classify_taxonomic_resolution.R

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classify_taxonomic_resolution

Classify Taxonomic Resolution

Description

Classifies taxa in a data frame to a specified taxonomic resolution (family, genus, or species) using a classification table, and aggregates pollen proportions accordingly.

Usage

```
classify_taxonomic_resolution(
  data,
  data_classification_table,
  taxonomic_resolution
)
```

Arguments

data
: A data frame containing taxon data with columns including 'taxon', 'dataset_name', 'age', and 'pollen_prop'.

data_classification_table
: A data frame mapping 'sel_name' to taxonomic levels (e.g., family, genus, species).

taxonomic_resolution
: A character string specifying the taxonomic resolution to classify to. Must be one of 'family', 'genus', or 'species'.

Details

Performs a left join to map taxa to the desired resolution, aggregates pollen proportions, and ensures all dataset_name-age-taxon combinations are present in the output.

Value

A data frame with taxa classified to the specified resolution and pollen proportions aggregated accordingly. The output preserves all dataset_name and age combinations for true negatives.

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