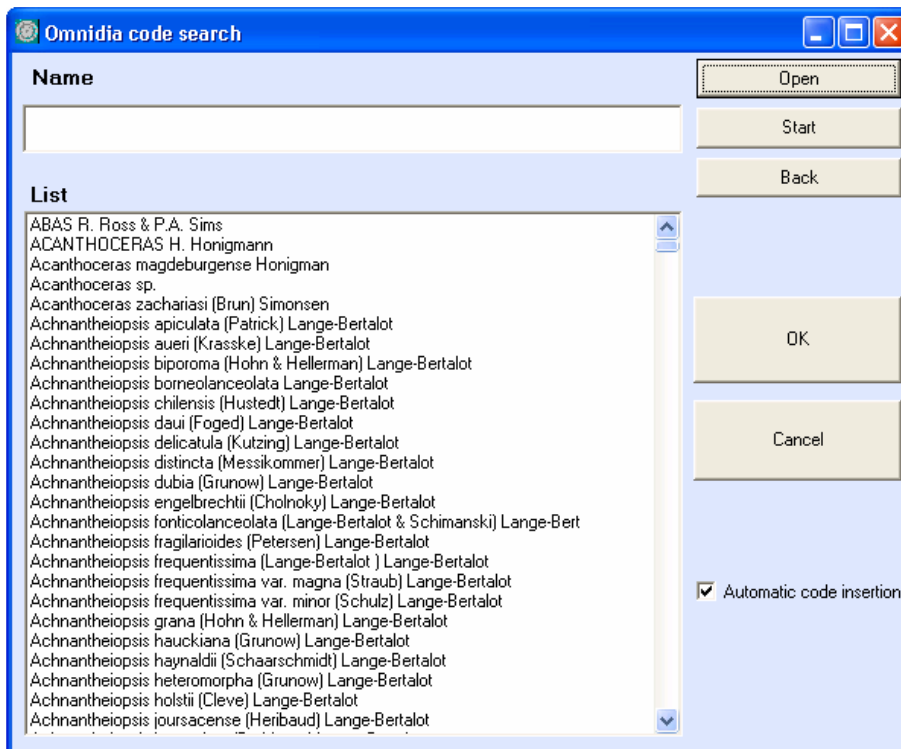
name	fcode	ind	sens	scil_ind	scil_sens	tisens	tiind	s_i
Asterionella formosa	AFOR							
Aulacoseira alpigena	AUAL							
Aulacoseira ambigua	AAMB							
Aulacoseira granulata	AGRA	2	2	0	0			
Aulacoseira granulata	AUGR							
Aulacoseira islandica	AUIS							
Aulacoseira italica	AUIT							
Aulacoseira muzzanensis	AMUZ	3	2	0	0			
Aulacoseira subarctica	AUSU							
Bacillaria paradoxa	BPAR							
Bacillaria paxillifera var. paxillifer	BPAX	0	0	3	4			
Brachysira brebissonii	BBRE							
Brachysira neoexilis	BNED							
Brachysira vitrea	BVIT							
Caloneis aerophila	CAER					1,5	3	
Caloneis alpestris	CAPS					1,9	2	
Caloneis amphisbaena	CAMP	0	0	3	4	4,5	3	
Caloneis bacillum	CBAC	3	2	0	0	4	2	
Caloneis latiuscula	CLTU					1	3	
Caloneis obtusa	CAOB					1	3	
Caloneis tenuis	CATE					1	3	
Campylodiscus clypeus	CCLY	0	0	2	4			
Campylodiscus clypeus var. bicostatus	CCBI	0	0	3	4			
Campylodiscus hibernicus	CHIB	0	0	3	5			
Cavinula cocconeiformis	CCOC							
Cavinula jaernefeltii	CJAR							
Cavinula scutelloides	CVSD							

In this form You can list or modify of the basic data of the Dilstore software. Important: For index calculations the Dilstore software uses taxon codes! Do not change this data!

- : go to the first record;
- : go to the previous record
- : go to the next record
- : go to the last record
- : delete record
- : edit record
- : commit the changes of the data record
- : cancel changes of the record
- . Refresh data

listbasicdata
 \$ List basic data
 K taxonname;code; tolerance value;indicator value
 + Dilstore_3

#K+ Code searching form



It works with Excel sheets. The csv or xls formats are suitable. The taxon name should be in the first column of the table, the second column is usable for other comments. The codes are inserted into the third column, so it must be empty for avoiding data lost! The filled table is suitable for open to index calculations.

Steps:

1. Push "Open" button
2. If the "automatic code insertion" checkbox is filled, the exactly matching code will be inserted into the third column of the table. The other way, the code is showed. The OK or Cancel buttons make possible to use or misuse the code.
3. MS Excel will be started, and You may open your sheet.
4. Click on the first taxon name, it will be the active cell.
5. Click "Start" button, and the code searching method will be initiated.
6. If the taxon name (shown in the "Name" box) is not matching exactly to the name (in the list), the software searches a near valid name and the user may decide which is the right name. The right name should be selected from the list. With OK button can insert code into the sheet, the cancel button skips this name.
7. The "Back" button can close this form. You must save the changes before exit from this utility!

codesearching

\$ Code searching form

K code;OMNiDIA; MS Excel

+ Dilstore_5

Buttons

Open

Opens the installed MS Excel in your computer, and you have to open the sheet for code insertion!

