General information

name of the dataset: MaPHYTE database

type of dataset (more information): species (taxonomic group) per site database including environmental information
data type: point data/observation data

science keywords according to GCMD:
topic: Biological Classification, Terrestrial Hydrosphere

ISO topic category according to ISO 19115:
Biota, Environment, Inland Waters
Technical and administrative specifications

data format: Access
operating system: Win XP
data language: English
current access level: internal

currently available through GBIF: no
exchange planned:

update level: completed
documentation:
type: internal description
language: English

Do you plan to publish the data on the Freshwater Biodiversity data portal:
media for data delivery: others/specify
others/details: delivery has to be agreed by data owners

contact details:

metadata contact person: Sebastian Birk
first, last name: Sebastian Birk
phone: 00491747404275
email: sebastian.birk@uni-due.de
institution: University of Duisburg-Essen, Institute of Biology, Applied Zoology/Hydrobiology
address: Universitätsstraße 5
postal code, city: 45141 Essen
country Germany
web address: http://www.uni-due.de/hydrobiology/

technical contact person: Sebastian Birk
first, last name: Sebastian Birk
phone: 00491747404275
email: sebastian.birk@uni-due.de

scientific contact person: Sebastian Birk
first, last name: Sebastian Birk
phone: 00491747404275
email: sebastian.birk@uni-due.de
**Intellectual property rights and citation**

(if the database is already published):

**dataset creator (data compiler):**
- contact name: countries participating in the intercalibration exercise
- contact email: sebastian.birk@uni-due.de

**data contributors to/owners of this dataset:**
- number: multiple

**provider 1:**
- provider institute: Austria. SYSTEMA / University of Vienna
- contact name: Karin Pall / Brigitte Schmidt
- contact email: karin.pall@systema.at / brigitte.schmidt@univie.ac.at
- criteria for using the data in a publication/scientific analysis: Other/Additional criteria
- other/additional criteria: Data ownership and availability is unknown. Contact Karin Pall or Brigitte Schmidt for further information.
- comments: Dataset contains data from 13 sites.

**provider 2:**
- provider institute: Belgium (Flanders). INBO
- contact name: Luc Denys
- contact email: luc.deny@inbo.be
- criteria for using the data in a publication/scientific analysis: Other/Additional criteria
- other/additional criteria: Data is available. Contact Luc Denys for availability of data and use criteria.
- comments: Dataset contains data from 87 sites.

**provider 3:**
- provider institute: Czech Republic. T. G. Masaryk Water Research Institute
- contact name: Libuse Opatrilova
- contact email: Libuse_Opatrilova@vuv.cz
- criteria for using the data in a publication/scientific analysis: Other/Additional criteria
- other/additional criteria: Data must be publicly acknowledged and correctly cited. Data can only be used as part of a larger dataset. Data provider must be informed of any publication using these data.

**provider 4:**
- provider institute: Denmark. National Env Research Institute / Danish Min of the Environment
- contact name: Annette Baattrup-Pedersen / Lars Larsen
- contact email: abp@dmu.dk / LLA@blst.dk
- criteria for using the data in a publication/scientific analysis: Other/Additional criteria
- other/additional criteria: Data ownership and availability is unknown. Contact Annette Baattrup-Pedersen or Lars Larsen for further information.
- comments: Dataset contains data from 35 sites

**provider 5:**
- provider institute: Estonian University of Life Sciences
- contact name: Kai Piirsoo
- contact email: kai.piirsoo@emu.ee
- criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Kai Piirsoo for further information.

provider 6:
provider institute: France
contact name: Christophe Leplae / Yorick Reyjol
contact email: christophe.leplae@bordeaux.cemagref.fr / yorick.reyjol@onema.fr
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Yorick Reyjol for further information.
comments: Dataset contains data from 52 sites.

