Modern Analysis of Biological Data. Part 2: Linear models with correlations in R

The publication follows up the first part of Modern analysis of biological data. The authors present selected models and methods of statistical analysis of correlated data, i.e. linear methods, as appropriate tools in data analysis based on temporal, spatial, and phylogenetic dependency. The book serves as a practical guide to data analysis in R, a freely available and one of the most extensive statistical software packages worldwide. It consists of nineteen resolved and commented examples specifically chosen to demonstrate proper model design and to highlight the problems and errors which may occur during the analysis. The language of the book is simple and comprehensible for readers lacking specialised mathematical knowledge. The book is primarily intended for students and researches in biological, agricultural, veterinary, medical, and pharmaceutical fields who need to perform correct analysis of the results of their observations and experiments, including the more complex ones featuring dependencies between repeated measurements of the same subjects.