

Collapse a (taxonomic) tree at a given rank, with options to exclude specific clades.

Description

Collapse a (taxonomic) tree at a given rank, with options to exclude specific clades.

Usage

```
metadataCollapseTree(tree, metadata, rankN, excludeType, excludeItem)
```

Arguments

- tree A tree object
- metadata A data.frame with 9 (+1 optional) columns. Data rows are tree leaves with (clade names at each rank).
- rankN A character string corresponding to the rank at which to collapse the tree. Must match header name on metadata
- excludeType Specify method for inputting clades to exclude from collapsing. Either 'list', 'col' or none.
- excludeItem A vector of clade names if excludeType=='list'. The header name of a binary vector on metadata if excludeType=='col'.

Details

The data.frame metadata should be in the following format:

taxon_ID	rank1	rank2	rank3	rank4	rank5	rank6	rank7	rank8
6014	Eukaryota	Opisthokonta	Metazoa	Cnidaria	Anthozoa	Actiniaria	Anthopleura	Anthopleura_elegantissima_(clonal_anemone)
5801	Eukaryota	Archaeplastida	Chloroplastida	Phragmoplastophyta	Embryophyta	Solanum	Solanum	Solanum_chacoense_(Chaco_potato)

Each row corresponds to a tip in tree. An optional column should be included if exclusionType 'col' is chosen. This additional column should contain a value of 1 if the tip should NOT be collapsed, 0 otherwise.

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Examples

```
metadataCollapseTree(tree.object,metadata.data.frame, 'rank5', 'list', c("Anthozoa", "Embyophyta"))
metadataCollapseTree(tree.object,metadata.data.frame, 'rank5', 'col', 'excludeBin')
```