A principal component analysis of raw data only provides fairly poor results, dominated by localized species. A transformation into ordinal data does not improve the results.

Correspondence analysis of ordinal data performs even worse than principal component analysis by exacerbating local variations relative to larger plant formations that are significantly overwritten in the analysis.

The principal coordinates analysis of ordinal data provides better dispersion of the relevés, but the extreme data are highlighted and interpretation is not easy. Only relevé coordinates are provided. In addition, there is no help for interpretation apart from the eigenvalues. The type of distance has little impact on interpretation.

Non-metric multidimensional analyzes of ordinal data also produce a good dispersion of relevés but again only produce the coordinates of the relevés and no aid to interpretation. In addition, the choice, initially of the number of axes to extract, has an impact on the results, which makes the interpretation of the results quite delicate.

With the analysis of a simple disjunctive table, correspondence analysis turns out to be completely unsuitable and it should no longer be used. The same goes for variants created like CCA or DCA, ... which also suffer from the same basic defect. They are strongly discouraged.

The non-symmetrical correspondence analysis of the simple disjunctive table produces a nice view of the entire transect and then more local variations. Interpretation aids are useful. The synthetic nature of the analysis is certain with only the first five significant eigenvalues.

The principal coordinates analysis produces a good dispersion of the relevés that is fairly easy to interpret on the first axes but does not provide coordinates for the species or help with interpretation.

A non-symmetrical correspondence analysis of a 113 disjunctive table also produces good results that are quite easy to interpret like those of the simple disjunctive table.

The non-symmetrical correspondence analysis of abundance data in logarithmic version always favors abundant species, but in an attenuated manner compared to an untransformed version. There is therefore a choice to make if we want to favor abundance without giving them too much weight. In such an analysis, there is only one row per species.

The multiple factorial analysis of a disjunctive table, with three sub-tables, including one for woody species, clearly favors the latter. There is therefore a choice to make if we wish to highlight a stratum or a category of species. The same analysis with file 113 also provides results that are easy to interpret and choice has to be done between the two types of disjunctive table, the last giving a little more importance to simple presences compared to abundances. With the logarithmic file, abundant species are again favored, but less clearly than with abundances 12345.

If we wish to link the floristic and mesological tables, a multiple factorial analysis based on the non-symmetrical correspondence analysis of disjunctive tables appears to be a very powerful technique for understanding the parallelisms between species and mesological factors, without prejudging the type of relationship between these parameters.

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