Plan Overview

A Data Management Plan created using MyApp

Title: Brazilian aquatic plant data managemen

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Funder: Digital Curation Centre (dcc.ac.uk)

Funding opportunity number: 34070

Template: Digital Curation Centre

Project abstract:

Iniciatives directed to manage the information on aquatic plants can subsidize scientific research in different areas, educational practices and political decisions for sustainable management and protection of wetlands and natural resources, as well as reveal gaps of knowledge about aquatic plants and wetlands. Furthermore, this can contribute specifically to consolidate systems of wetland classification in Brazil. The objectives of this work are to present and explore the utilization of the data repository and of the online plataform created for the specific management of data upon aquatic plants in Brazil. The data repository of aquatic plants was developed to store in a standardized form the information on records of occurrences of species contemplating: systematics, taxonomy, habit, life form, geographic distribution, hydrographic basin, wetland, bibliographic reference and deposit in herbarium.

Last modified: 10-03-2023

Copyright information:

Brazilian aquatic plant data managemen

The data repository of aquatic plants was developed to store in a standardized form the information on records of occurrences of species contemplating: systematics, taxonomy, habit, life form, geographic distribution, hydrographic basin, wetland, bibliographic reference and deposit in herbarium.

Herein we present information compiled from scientific publications in the fields of Botany and Ecology, involving regional floras, floristic, phytosociological and limnological studies, that contemplated aquatic plants, in study areas in Brazil.

Thereby, the intention is to generate a mark upon the knowledge formaly produced and published on this group of organisms.

To survey scientific publications we accesssed sites such as Scielo, Periódicos Capes and Google Scholar, plus virtual libraries, and searched for the term aquatic plants and those considered similar, presented in the previous topic, besides the names and initials of the States of the Brazilian Southeast. Old bibliographies not available online were obtained consulting private libraries, as had been previously done by Thomaz & Bini (2003). We took into consideration complete articles, books, book chapters, doctor theses and master dissertations.

Type Information	Field	Description	Levels	References
Record Level	brazilianRegion	Geographic region of Brazil	CO; NE; N; SE; S	this repository
brazilianMacrophyteAccess	Identificador do access of the record of occurrence in the data repository	Sequential number started in 1 in each geographic region (brazilianRegion)	this repository	
basisOfRecord	Basis of record	Fossil_specimen; human_observation; literature; living_specimen; machine_observation; material_sample; observation; preserved_specimen; unknown	http://rs.tdwg.org/dwc/terms/basisOfRecord	
collectionCode	Herbarium code, determinator of a physical collection or digital data set	-	http://rs.tdwg.org/dwc/terms/collectionCode	
catalogNumber	Register number, determinator of a record within the physical collection or digital data set	-	http://rs.tdwg.org/dwc/terms/catalogNumber	
threatStatus	Information of the evaluation of risk of extinction according to (CNCFlora, 2017).	CR; DD; EN; LC; NT; VU	Red List of Species of the Brazilian Flora Threatened by Extinction (CNCFlora, 2017).	
Occurrence	associatedReference	Determinator of the access of the scientific publication in the data repository	Sequential number started from 1 in each Geographic region (brazilianRegion)	http://rs.tdwg.org/dwc/terms/associatedReferen
textReference	Text reference of the scientific publication in the data repository	Authors (et al., if the case); year of publication	this repository	
recordedBy	Person who recorded the occurrence.	-	http://rs.tdwg.org/dwc/terms/recordedBy	
recordNumber	Determinator of the record when it was collected.	-	http://rs.tdwg.org/dwc/terms/recordNumber	
day	Collection date	jan/31	http://rs.tdwg.org/dwc/terms/day	
month	Month ot the year, starting with 1 for January	01/dez	http://rs.tdwg.org/dwc/terms/month	
year	Year with 4 digits	1908-2014	http://rs.tdwg.org/dwc/terms/year	
fieldNotes	the text of notes taken in the field about the Event	-	http://rs.tdwg.org/dwc/terms/fieldNotes	
Updated Taxon	taxonRank	Determination taxonomic level	Familiy; genus; specific epithet; infraspecific epithet; not found	http://rs.tdwg.org/dwc/terms/taxonRank
Group	Taxonomic group	Algae; angiosperms; bryophytes; gymnosperms; ferns and lycophytes	Brazil Flora G (2014): Brazilian Flora 2020 project - Projeto Flora do Brasil 2020.	
kingdom	Kingdom	Protists; Plantae	http://rs.tdwg.org/dwc/terms/kingdom	
phylum	Phylum	-	http://rs.tdwg.org/dwc/terms/phylum	
class	Class	-	http://rs.tdwg.org/dwc/terms/class	
order	Order	-	http://rs.tdwg.org/dwc/terms/order	
family	Family	-	http://rs.tdwg.org/dwc/terms/family	
genus	Genus	-	http://rs.tdwg.org/dwc/terms/genus	

