

Taiwan Endemic Species Research Centre, JiJi Township, Taiwan

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Web site (distribution of R functions and PDFs of research papers):
<http://numericalecology.com>

Short course on

Ordination methods for community ecology

April 17–19, 2016

Day 1

1. Introduction to data analysis.
2. Ordination methods for community ecology: principal component analysis (PCA), correspondence analysis (CA), principal coordinate analysis (PCoA).
3. Transformation of species abundance data tables prior to linear analyses.

Day 2

4. Measures of similarity and dissimilarity, especially for community composition data.
5. Multiple regression, partial regression and variation partitioning.

Day 3

6. Statistical testing by permutation.
7. Canonical redundancy analysis (RDA) and canonical correspondence analysis (CCA).
8. Multivariate analysis of variance by canonical analysis
9. Selection of environmental variables in RDA.

⇒ Lectures in the morning.

⇒ Afternoons: Practicals about these topics using the R language

The following files are distributed in the folder Practicals_in_R.zip –

- Day-by-day list of the practical exercises (file: Short_course_practicals.pdf)
- Introduction to the R statistical language (file: Introduction_to_R.pdf)
- Practicals in the R language: Basic matrix operations (file: Basic_matrix_operations.pdf)
- Practicals using the R statistical language (file: Practicals_in_R.pdf)