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Ecological resemblance

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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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