# Package 'specieshindex'

September 9, 2021

```
Type Package
Title How (scientifically) popular is a given species?
Version 0.2.1
Date 2021-01-19
Author Jessica Tam
Maintainer Jessica Tam <tamtinying@gmail.com>
Description Finds the h-index of a species.
Depends R (i = 3.5.0)
LazyData true
Imports rscopus,
     wosr,
     rbace,
     taxize,
     dplyr,
     data.table,
     httr,
     XML,
     jsonlite,
     ggplot2,
     ggpubr
Suggests testthat,
     knitr,
     roxygen2,
     devtools,
     rmarkdown,
     RefManageR
License MIT + file LICENSE
\mathbf{URL} \ \text{https://github.com/jessicatytam/specieshindex}
RoxygenNote 7.1.2
VignetteBuilder knitr
Encoding UTF-8
```

## R topics documented:

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#### Description

This function returns a dataframe of the summary of all of the indices.

#### Usage

```
Allindices(data, genus, species, sourcetype = 0)
```

## Arguments

data The dataframe generated from FetchSpT or FetchSpTAK.

genus Genus classification from the binomial name.

species Species classification from the binomial name.

sourcetype Source type; default is 0, enter 1 to add SourceType variables.

#### Value

A datarame of all of the indices in the package.

## Examples

```
data(Woylie)
Allindices(Woylie, genus = "genus_name", species = "species_name", sourcetype = 0)
```

CountGenusT $CountSpT wrapper$
- · · · · · · · · · · · · · · · · · · ·

## Description

This is a wrapper function for CountGenusT\_scopus, CountGenusT\_wos, and CountGenusT\_base.

## Usage

```
CountGenusT(db, genus, synonyms, additionalkeywords)
```

## Arguments

db Literature database. Scopus ("scopus"), Web of Science ("wos"), or Base

("base").

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

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## Value

Search count of the genus with the given genus.

## Examples

```
## Not run:
CountGenusT("scopus", genus = "Osphranter")
## End(Not run)
## Not run:
CountGenusT("scopus", genus = "Osphranter", synonyms = "Macropus", additionalkeywords = "conserv*")
## End(Not run)
```

CountGenusTAK

 $CountSpTAK\ wrapper$ 

#### Description

This is a wrapper function for CountGenusTAK\_scopus, CountGenusTAK\_wos, and CountGenusTAK\_base.

## Usage

```
CountGenusTAK(db, genus, synonyms, additionalkeywords)
```

#### Arguments

db Literature database. Scopus ("scopus"), Web of Science ("wos"), or Base

("base").

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

## Value

Search count of the genus with the given genus.

```
## Not run:
CountGenusTAK("scopus", genus = "Osphranter")

## End(Not run)

## Not run:
CountGenusTAK("scopus", genus = "Osphranter", synonyms = "Macropus", additionalkeywords = "conserv*")

## End(Not run)
```

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CountGenusTAK\_base

Search count from BASE - title, abstract and author keywords

#### Description

This function counts the total number of search results. It counts the publications with the genus name in the title, abstract and author keywords. A check will be conducted via gnr\_resolve to validate the genus name.

## Usage

```
CountGenusTAK_base(genus, synonyms, additionalkeywords)
```

## Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

#### Value

Search count of the genus with the given genus.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusTAK_base("Bettongia")

#lower case letter in genus is also accepted and will return identical results

CountGenusTAK_base("bettongia")

## End(Not run)

## Not run:
CountGenusTAK_base("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results

CountGenusTAK_base("bettongia", "conserv*")

## End(Not run)
```

 ${\tt CountGenusTAK\_scopus} \quad \textit{Search count from Scopus - title, abstract, and keywords}$ 

## Description

This function counts the total number of search results. It counts the publications with the genus name in the title, abstract, and keywords. A check will be conducted via gnr\_resolve to validate the genus name.

## Usage

```
CountGenusTAK_scopus(
  genus,
  synonyms,
  additionalkeywords,
  datatype = "application/xml"
)
```

## Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

datatype Formats the URL to be sent to the API. The default is "application/xml".

## Value

Search count of the genus with the given genus.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusTAK_scopus("Bettongia")

#lower case letter in genus is also accepted and will return identical results

CountGenusTAK_scopus("bettongia")

## End(Not run)

## Not run:
CountGenusTAK_scopus("Bettongia")
```