Start

If the MS Excel and the required sheet in it is already opened it starts the code searching process

Back

Retain to the main form

OK

Inserts the selected code into the sheet

Cancel

Skip the taxon without code insertion

#\$K+ **Main menu - File**

Open

You can open the sheet for index calculations in a standard dialog box. The program works with csv files, in which data are separated with semicolon. These files can be prepared with MS Excel or Open office calc software. The standard file format contains taxon names, codes and abundances. First row contains sample codes and the second contains date.

Index calculations are automatically done during the loading of the file into the data table of the main form! The preliminary condition of the index calculation is inserting the correct species codes into the csv data file!

The utilities menu helps you in the correct code searching.

	Sample code	nád1	nád2	nád3
	Date	1988.03.15	1988.03.15	1988.03.15
Achnanthes delicatula	ADEL	0	0	1
Achnanthes lanceolata	ALAN	0	0	0
Achnanthes minutissima var. cryptocephala	AMIN	105	33	76
Amphora commutata	ACOM	0	0	0
Amphora ovalis	AOVA	0	2	1
Amphora ovalis var. pediculus	AOPE	1	0	0
Anomoeoneis sphaerophora	ASPH	0	0	1

Important: You must save sheet into csv file with the same language settings of the operating system (Windows) as you will use it with DilStore!

Save

You can save the sheet into the original csv file. The calculated new data will be inserted into the bottom of the sheet.

Individuals	328	239	334
Species number	34	31	44
Shannon diversity	3,88	4,18	4,45
Evenness	0,76	0,84	0,81
TDIL	3,66	3,55	3,59
TDIL n%	23,53	22,58	25
SCIL	11,26	8,46	10,6
SCIL n%	32,35	35,48	34,09
TI	2,01	2,62	2,03
TI n%	20,59	22,58	25
S	1,35	1,31	1,38
S n%	29,41	32,26	31,82

Save as

You can save the sheet into csv or xls format via standard save dialog box. The saved sheet contains both the original dataset and the calculated data.

mainmenufile

\$ Main menu - File

K Open;Save; save as;print sheet; print basic data; close; exit

+ Dilstore_6

Print sheet

You can print your data table with calculated data. In each page you can print 9 columns and 40 rows of you table.

Print sample

You can print the active column of the sheet.

Print basic data

The taxons which are used for index calculations will be printed with full name, code, indicator and tolerance values.

Close

Before you open new csv file, you must close the previously used one!

