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Abstract

The wide-ranging and rapidly evolving nature of ecological studies mean that it is not possible to cover all existing and emerging techniques for analyzing multivariate data. However, two important methods enticed many followers: the Canonical Correspondence Analysis (CCA) and the STATICO analysis. Despite the particular characteristics of each, they have similarities and differences, which when analyzed properly, can, together, provide important complementary results to those that are usually exploited by researchers. If on one hand, the use of CCA is completely generalized and implemented, solving many problems formulated by ecologists, on the other hand, this method has some weaknesses mainly caused by the imposition of the number of variables that is required to be applied (much higher in comparison with samples). Also, the STATICO method has no such restrictions, but requires that the number of variables (species or environment) is the same in each time or space. Yet, the STATICO method presents information that can be more detailed since it allows visualizing the variability within groups (either in time or space). In this study, the data needed for implementing these methods are sketched, as well as the comparison is made showing the advantages and disadvantages of each method. The treated ecological data are a sequence of pairs of ecological tables, where species abundances and environmental variables are measured at different, specified locations, over the course of time.