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```
#lower case letter in genus is also accepted and will return identical results
CountGenusTAK_scopus("bettongia")
## End(Not run)
```

CountGenusTAK\_wos

 $Search\ count\ from\ Web\ of\ Science\ -\ title,\ abstract\ and\ author$  keywords

## Description

This function counts the total number of search results. It counts the publications with the genus name in the title, abstract and author keywords. A check will be conducted via <code>gnr\_resolve</code> to validate the genus name.

## Usage

CountGenusTAK\_wos(genus, synonyms, additionalkeywords)

## Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

#### Value

Search count of the genus with the given genus.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusTAK_wos("Bettongia")

#lower case letter in genus is also accepted and will return identical results
CountGenusTAK_wos("bettongia")

## End(Not run)

## Not run:
CountGenusTAK_wos("Bettongia", "conserv*")
```

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```
#lower case letter in genus is also accepted and will return identical results
CountGenusTAK_wos("bettongia", "conserv*")
## End(Not run)
```

CountGenusT\_base

Search count from BASE - title only

#### Description

This function counts the total number of search results. It counts the publications with the genus name in the title only. A check will be conducted via <code>gnr\_resolve</code> to validate the genus name.

#### Usage

CountGenusT\_base(genus, synonyms, additionalkeywords)

## Arguments

genus Genus classification from the binomial name.
synonyms Alternate genus names.
additionalkeywords

Optional search terms.

#### Value

Search count of the genus with the given genus.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusT_base("Bettongia")

#lower case letter in genus is also accepted and will return identical results

CountGenusT_base("bettongia")

## End(Not run)

## Not run:
CountGenusT_base("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results
```

 $CountGenusT\_scopus$ 

```
CountGenusT_base("bettongia", "conserv*")
## End(Not run)
```

 $CountGenusT\_scopus$ 

Search count from Scopus - title only

#### Description

This function counts the total number of search results. It counts the publications with the genus name in the title only. A check will be conducted via <code>gnr\_resolve</code> to validate the genus name.

## Usage

```
CountGenusT_scopus(
  genus,
  synonyms,
  additionalkeywords,
  datatype = "application/xml"
)
```

#### Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names. additionalkeywords

Optional search terms.

datatype Formats the URL to be sent to the API. The default is "application/xml".

## Value

Search count of the genus with the given genus.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusT_scopus("Bettongia")

#lower case letter in genus is also accepted and will return identical results
CountGenusT_scopus("bettongia")
```

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```
## End(Not run)
## Not run:
CountGenusT_scopus("Bettongia", "conserv*")
#lower case letter in genus is also accepted and will return identical results
CountGenusT_scopus("bettongia", "conserv*")
## End(Not run)
```

CountGenusT\_wos

Search count from Web of Science - title only

## Description

This function counts the total number of search results. It counts the publications with the genus name in the title only. A check will be conducted via gnr\_resolve to validate the genus name.

#### Usage

```
CountGenusT_wos(genus, synonyms, additionalkeywords)
```

## Arguments

synonyms

genus Genus classification from the binomial name.

additionalkeywords

Optional search terms.

Alternate genus names.

#### Value

Search count of the genus with the given genus.

## References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountGenusT_wos("Bettongia")

#lower case letter in genus is also accepted and will return identical results
CountGenusT_wos("bettongia")
```

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```
## End(Not run)
## Not run:
CountGenusT_wos("Bettongia", "conserv*")
#lower case letter in genus is also accepted and will return identical results
CountGenusT_wos("bettongia", "conserv*")
## End(Not run)
```

CountSpT

 $CountSpT\ wrapper$ 

#### Description

This is a wrapper function for CountSpT\_scopus, CountSpT\_wos, and CountSpT\_base.

#### Usage

```
CountSpT(db, genus, species, synonyms, additionalkeywords)
```

## Arguments

db Literature database. Scopus ("scopus"), Web of Science ("wos"), or Base

("base").

genus Genus classification from the binomial name.

species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

#### Value

Search count of the species with the given genus and species.

```
## Not run:
CountSpT("scopus", genus = "Osphranter", species = "rufus")

## End(Not run)

## Not run:
CountSpT("scopus", genus = "Osphranter", species = "rufus", synonyms = "Macropus rufus", additionalkeywords = "cons"
## End(Not run)
```

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 $CountSpTAK\ wrapper$ 

#### Description

This is a wrapper function for CountSpTAK\_scopus, CountSpTAK\_wos, and CountSpTAK\_base.