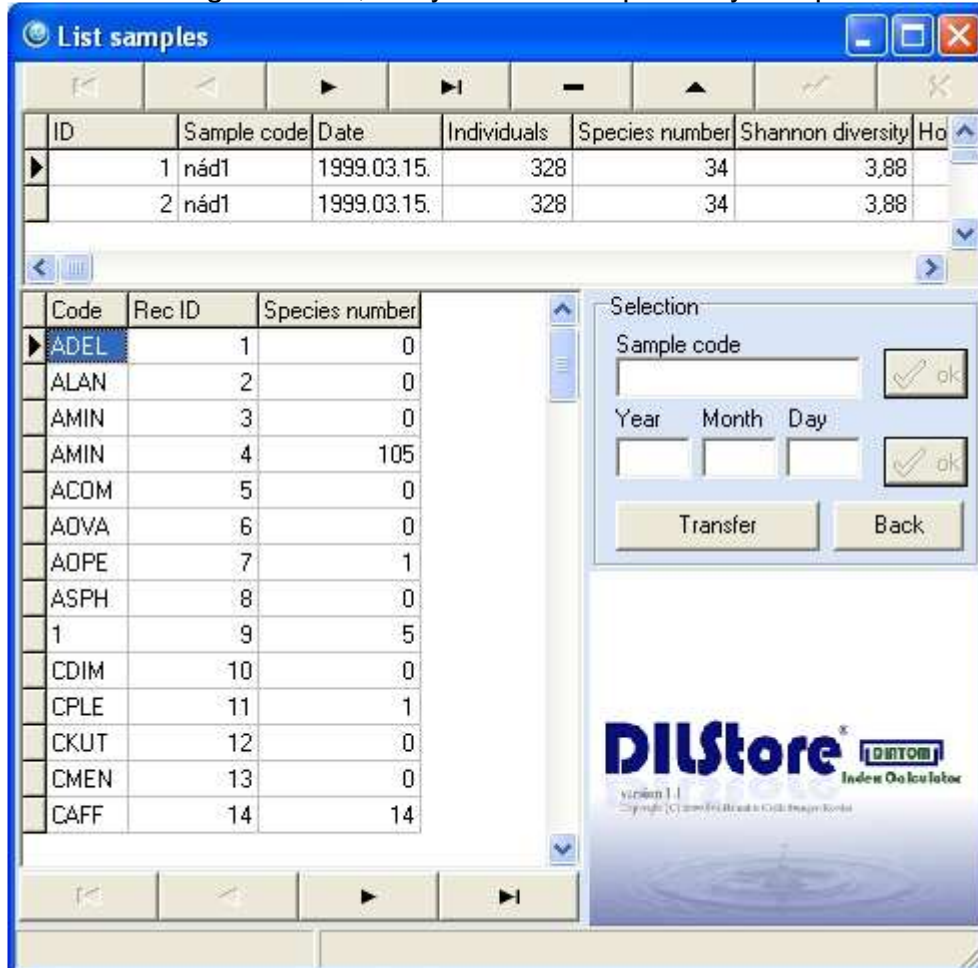
Exit

You can close this DilStore software.

#SK+ Main menu - Sample

View

With a list sample form you can view the previously calculated, stored datasets. You can list them in the original order, or by date of sample or by sample code.



mainmenusample

§ Main menu - Sample

K View;date; sample code

+ Dilstore_7

#SK+ **Main menu - Utilities**

Basic data

You can list the basic taxons with full name, code, indicator and tolerance values which are used for index calculations. The references are:

Ács, É. (2007): A Velencei-tó bevonatlakó algáinak tér- és időbeli változása, kapcsolata a tó ökológiai állapotával. (Spatial and temporal change of epiphytic algae and their connection with the ecological condition of shallow lake Velencei-tó). - Acta Biologica Debrecina, Oecologia Hungariae 17: 9–111.

Hofmann, G. (1994): Aufwuchs-Diatomeen in Seen und ihre Eignung als Indikatoren der Trophie. - Bibliotheca Diatomologica 30, J. Cramer Verlag, Berlin pp. 241

Sgro, G., V., Reavie, E., D., Kingston, J., C., Kireta, A., R., Ferguson, M., J., Danz, N., P. & Johansen, J., R. (2007): A diatom quality index from a diatom-based total phosphorus inference model. - Environmental Bioindicators 2:15-34.

Stenger-Kovács, C., Padisák, J., Hajnal, É. & Buczkó, K. (2007): Epiphytic, littoral diatoms as bioindicators of shallow lake trophic status: Trophic Diatom Index for Lakes (TDIL) developed in Hungary. - Hydrobiologia 589: 141-154.

You can check your codes in your data table, or you can change basic data, if you would like to introduce a modified or a new index into the DilStore software.

Code conversion

You can search OMNIDIA software codes half automatically. The utility program inserts codes into an Excel sheet.

Language

You can change the language of the DilStore software. The same windows setting of numeric format is required.

Change DB password

During the installation of this software a database password is generated, and suggested to change this password.

Save settings

The language settings are saved.

mainmenuutilities

\$ Main menu - Utilities

K utilities;basic data, code conversion, OMNIDIA code

+ Dilstore_8

#SK+ File formats

Data sheet

Data sheet is a csv file. The first and second rows contain headers. In the first row there are sample codes, in the second row are the date according to the operating system date format settings. From the third row data records can be found. First cells contain taxon names, second cells are for comments, thirds contain taxon codes and lasted the abundance data.

This data format can be prepared with MS Excel or Openoffice.org. The File/Save as and file type you can set csv.

Important: If the date format is not proper, the DilStore software could not be able to store datasets into its database!

```
::Sample code;nád1;nád2;nád3;nád4;nád5;nád6;  
::Date;1988.03.15;1988.03.15;1988.03.15;1988.03.15;1988.03.15;1988.03.15;  
Achnanthes delicatula;;ADEL;0;0;1;0;0;0;  
Achnanthes lanceolata;;ALAN;0;0;0;0;1;0;  
Achnanthes minutissima var. cryptocephala;;AMIN;105;33;76;162;103;25;  
Amphora commutata;;ACOM;0;0;0;0;1;0;
```

Csv file format. Data are separated with semicolons or colons depending on the language setting.

	Sample code	nád1	nád2	nád3
	Date	1988.03.15	1988.03.15	1988.03.15
Achnanthes delicatula	ADEL	0	0	1
Achnanthes lanceolata	ALAN	0	0	0
Achnanthes minutissima var. cryptocephala	AMIN	105	33	76
Amphora commutata	ACOM	0	0	0
Amphora ovalis	AOVA	0	2	1
Amphora ovalis var. pediculus	AOPE	1	0	0
Anomoeoneis sphaerophora	ASPH	0	0	1

File format opened with Ms Excel

Code searching

It works with Excel sheets. The csv or xls formats are suitable. The taxon name should be in the first column of the table, the second column is usable for other comments. The codes are inserted into the third column, so it must be empty for avoiding data lost! The filled table is suitable for opening the index calculations.

fileformat
\$ File formats
K Excel;xls;csv
+ Dilstore_9