R documentation

of 'alpha_div.Rd'

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`alpha.div` *Calculate alpha-diversity*

Description

Calculates two types of α-diversity: the Simpson index and and the Shannon Weiner index.

Usage

```
alpha.div(x, method = "simpson")
```

Arguments

`x`	Either a dataframe of taxa abudances in sites, with sites comprising rows and columns comprising taxa (rownames of the dataframe should give site names), or a numeric vector comprising taxa abundances for a single site.
`method`	One of `"simpson"` or `"shannon"`. Partial matches allowed.

Value

The output is a list with the following components:

1. `p.i` A dataframe containing proportional abundances of taxa in sites.
2. `method` The diversity method applied.
3. `rn` The rownames of the original community dataset (i.e., the site names).
4. `div` A dataframe of actual computed diversities.

Author(s)

Intro to R class

References

Magurran, A. E. (1988). Ecological diversity and its measurement. Princeton university press.

Examples

```
taxa <- c(sp1 = 3, sp2 = 4, sp3 = 9)
x <- alpha.div(taxa)
plot(x)
plot(x, TRUE)
```

Index