Using the package vegtable for documenting syntaxonomic classifications: Comparison of two classification approaches for the Chilean vegetation

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The package vegtable was developed to assess and handle data imported from vegetation-plot databases into R. The database "sudamerica" contains around 2,000 plot observations recorded in the South American continent. From its origins this database compiles data from bibliographic references, documents syntaxonomic classifications and aims to make the data suitable for meta-analysis and critical reviews. In Chile, the Braun-Blanquet approach has been widely implemented but most of the current surveys are restricted to a small set of vegetation groups or to specific study sites. Thus a revised classification system for the whole country is still missing. We used "sudamerica" to summarize the syntaxonomic classification of the Chilean vegetation and to compare the Braun-Blanquet approach with plant formations following the EcoVeg approach. Plot observations were classified into 29 classes, 43 orders, 66 alliances, and 175 associations according to the Braun-Blanquet approach. The same were assigned to 7 classes, 10 subclasses and 19 formations in the EcoVeg approach. There are several mismatches between phytosociological classes and EcoVeg formations, which indicates some inconsistencies in the current stage of syntaxonomy in Chile. In this contribution we discuss the use of vegetation-plot databases to host multiple syntaxonomic classifications as well as a backup for syntaxonomic references.