## Usage

```
CountSpTAK(db, genus, species, synonyms, additionalkeywords)
```

#### Arguments

db Literature database. Scopus ("scopus"), Web of Science ("wos"), or Base

("base").

genus Genus classification from the binomial name.
species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

#### Value

Search count of the species with the given genus and species.

## Examples

```
## Not run:
CountSpTAK("scopus", genus = "Osphranter", species = "rufus")
## End(Not run)
## Not run:
CountSpTAK("scopus", genus = "Osphranter", species = "rufus", synonyms = "Macropus rufus", additionalkeywords = "countSpTAK("scopus", genus = "Osphranter", species = "rufus", synonyms = "Macropus rufus", additionalkeywords = "countSpTAK("scopus")
```

CountSpTAK\_base

Search count from BASE - title, abstract and author keywords

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title, abstract and author keywords. A check will be conducted via gnr\_resolve to validate the genus and species names.

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#### Usage

```
CountSpTAK_base(genus, species, synonyms, additionalkeywords)
```

## Arguments

genus Genus classification from the binomial name.

species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

#### Examples

```
## Not run:
CountSpTAK_base("Bettongia", "penicillata")
#lower case letter in genus is also accepted and will return identical results
CountSpTAK_base("bettongia", "penicillata")
## End(Not run)
## Not run:
CountSpTAK_base("Bettongia", "penicillata", "conserv*")
#lower case letter in genus is also accepted and will return identical results
CountSpTAK_base("bettongia", "penicillata", "conserv*")
## End(Not run)
```

CountSpTAK\_scopus

Search count from Scopus - title, abstract, and keywords

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title, abstract, and keywords. A check will be conducted via gnr\_resolve to validate the genus and species names.

#### Usage

```
CountSpTAK_scopus(
  genus,
  species,
  synonyms,
  additionalkeywords,
  datatype = "application/xml"
)
```

## Arguments

genus Genus classification from the binomial name.

species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords
Optional search terms.

datatype Formats the URL to be sent to the API. The default is "application/xml".

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountSpTAK_scopus("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

CountSpTAK_scopus("bettongia", "penicillata")

## End(Not run)

## Not run:
CountSpTAK_scopus("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

CountSpTAK_scopus("bettongia", "penicillata")

## End(Not run)
```

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CountSpTAK_wos Search countSpTAK_wos keywords	from Web of Science - title, abstract and author
---	--

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title, abstract and author keywords. A check will be conducted via <code>gnr\_resolve</code> to validate the genus and species names.

#### Usage

```
CountSpTAK_wos(genus, species, synonyms, additionalkeywords)
```

#### Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.
synonyms Alternate species names.
additionalkeywords
Optional search terms.

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountSpTAK_wos("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

CountSpTAK_wos("bettongia", "penicillata")

## End(Not run)

## Not run:
CountSpTAK_wos("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results

CountSpTAK_wos("bettongia", "penicillata", "conserv*")

## End(Not run)
```

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CountSpT\_base

Search count from BASE - title only

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title only. A check will be conducted via <code>gnr\_resolve</code> to validate the genus and species names.

#### Usage

```
CountSpT_base(genus, species, synonyms, additionalkeywords)
```

## Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.
synonyms Alternate species names.
additionalkeywords

Optional search terms.

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountSpT_base("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

CountSpT_base("bettongia", "penicillata")

## End(Not run)

## Not run:
CountSpT_base("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results

CountSpT_base("bettongia", "penicillata", "conserv*")

## End(Not run)
```

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CountSpT\_scopus

Search count from Scopus - title only

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title only. A check will be conducted via <code>gnr\_resolve</code> to validate the genus and species names.

#### Usage

```
CountSpT_scopus(
  genus,
  species,
  synonyms,
  additionalkeywords,
  datatype = "application/xml"
)
```

## Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.
synonyms Alternate species names.

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 ${\it additional}{\it keywords}$ 

Optional search terms.

datatype Formats the URL to be sent to the API. The default is "application/xml".

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2. 191.

```
## Not run:
CountSpT_scopus("Bettongia", "penicillata")
#lower case letter in genus is also accepted and will return identical results
CountSpT_scopus("bettongia", "penicillata")
## End(Not run)
## Not run:
```

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```
CountSpT_scopus("Bettongia", "penicillata", "conserv*")
#lower case letter in genus is also accepted and will return identical results
CountSpT_scopus("bettongia", "penicillata", "conserv*")
## End(Not run)
```

CountSpT\_wos

Search count from Web of Science - title only

## Description

This function counts the total number of search results. It counts the publications with the binomial name in the title only. A check will be conducted via <code>gnr\_resolve</code> to validate the genus and species names.