provider 7:
provider institute: Germany
contact name: Sebastian Birk
contact email: sebastian.birk@uni-due.de
criteria for using the data in a publication/scientific analysis: The dataset needs to be requested from dataset creator with specific conditions of use.
other/additional criteria: Data ownership and availability is unknown. Contact Sebastian Birk for further information.
comments: Dataset contains data from 126 sites.

provider 8:
provider institute: Italy. ENEA Research Centre Salugia
contact name: Maria Rita Miniciardi
contact email: mariarita.miniciardi@enea.it
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Maria Rita Minicardi for further information.
comments: Dataset contains data from 24 sites.

provider 9:
provider institute: Latvian Environment, Geology and Meterology Centre
contact name: Normunds Kadikis
contact email: normunds.kadikis@lvgma.gov.lv
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Normunds Kadikis for further information.
comments: Dataset contains data from 36 sites.

provider 10:
provider institute: Lithuanian Environmental Protection Agency / Institute of Botany
contact name: Mindaugas Gudas / Zofia Sinceviene
contact email: m.gudas@aaa.am.lt / zofija.s@botanika.lt
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Mindaugas Gudas or Zofia Sinceviene for further information.
comments: Dataset contains data from 9 sites.

provider 11:
provider institute: Netherlands
contact name: Marcel van den Berg
contact email: marcel.vanden.berg@rws.nl
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data must be publicly acknowledged and cited correctly.
Data can only be used as part of a larger dataset and for publication, the names of individual waterbodies must not be published.
comments: Dataset contains data from 62 sites.

provider 12:
provider institute: Polish Institute of Environmental Protection
contact name: Agnieszka Kolada, Krzysztof Szoszkiewicz
contact email: akolada@ios.edu.pl, kssoszk@au.poznan.pl
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Agnieszka Kolada or Krzysztof Szoszkiewicz for further information.
comments: Dataset contains data from 78 sites.

provider 13:
provider institute: Belgium (Wallonia)
contact name: Daniel Galoux
contact email: d.galoux@mrw.wallonie.be
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Daniel Galoux for further information.
comments: Dataset contains data from 54 sites.

provider 14:
provider institute: Spain. Basque Water Agency
contact name: Alberto Manzanos
contact email: amanzanos@uragentzia.net
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Alberto Manzanos for further information.

provider 15:
provider institute: UK
contact name: Nigel Wilby
contact email: n.j.wilby@stir.ac.uk
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Nigel Wilby for further information.
comments: Dataset contains data from 208 sites.

provider 16:
provider institute: Ireland. Irish EPA
contact name: Martin McGarrigle
contact email: m.mcgarrigle@epa.ie
criteria for using the data in a publication/scientific analysis:
Other/Additional criteria
other/additional criteria: Data ownership and availability is unknown. Contact Martin McGarrigle for further information.

provider 17:
provider institute: Bulgaria
contact name: Gana Gecheva
Dataset: MaPHYTE database

contact email: ggecheva@mail.bg
criteria for using the data in a publication/scientific analysis: Other/Additional criteria

provider 18:
provider institute: Hungary. Balaton Limnological Institute, Hungarian Academy of Sciences
contact name: Lukacs Balazs Andras
contact email: lukacs.balazs@okologia.mta.hu
criteria for using the data in a publication/scientific analysis: Other/Additional criteria

provider 19:
provider institute: Luxemburg
contact name: Nora Welschbillig
contact email: Nora.Welschbillig@eau.etat.lu
criteria for using the data in a publication/scientific analysis: Other/Additional criteria

provider 20:
provider institute: Romania
contact name: Gabriel Chiriac
contact email: gabriel.chiriac@rowater.ro
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Contact Gabriel Chiriac for information on data availability.

provider 21:
provider institute: Slovakia
contact name: Mateus Haviar
contact email: haviar@vuvh.sk
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Contact Mateus Haviar for information on data availability.

provider 22:
provider institute: Slovenia
contact name: Gorazd Urbanic
contact email: gorazd.urbanic@izvrs.si gorazd.urbanic@bf.uni-lj.si
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: Contact Gorazd Urbanic for information on data availability.

