

Table of Contents

Ecological resemblance	1
<i>R functions</i>	1

Ecological resemblance

Theory **R functions** Examples Exercise 

R functions

- **dist** - offers just limited number of distance measures - e.g. euclidean, canberra and manhattan. The result is the *distance matrix*, an object of the class `dist`.
- **vegdist (library vegan)** - default distance used in this function is Bray-Curtis distance, which is (in contrast to Euclidean distance) considered as more suitable for ecological data (it is a quantitative analog of Sørensen dissimilarity).
- **dsvdis (library labdsv)** - offers some other indices than `vegdist`, e.g. `ruzicka` (Růžička, quantitative analogue of Jaccard) and `roberts`. For full comparison of `dist`, `vegdist` and `dsvdis`, see [Table 1 in the website of Dave Roberts](#).
- **dist.ldc (library adespatial)** - includes 21 dissimilarity indices described in Legendre & De Cáceres (2013), twelve of which are not readily available in other packages. Note that Bray-Curtis dissimilarity is called *percentage difference* (`method = "percentdiff"`). By default returns also informative message whether given dissimilarity index is Euclidean or not and whether it becomes Euclidean if square-rooted (as is the case of e.g. Bray-Curtis aka Percentage difference index).
- **designdist (library vegan)** - allows to design virtually any distance measure using the formula for their calculation.
- **daisy (library cluster)** - offers euclidean, manhattan and gower distance.
- **distance (library ecodist)** - contains seven distance measures, but the function more than for practical use is for a demonstration of the script (for larger matrices, the calculation takes rather long).

From:

<https://anadat-r.davidzeleny.net/> - **Analysis of community ecology data in R**

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https://anadat-r.davidzeleny.net/doku.php/en:similarity_r

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