#### Usage

```
CountSpT_wos(genus, species, synonyms, additionalkeywords)
```

#### **Arguments**

genus Genus classification from the binomial name.

species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

#### Value

Search count of the species with the given genus and species.

#### References

Chamberlain, S. & Szocs, E. (2013). taxize - taxonomic search and retrieval in R. F1000Research, 2, 191.

```
## Not run:
CountSpT_wos("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

CountSpT_wos("bettongia", "penicillata")

## End(Not run)

## Not run:
```

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```
CountSpT_wos("Bettongia", "penicillata", "conserv*")
#lower case letter in genus is also accepted and will return identical results
CountSpT_wos("bettongia", "penicillata", "conserv*")
## End(Not run)
```

FetchGenusT

 $FetchGenusT\ wrapper$ 

## Description

This is a wrapper function for FetchSpT\_scopus, and FetchSpT\_wos.

#### Usage

```
FetchGenusT(db, genus, synonyms, additionalkeywords, language = 0)
```

## Arguments

db Literature database. Scopus ("scopus") or Web of Science ("wos").

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable. Scopus

only.

## Value

A dataframe of the genus' citation records with the given genus.

```
## Not run:
FetchGenusT("scopus", genus = "Osphranter")
## End(Not run)
## Not run:
FetchGenusT("scopus", genus = "Osphranter", synonyms = "Macropus", additionalkeywords = "conserv*")
## End(Not run)
```

FetchGenusTAK

 $FetchGenusTAK\ wrapper$ 

## Description

This is a wrapper function for FetchGenusTAK\_scopus, and FetchGenusTAK\_wos.

## Usage

```
FetchGenusTAK(db, genus, synonyms, additionalkeywords, language = 0)
```

#### Arguments

db Literature database. Scopus ("scopus") or Web of Science ("wos").

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additional keywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable. Scopus

only.

#### Value

A dataframe of the genus' citation records with the given genus.

## Examples

```
## Not run:
FetchGenusTAK("scopus", genus = "Osphranter")

## End(Not run)
## Not run:
FetchGenusTAK("scopus", genus = "Osphranter", synonyms = "Macropus", additionalkeywords = "conserv*")

## End(Not run)
```

FetchGenusTAK\_scopus

Fetch data from Scopus - title, abstract and keywords

## Description

This function fetches citation information from Scopus using genus name found in the title, abstract and keywords of the publications. Duplicates are to be removed by the user after fetching the data.

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#### Usage

```
FetchGenusTAK_scopus(genus, synonyms, additionalkeywords, language = 0)
```

## Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable.

#### Value

A dataframe of the genus' citation records with the given genus.

## Examples

```
## Not run:
FetchGenusTAK_scopus("Bettongia")

#lower case letter in genus is also accepted and will return identical results
FetchGenusTAK_scopus("bettongia")

## End(Not run)

## Not run:
FetchGenusTAK_scopus("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchGenusTAK_scopus("bettongia", "conserv*")

## End(Not run)
```

FetchGenusTAK\_wos

Fetch data from Web of Science - title, abstract and author keywords.

#### Description

This function fetches citation information from Web of Science using genus name found in the title, abstract and author keywords of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchGenusTAK_wos(genus, synonyms, additionalkeywords)
```

#### Arguments

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

#### Value

A dataframe of the genus' citation records with the given genus.

## Examples

```
## Not run:
FetchGenusTAK_wos("Bettongia")

#lower case letter in genus is also accepted and will return identical results
FetchGenusTAK_wos("bettongia")

## End(Not run)

## Not run:
FetchGenusTAK_wos("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchGenusTAK_wos("bettongia", "conserv*")

## End(Not run)
```

FetchGenusT\_scopus

Fetch data from Scopus - title only

#### Description

This function fetches citation information from Scopus using genus name found in the title of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchGenusT_scopus(genus, synonyms, additionalkeywords, language = 0)
```

#### **Arguments**

genus Genus classification from the binomial name.

synonyms Alternate genus names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable.

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## Value

A dataframe of the genus' citation records with the given genus.

## Examples

```
## Not run:
FetchGenusT_scopus("Bettongia")

#lower case letter in genus is also accepted and will return identical results
FetchGenusT_scopus("bettongia")

## End(Not run)

## Not run:
FetchGenusT_scopus("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchGenusT_scopus("bettongia", "conserv*")

## End(Not run)
```

FetchGenusT\_wos

Fetch data from Web of Science - title only

## Description

This function fetches citation information from Web of Science using genus name found in the title of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchGenusT_wos(genus, synonyms, additionalkeywords)
```

## Arguments

genus Genus classification from the binomial name.
synonyms Alternate genus names.
additionalkeywords
Optional search terms.

