

Package ‘easyScieloPack’

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Title Easy Interface to Search 'SciELO' Database

Version 0.1.1

Description Provides a simple interface to search and retrieve scientific articles from the 'SciELO' (Scientific Electronic Library Online) database <<https://scielo.org>>. It allows querying, filtering, and visualizing results in an interactive table.

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Encoding UTF-8

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URL <https://github.com/Programa-ISA/easyScieloPack>

BugReports <https://github.com/Programa-ISA/easyScieloPack/issues>

NeedsCompilation no

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`fetch_scielo_results` *Fetch search results from SciELO*

Description

This is the core function that performs the web scraping and data extraction. It handles pagination and combines results into a single data frame.

Usage

```
fetch_scielo_results(query_obj)
```

Arguments

`query_obj` A `scielo_query` object.

Value

A data frame containing all fetched articles.

`normalize_categories` *Normalize and validate a subject category*

Description

Accepts a single subject category and validates it.

Usage

```
normalize_categories(category)
```

Arguments

`category` A character vector of length 1. Subject category to filter by (e.g., "environmental sciences").

Value

A cleaned category string if valid.

normalize_collections *Normalize SciELO collection names or ISO codes*

Description

Converts country names or ISO codes into valid SciELO collection codes. Only one value is allowed.

Usage

```
normalize_collections(collections)
```

Arguments

collections A character vector of length 1: a country name (e.g., "Costa Rica") or a valid SciELO ISO code (e.g., "cri").

Value

A character string representing the normalized SciELO collection code.

Examples

```
normalize_collections("Costa Rica") # returns "cri"  
normalize_collections("cri")        # returns "cri"
```

normalize_journals *Normalize and validate a journal name*

Description

Accepts a single journal name and validates it.

Usage

```
normalize_journals(journal)
```

Arguments

journal A character vector of length 1. Journal name to filter by (e.g., "Revista Ambiente & Água").

Value

A cleaned journal name if valid.

normalize_languages *Normalize and validate article language codes*

Description

Accepts a single language code ("es", "pt", "en") and validates it.

Usage

```
normalize_languages(lang_code)
```

Arguments

lang_code A character vector of length 1. Language code to filter by.

Value

A normalized (lowercase) language code if valid.

Examples

```
normalize_languages("EN") # returns "en"
```

search_scielo *Search SciELO and return results as a data.frame*

Description

Executes a search in the SciELO database using multiple optional filters, and returns the results as a data frame.

Usage

```
search_scielo(  
  query,  
  lang = "en",  
  lang_operator = "AND",  
  n_max = NULL,  
  journals = NULL,  
  collections = NULL,  
  languages = NULL,  
  categories = NULL,  
  year_start = NULL,  
  year_end = NULL  
)
```

Arguments

query	Search term (e.g., "climate change"). Required.
lang	Interface language for SciELO website ("en", "es", "pt"). Default is "en".
lang_operator	Operator for combining language filters ("AND" or "OR"). Default is "AND".
n_max	Maximum number of results to return. Optional.
journals	Vector of journal names to filter. Only one supported. Optional.
collections	A character string for filtering by SciELO collection (country name or ISO code, e.g., "Mexico" or "mex").
languages	Vector of article languages to filter (e.g., "en").
categories	Vector of subject categories (e.g., "ecology").
year_start	Start year for filtering articles. Optional.
year_end	End year for filtering articles. Optional.

Details

Note: Only one value per filter category is currently supported (e.g., only one language).

Value

A data.frame with the search results.

Examples

```
# Simple search with a keyword
df1 <- search_scielo("salud ambiental")

# Limit number of results to 5
df2 <- search_scielo("salud ambiental", n_max = 5)

# Filter by SciELO collection (country name or code)
df3 <- search_scielo("salud ambiental", collections = "Ecuador")
df4 <- search_scielo("salud ambiental", collections = "cri") # Costa Rica by ISO code

# Filter by article language
df5 <- search_scielo("salud ambiental", languages = "es")

# Filter by a specific journal
df6 <- search_scielo("salud ambiental", journals = "Revista Ambiente & Agua")

# Filter by subject category
df7 <- search_scielo("salud ambiental", categories = "environmental sciences")

# Filter by year range
df8 <- search_scielo("salud ambiental", year_start = 2015, year_end = 2020)
```

`years`*Validate year range for SciELO query*

Description

Ensures that start and end years are valid numeric values and in correct order.

Usage

```
years(start_year, end_year)
```

Arguments

<code>start_year</code>	Integer. Start year for filtering (inclusive).
<code>end_year</code>	Integer. End year for filtering (inclusive).

Value

A list with named elements `year_start` and `year_end`.

Examples

```
valid_years <- years(2018, 2022)
```

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