provider 23:
provider institute: Spain. University of Vigo
contact name: Isabel Pardo
contact email: ipardo@uvigo.es
criteria for using the data in a publication/scientific analysis: Other/Additional criteria
other/additional criteria: This component of the Spanish data within the dataset is unavailable for use.

citation of this dataset:
author(s): Birk, S., Willby, N., Chauvin, C., Coops, H.C., Denys, L., Galoux, D., Kolada, A., Pali, K., Pardo, I., Pot, R. & Stelzer, D.
year: 2007

citation of the metadata:
comments: Where specified, data owners need to be contacted for further information on data availability. Otherwise, data available according to criteria listed against data provider.
General data specifications

regional coverage of the dataset:
  scale of the dataset: continental
  continents: Europe
  countries: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, United Kingdom
**Site specifications**

**coordinate system/grid data:**
- latitude/longitude, format: DD
- Comments: Coordinates only partly available.

**site coding:**
- Site coding available: yes
- Number of digits: 3
- Example: 345

**number of sites:**
- >1000
- Exact number of sites: 2614
Dataset: MaPHYTE database

Climate and environmental data

climate related data:
  available per: per site
  available parameters:
    mean annual precipitation
    mean annual air temperature
  comments: data only partly available (mainly for sites with high status, data are derived via coordinates)

environmental data:
  available parameters per catchment: catchment size
  available parameters per catchment: catchment geology
  available parameters per site: catchment land use upstream of sampling site
  available parameters per site: altitude
  available parameters per site: mean depth
  available parameters per site: substrate composition

physico-chemistry data:
  total P, ortho P, nitrate, ammonium, alkalinity, oxygen content, BOD5 (biochemical oxygen demand), conductivity
  availability of physico-chemical data, if there is more than one sample per site: mean values per site

stressors influencing the sites:
  reference sites available: yes

<table>
<thead>
<tr>
<th>stressor</th>
<th>restored sites available</th>
<th>data before/after restoration available</th>
<th>stressor gradient available</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>eutrophication</td>
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<tr>
<td>hydromorphological degradation</td>
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<tr>
<td>organic pollution</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>general degradation</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
**Biological data**

<table>
<thead>
<tr>
<th>biological data origin:</th>
<th>from sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>specify project:</td>
<td>national WFD monitoring programmes</td>
</tr>
<tr>
<td>organism group addressed:</td>
<td>macrophytes</td>
</tr>
</tbody>
</table>
Sample specifications/sample resolution

macrophytes:
sample information:
covered timeframe:
  year from - to: 2000 - 2009
historical data: no
palaeo data: no
season: summer
temporal resolution/frequency of sampling:
time series data: no
taxonomic resolution: genus, species
taxonomic coding:
coding system: internal coding (intercalibration exercise)
example: AMB.FLU
sample specifications: quantitative (abundance data)
replicate samples: yes
number of samples: 3195
specification of method(s) used for sampling and sorting:
  Sampling was in line with the requirements of the European Standard EN 14184:2003. Representative river stretches were visually inspected during the growing season (June to September) by wading, diving or boating, using rake, grapnel or aqua-scope where necessary. Representative sites spanned about 100 m of river length.
sample type (e.g. habitat specific samples, composite samples etc.):
  multi-habitat
specific sample location (e.g. littoral, profundal, transect, shoreline, hyporheic zone, etc.):
  entire stream width
other important sample related informations:
  The abundance data were converted from the national into a standard international five-class abundance scale according to Birk, S. & Willby, N.J. (2010) Towards harmonization of ecological quality classification: establishing common grounds in European macrophyte assessment for rivers. Hydrobiologia, 652, 149-163.
comments: replicates only for some sites
Dataset: MaPHYTE database

Other specifications

availability of photos: no
availability of maps: no
quality control procedures:
  Were any quality control procedures applied to your dataset? no