#### Value

A dataframe of the genus' citation records with the given genus.

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#### Examples

```
## Not run:
FetchGenusT_wos("Bettongia")

#lower case letter in genus is also accepted and will return identical results
FetchGenusT_wos("bettongia")

## End(Not run)

## Not run:
FetchGenusT_wos("Bettongia", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchGenusT_wos("bettongia", "conserv*")

## End(Not run)
```

FetchSpT

 $FetchSpT\ wrapper$ 

#### Description

This is a wrapper function for FetchSpT\_scopus, FetchSpT\_wos, and FetchSpT\_base.

#### Usage

```
FetchSpT(db, genus, species, synonyms, additionalkeywords, language = 0)
```

## Arguments

db Literature database. Scopus ("scopus") or Web of Science ("wos").

genus Genus classification from the binomial name.
species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable. Scopus

only.

#### Value

A dataframe of the species' citation records with the given genus and species.

FetchSpTAK 25

#### Examples

```
## Not run:
FetchSpT("scopus", genus = "Osphranter", species = "rufus")

## End(Not run)
## Not run:
FetchSpT("scopus", genus = "Osphranter", species = "rufus", synonyms = "Macropus rufus", additionalkeywords = "constant"
## End(Not run)
```

FetchSpTAK

 $FetchSpTAK\ wrapper$ 

#### Description

This is a wrapper function for FetchSpTAK\_scopus, FetchSpTAK\_wos, and FetchSpTAK\_base.

#### Usage

```
FetchSpTAK(db, genus, species, synonyms, additionalkeywords, language = 0)
```

#### Arguments

db Literature database. Scopus ("scopus") or Web of Science ("wos").

genus Genus classification from the binomial name.
species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable. Scopus

only.

#### Value

A dataframe of the species' citation records with the given genus and species.

```
## Not run:
FetchSpTAK("scopus", genus = "Osphranter", species = "rufus")

## End(Not run)

## Not run:
FetchSpTAK("scopus", genus = "Osphranter", species = "rufus", synonyms = "Macropus rufus", additionalkeywords = "co"
## End(Not run)
```

FetchSpTAK\_scopus

Fetch data from Scopus - title, abstract and keywords

## Description

This function fetches citation information from Scopus using genus and species name found in the title, abstract and keywords of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchSpTAK_scopus(genus, species, synonyms, additionalkeywords, language = 0)
```

## Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable.

## Value

A dataframe of the species' citation records with the given genus and species.

```
## Not run:
FetchSpTAK_scopus("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

FetchSpTAK_scopus("bettongia", "penicillata")

## End(Not run)

## Not run:
FetchSpTAK_scopus("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results

FetchSpTAK_scopus("bettongia", "penicillata", "conserv*")

## End(Not run)
```

 $FetchSpTAK_{-wos}$  27

FetchSpTAK_wos	Fetch data from Web of Science - title, abstract and author keywords.

#### Description

This function fetches citation information from Web of Science using genus and species name found in the title, abstract and author keywords of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchSpTAK_wos(genus, species, synonyms, additionalkeywords)
```

#### Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.
synonyms Alternate species names.
additionalkeywords

Optional search terms.

#### Value

A dataframe of the species' citation records with the given genus and species.

```
## Not run:
FetchSpTAK_wos("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results
FetchSpTAK_wos("bettongia", "penicillata")

## End(Not run)

## Not run:
FetchSpTAK_wos("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchSpTAK_wos("bettongia", "penicillata", "conserv*")

## End(Not run)
```

28 FetchSpT\_scopus

FetchSpT\_scopus

Fetch data from Scopus - title only

## Description

This function fetches citation information from Scopus using genus and species name found in the title of the publications. Duplicates are to be removed by the user after fetching the data.

