README for data and R code related to Schwarz et al. 2020 Oikos (OIK-07303)

File list

OIK-07303_database.csv

OIK-07303_original_studies.xlsx

OIK-07303_results.csv

OIK-07303_functions.R

OIK-07303_betalinkr.R

OIK-07303_network_aggregation.R

File description

OIK-07303_database.csv – data set containing plant-pollinator interaction data from 30 studies. Needs to be red in OIK-07303_network_aggregation.R to reproduce results of Schwarz et al. 2020 Oikos. For re-use of the data set, please consider that original studies and data publications, from which the data set was derived, need to be cited. For some studies code identifiers instead of species names are used for plant (column lower) and pollinator (column higher) species.

OIK-07303_original_studies.xlsx – table containing references (DOI or URL) to articles and data publications related to the data compiled in OIK-07303_database.csv.

OIK-07303_results.csv – data frame that was finally used for statistical analyses. For each aggregated network (rows) various network indices and co-variables (columns) are given. Note that variables are sometimes differently named than in the related article: aggregation_level = one of five categories of temporal scale; actual.grain = temporal extent in days; sampling.days = sampling effort in number of sampling days; tot.species = species richness; qS = quantitative measure of species turnover; qOS = quantitative measure of link rewiring; prop.plants = sampling completeness of plant species; prop.polls = sampling completeness of pollinator species; prop.links = sampling completeness of links; poll.cov = sampling coverage of pollinators; plan.cov = sampling coverage of plants; poll.cov = sampling coverage of pollinators; link.cov = sampling coverage of links.

OIK-07303_functions.R – R script containing functions that allow aggregating interaction data into networks at different temporal scales and calculating network indices and various co-variables. You do not need to open this file but guarantee that it can be loaded along with required packages in OIK-07303_network_aggregation.R.

OIK-07303_betalinkr.R – R script containing function betalinkr to assess species turnover and link rewiring.

OIK-07303_network_aggregation.R – R script to prepare the data from OIK-07303_database.csv for aggregating networks and to calculate network indices and co-variables, which results in a data frame identical to OIK-07303_results.csv.