Package ‘rYoutheria’

October 14, 2022

Type Package
Title Access to the YouTheria Mammal Trait Database
Description A programmatic interface to web-services of YouTheria. YouTheria is an online database of mammalian trait data <http://www.ughteria.org/>.
Version 1.0.3
Date 2016-04-11
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VignetteBuilder knitr
URL https://github.com/BiologicalRecordsCentre/rYoutheria
BugReports https://github.com/biologicalrecordscentre/rYoutheria/issues
Depends R (>= 3.0.0)
Imports plyr, RJSONIO, reshape2, RCurl
Suggests knitr, testthat, roxygen2
License MIT + file LICENSE
RoxygenNote 5.0.1
NeedsCompilation no
Repository CRAN
Date/Publication 2016-04-12 17:01:41

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getLocData

Get country names from YouTheria

description

Retrieves a data.frame of country names and IDs from YouTheria.

Usage

getCountries()

Value

A dataframe of country names and IDs. These names can be used in getMeasurementData to restrict the search to a specific country

Examples

## Not run:
# Get a dataframe of all countries
getCountries()

## End(Not run)

getLocData

Get location information from YouTheria

description

Retrieves location information stored on YouTheria

Usage

getLocData(country = NULL, StudyUnitId = NULL)

Arguments

country Character specifying the country within which to search for locations. for a list of countries used getCountries().
StudyUnitId Numeric specifying the StudyUnitId to search for

Value

A dataframe in which each rows gives the details of a study unit
getMeasurementData

Examples

## Not run:
# Get a dataframe of Indian study units
Indian_StudyUnits <- getLocData(country = 'India')

## End(Not run)

getMeasurementData Get a table of trait measurements from YouTheria

Description

Retrieves a data.frame of trait measurements with facilities to select by location, species name and/or measurement type.

Usage

getMeasurementData(measurementType = NA, MSW93Binomial = NA, MSW05Binomial = NA, country = NULL, StudyUnitId = NULL, locationData = TRUE, locationOnly = FALSE, cast = TRUE, silent = FALSE)

Arguments

measurementType Measurement types to collect data for. If NULL (default), all measurement types are returned. Can also be ‘numeric’ or ‘character’ (or a list of either type) and will filter by MeasurementTypeID and the measurement respectively. MeasurementTypeIDs and names can be found using getMeasurementTypes().

MSW93Binomial Character giving the latin name of a species (or list of species) for which measurements are required. Naming should follow Mammal Species of the World 1993.

MSW05Binomial Character giving the latin name of a species (or list of species) for which measurements are required. Naming should follow Mammal Species of the World 2005.

country Character specifying the country from which you wish to collect data. If NULL all data is retrieved. If specified then locationOnly is set to TRUE

StudyUnitId Numeric specifying the StudyUnitId from which you wish to collect data. If NULL all data is retrieved

locationData Logical dictating whether location information should be added to the output. Default is FALSE but is set to TRUE if either StudyUnitId or country are specified.

locationOnly If TRUE data is only be returned if it has location information.

cast If TRUE (default) then the data is cast so that each observation is one row in the output. If false then each observation has one row for each data element recorded (i.e. range, mean, units, etc)

silent If TRUE progress reporting is silenced
getMeasurementTypes

Description
Retrieves a data.frame of measurement types available from YouTheria.

Usage
getMeasurementTypes(measurementType = NULL)

Arguments
measurementType
If NULL (default), then all measurement types are returned. Can also be 'numeric' or 'character' (or a list of either type) and will filter by Id and Name respectively in the resulting data.frame.

Value
A dataframe of measurement types giving their Id and Name
The `rYoutheria` package

Description

The rYouTheria package harnesses the YouTheria website’s APIs to give easy access to a large amount of mammal trait data. The package allows the user to select data by species, location and measurement type. More information can be found out about the YouTheria dataset at [http://www.utheria.org/](http://www.utheria.org/)

Click on the index link below for more information on each function

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### YoutheriaToDF

**Convert data returned from API to a dataframe**

Description

Takes the list returned by `fromJSON(getURL(url))`, where `url` is the ValueByType controller in the YouTheria API, and returns a data.frame. This code is faster than using `plyr`.

Usage

`YoutheriaToDF(x)`

Arguments

- `x` a list of trait data as returned by `fromJSON(getURL(url))`.

Value

A data.frame of melted trait data
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