#### Usage

```
FetchSpT_scopus(genus, species, synonyms, additionalkeywords, language = 0)
```

## Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.

synonyms Alternate species names.

additionalkeywords

Optional search terms.

language Language of the paper; default is 0, enter 1 to retrieve the variable.

## Value

A dataframe of the species' citation records with the given genus and species.

```
## Not run:
FetchSpT_scopus("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results

FetchSpT_scopus("bettongia", "penicillata")

## End(Not run)

## Not run:
FetchSpT_scopus("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results

FetchSpT_scopus("bettongia", "penicillata", "conserv*")

## End(Not run)
```

 $FetchSpT_{-wos}$  29

FetchSpT\_wos

Fetch data from Web of Science - title only

## Description

This function fetches citation information from Web of Science using genus and species name found in the title of the publications. Duplicates are to be removed by the user after fetching the data.

## Usage

```
FetchSpT_wos(genus, species, synonyms, additionalkeywords)
```

## Arguments

genus Genus classification from the binomial name.
species Species classification from the binomial name.
synonyms Alternate species names.
additionalkeywords

Optional search terms.

#### Value

A dataframe of the species' citation records with the given genus and species.

```
## Not run:
FetchSpT_wos("Bettongia", "penicillata")

#lower case letter in genus is also accepted and will return identical results
FetchSpT_wos("bettongia", "penicillata")

## End(Not run)

## Not run:
FetchSpT_wos("Bettongia", "penicillata", "conserv*")

#lower case letter in genus is also accepted and will return identical results
FetchSpT_wos("bettongia", "penicillata", "conserv*")

## End(Not run)
```

30 Koala

getYear	$Extract\ year$
---------	-----------------

## Description

Extracts the year of each publication of the output from any of the Fetch functions and counts the number of publications each year.

#### Usage

```
getYear(data, genus, species)
```

## Arguments

data Output from any of the fetch function.

genus Genus classification from the binomial name.

species Species classification from the binomial name.

#### Value

A dataframe with the year and frequency of the publications

## Examples

```
getYear(data = Woylie, genus = "Bettongia", species = "penicillata")
```

Koala $Ko$	ala	dataset
------------	-----	---------

## Description

Citation records of koala (Phascolarctos cinereus) from Scopus. Data was retrieved on 10 July 2020.

## Usage

Koala

#### **Format**

A data frame with 773 rows and 20 variables

#### Source

```
http://api.elsevier.com/content/search/scopus
```

languages 31

languages

Languages

## Description

List of languages of documents found on Scopus. Data was retrieved on 9 March 2021.

## Usage

languages

#### **Format**

A csv file with the complete list of languages of documents found on Scopus.

#### Source

https://www.elsevier.com/solutions/scopus/how-scopus-works/content

Platypus

Platypus dataset

## Description

Citation records of platypus (Ornithorhynchus anatinus) from Scopus. Data was retrieved on 10 July 2020.

## Usage

Platypus

#### **Format**

A data frame with 321 rows and 20 variables

## Source

http://api.elsevier.com/content/search/scopus

32 plotPub

plotAllindices

Index plot

## Description

Plots the indices of a single species or combined.

## Usage

```
plotAllindices(data)
```

#### Arguments

data

The dataframe generated from Allindices.

#### Value

ggplot

## Examples

```
W <- Allindices(Woylie, genus = "Bettongia", species = "penicillata")
Q <- Allindices(Quokka, genus = "Setonix", species = "brachyurus")
P <- Allindices(Platypus, genus = "Ornithorhynchus", species = "anatinus")
K <- Allindices(Koala, genus = "Phascolarctos", species = "cinereus")
CombineSp <- dplyr::bind_rows(W, Q, P, K)
plotAllindices(CombineSp)</pre>
```

plotPub

Publication plot

#### Description

Plots the publication by year of a single species or combined.

#### Usage

```
plotPub(data)
```

#### Arguments

data

The dataframe generated from getYear.

## Value

ggplot

Quokka 33

#### Examples

```
extract_year_W <- getYear(data = Woylie, genus = "Bettongia", species = "penicillata")
extract_year_Q <- getYear(data = Quokka, genus = "Setonix", species = "brachyurus")
extract_year_P <- getYear(data = Platypus, genus = "Ornithorhynchus", species = "anatinus")
extract_year_K <- getYear(data = Koala, genus = "Phascolarctos", species = "cinereus")
Combine_pub <- rbind(extract_year_W, extract_year_Q, extract_year_P, extract_year_K)
plotPub(Combine_pub)</pre>
```

Quokka

Quokka dataset

## Description

Citation records of quokka (Setonix brachyurus) from Scopus. Data was retrieved on 10 July 2020.