identificationQualifier	Conferatur / affinis	cf.; aff.	http://rs.tdwg.org/dwc/terms/identificationQualifier	
specificEpithet	Specific epithet	-	http://rs.tdwg.org/dwc/terms/specificEpithet	
infraspecificEpithet	Subspecies	-	http://rs.tdwg.org/dwc/terms/infraspecificEpithet	
scientificNameAuthorship	Author(s) of the species	-	http://rs.tdwg.org/dwc/terms/scientificNameAuthorship	
scientificName	Scientific name	-	http://rs.tdwg.org/dwc/terms/scientificName	
Reference Taxon	referenceFamily	Family according to reference	-	this repository
referenceGenus	Genus according to reference	-	this repository	
reference IdentificationQualifier	Conferatur / affinis according to reference		this repository	
referenceSpecificEpithet	Specific epithet according to reference		this repository	
referenceInfraspecificEpithet	Subspecies according to reference		this repository	
referenceScientificnameauthor	Author(s) according to reference		this repository	
Ecologia	lifeFormReference	Habit as cited in reference	Shrub; subshrub; tree; treelet; herb; liana	this repository
aquaticLifeFormReference	Life form as cited in reference	Amphibious; emergent; epiphyte; rooted floating; free floating; rooted submerged; free submerged	this repository	
habitatFloraBR	Substrates of occurrence of the species conforme Flora do Brasil 2020	Aquatic; epiphyte; hemiepiphyte; hemiparasite; parasite; rupicolous; saprophyte; terrestrial; unknown	Brazil Flora G (2014): Brazilian Flora 2020 project - Projeto Flora do Brasil 2020.	
lifeFormFloraBR	Habits reported for the species in Flora do Brasil 2020	Shrub; tree; bamboo; dracenoid; herb; liana; palm; subshrub; succulent; unknown	Brazil Flora G (2014): Brazilian Flora 2020 project - Projeto Flora do Brasil 2020.	
wetlandReference	Habitat type as cited in reference	-	this repository	
classifiedWetlandRefernce	Wetland classification according to Junk et al. (2013)	System; subsystem; order; suborder; class; subclass; macrohabitat	this repository	
wetlandClassification	Categorization of wetlands (classifiedWetlandReference) and this repository	-	this repository	
Location	country	Country	Brazil	http://rs.tdwg.org/dwc/terms/country
stateProvince	State	ES; MG; RJ; SP	http://rs.tdwg.org/dwc/terms/stateProvince	
municipality	Municipality	-	http://rs.tdwg.org/dwc/terms/municipality	
locality	Specific description of the locality	-	http://rs.tdwg.org/dwc/terms/locality	
decimalLatitude	Longitude	-	http://rs.tdwg.org/dwc/terms/decimalLatitude	
decimalLongitude	Latitude	-	http://rs.tdwg.org/dwc/terms/decimalLongitude	
altitude	Altitude	-	http://rs.tdwg.org/dwc/terms/decimalAltitude	
hydrographicBasin	Hydrographic basin	-	(CNRH, 2002)	
hydrograficSubbasin	Hydrographic subbbasin	-	(CNRH, 2002)	
Table	Field	Description		
Reference	brazilianRegion	Geographic region of Brazil		
codigo_referencia	Sequential number of the reference work per geographic region			
ano	Year of publication of the work			
tipo	Type of publication			
id_idioma	Language of the publication			
linque	Home page of the work (URL)			

textReference	One of a) an indicator of the existence of, b) a reference to (publication, URI), or c) the text of notes taken in the field about the Event.	incluído	
Author Reference	brazilianRegion	Geographic region of Brazil	
codigo_referencia	Sequential Identifier number of the author of the work per geographic region		
ordem_autoria	Authorship order of the article		
ultimo_nome	Author's last name		
Iniciais	Author's initials		
nome_completo	Author's full name		
Complete Article	brazilianRegion	Geographic region of Brazil	
codigo_referencia	Sequential identifier number of the article per geographic region		
doi	Digital Object Identifier		
titulo_artigo_completo	Title of the article		
titulo_periodico_revista	Name of the journal		
ISSN	ISSN of the journal		
volume	Volume of the publication		
serie	Series of the publication		
pag_ini	Initial page		
pag_fim	Final page		
num_artigo_eletronico	Electronic article number		
Book	brazilianRegion	Geographic region of Brazil	
codigo_referencia	Sequential identifier number of the book per geographic region		
titulo_livro	Book title		
tipo_publicacao_livro			
natureza			
num_volumes	Volume number		
num_paginas	Number of pages		
ISBN	International Standard Book Number		
num_edicao_revisao	Number of edition or revision		
serie	Series		
cidade_editora	City of Publisher		
nome_editora	Name of Publisher		
Book Chapter	brazilianRegion	Geographic region of Brazil	
codigo_referencia	Sequential identifier number of the book chapter per geographic region		
titulo_capitulo	Chapter title		
titulo_livro	Book title		
organizadores	Book organizers		
num_volumes	Volume number		
pag_ini	Inicial page of the chapter		
pag_fim	Final page of the chapter		
num_edicao_revisao	Number of edition or revision		
serie	Series		
ISBN	International Standard Book Number		
cidade_editora	City of Publisher		
nome_editora	Name of Publisher		
Thesis	brazilianRegion	Geographic region of Brazil	

codigo_referencia	Sequencial identifier number of the of the thesis per geographic region		
titulo_tese	Title of thesis		
nivel	MS-Master; DR-Doctor		
curso	Name of the Graduate course		
instituicao	Institution		
nome_orientador	Name of supervisor		
ano_ini	Initial year		
ano_fim	Final year		

Original references must be cited

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The data will be stored on the MYSQL server.

The data will be kept in CSV format, SQL script, and ODS and XLS worksheets.

The backup files will be copied to three accounts for cloud storage: Google, Dropbox, and Mega.

The data will be shared through the website https://sites.icb.ufmg.br/macrofitasaquaticas/

User and password to change data.

Only the curator can change the main database through scipt in R Language.

All other users insert data into spreadsheets.

The data will be stored on the MYSQL server.

The data will be updated every six months on the MYSQL server.

https://sites.icb.ufmg.br/macrofitasaquaticas/

No

Pablo Hendrigo Alves de Melo

Web and Data Server.