#### Usage

Quokka

#### **Format**

A data frame with 242 rows and 20 variables

#### Source

http://api.elsevier.com/content/search/scopus

SourceType

Source type

## Description

This function calculates the total number of items for each document type.

#### Usage

SourceType(data)

#### Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

## Value

A dataframe with each document and their counts.

34 SpHAfterdate

#### Examples

```
data(Woylie)
SourceType(Woylie)
```

SpH5

 $Species\ h5\ index$ 

## Description

This function calculates the h-index of a species in the past 5 years.

## Usage

SpH5(data)

## Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

#### Value

H5 index.

#### References

Suzuki, H. (2012). *Google Scholar Metrics for Publications*. Retrieved from https://scholar.googleblog.com/2012/04/google-scholar-metrics-for-publications.html.

## Examples

```
data(Woylie)
SpH5(Woylie)
```

SpHAfterdate

Species h-index with a given time frame

## Description

This function calculates the h-index using a given date up till the newest record.

## Usage

```
SpHAfterdate(data, date)
```

SpHindex 35

#### **Arguments**

data The dataframe generated from FetchSpT or FetchSpTAK.

date The lower limit of the timeframe.

#### Value

H-index of the given time period.

## Examples

```
data(Woylie)
SpHAfterdate(Woylie, "2000-01-01")
```

SpHindex

Species h-index

## Description

This function calculates the h-index of a species.

#### Usage

```
SpHindex(data)
```

#### Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

## Value

H-index.

## References

Bertoli-Barsotti, L. & Lando, T. (2015). On a formula for the h-index. *Journal of Informetrics*, 9(4), 762-776.

Hirsch, J. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences of the United States of America, 102(46), 16569-16572.

```
data(Woylie)
SpHindex(Woylie)
```

36 SpMindex

Spi10

Species i10 index

## Description

This function calculates the i10 index of a species. i10 index counts all of the publications with 10 or more citations.

## Usage

Spi10(data)

## Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

#### Value

i10 index.

#### References

Cornell University (2019). *i10-index*. Retrieved from https://guides.library.cornell.edu/c.php?g=32272&p=203393.

## Examples

```
data(Woylie)
Spi10(Woylie)
```

SpMindex

 $Species\ m ext{-}index$ 

## Description

This function calculates the m-index of species. M-index uses the h-index and divides it by the number of years of activity.

## Usage

SpMindex(data)

#### Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

TotalCite 37

## Value

M-index.

## References

University of Pittsburgh (2019). Research Impact and Metrics: Author metrics. Retrieved from https://pitt.libguides.com/bibliometricIndicators/AuthorMetrics.

## Examples

```
data(Woylie)
SpMindex(Woylie)
```

TotalCite

Total citations

## Description

This function calculates the total number of citations.

## Usage

```
TotalCite(data)
```

## Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

#### Value

A numerical value of the total number of citations.

```
data(Woylie)
TotalCite(Woylie)
```

38 TotalPub

TotalJournals

 $Total\ journals$ 

## Description

This function calculates the total number of journals.

## Usage

```
TotalJournals(data)
```

## Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

## Value

An integer of the total number of journals.

## Examples

```
data(Woylie)
TotalJournals(Woylie)
```

TotalPub

 $Total\ publications$ 

## Description

This function calculates the total number of publications.

## Usage

TotalPub(data)

## Arguments

data

The dataframe generated from  ${\sf FetchSpT}$  or  ${\sf FetchSpTAK}.$ 

## Value

An integer of the total number of publications.

```
data(Woylie)
TotalPub(Woylie)
```

Woylie 39

Woylie  $Woylie\ dataset$ 

## Description

Citation records of woylie (Bettongia penicillata) from Scopus. Data was retrieved on 10 July 2020.

## Usage

Woylie

#### **Format**

A data frame with 113 rows and 20 variables

#### Source

http://api.elsevier.com/content/search/scopus

YearsPublishing

Years since first publication

## Description

The number of years since the first publication in relation to the species.

## Usage

YearsPublishing(data)

## Arguments

data

The dataframe generated from FetchSpT or FetchSpTAK.

## Value

Number of years.

```
data(Woylie)
YearsPublishing(Woylie)
```

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