



References

References to cited works

Numbers in brackets: pages of the book where references are cited.

- Aart, P. J. M. (van der) 1973. Distribution analysis of wolfspiders (Araneae, Lycosidae) in a dune area by means of principal component analysis. *Neth. J. Zool.* **23**: 266-329. [452]
- Aart, P. J. M. (van der) & N. Smeenk-Enserink. 1975. Correlations between distributions of hunting spiders (Lycosidae, Ctenidae) and environmental characteristics in a dune area. *Neth. J. Zool.* **25**: 1-45. [410, 452, 487, 660, 661]
- Ables, J. G. 1974. Maximum entropy spectral analysis. *Astron. Astrophys. Suppl.* **15**: 383-393. [765]
- Addicott, J. F., J. M. Aho, M. F. Antolin, M. F. Padilla, J. S. Richardson & D. A. Soluk. 1987. Ecological neighborhoods: scaling environmental patterns. *Oikos* **49**: 340-346. [787]
- Agresti, A. 2002. *Categorical data analysis. 2nd edition.* Wiley Series in Probability and Statistics, John Wiley & Sons, Hoboken, New Jersey. xv + 710 pp. [235]
- Akaike, H. 1974. A new look at the statistical model identification. *IEEE Trans. Autom. Control* **19**: 716-723. [566]
- Ali, G., A. Roy & P. Legendre. 2010. Spatial relationships between soil moisture patterns and topographic variables at multiple scales in a humid temperate forested catchment. *Water Resour. Res.* **46**, W10526, doi:10.1029/2009WR008804. [877]
- Allan, J. D. 1975. Components of diversity. *Oecologia* **18**: 359-367. [260]
- Allen, T. F. H., S. M. Bartell & J. F. Koonce. 1977. Multiple stable configurations in ordination of phytoplankton community change rates. *Ecology* **58**: 1076-1084. [769, 774]
- Allen, T. F. H. & T. W. Hoekstra. 1991. Role of heterogeneity in scaling of ecological systems under analysis. 47-68 in: J. Kolasa & S. T. A. Pickett [eds.] *Ecological heterogeneity*. Springer-Verlag, New York. [786]
- Allen, T. F. H. & T. B. Starr. 1982. *Hierarchy – Perspectives for ecological complexity*. Univ. of Chicago Press, Chicago. xvi + 310 pp. [9]
- Alonso, D., R. S. Etienne & A. J. McKane. 2006. The merits of neutral theory. *Trends Ecol. Evol.* **21**: 451-457. [12]
- Amanieu, M., P. Legendre, M. Troussellier & G.-F. Frisoni. 1989. Le programme Écothau: théorie écologique et base de la modélisation. *Oceanol. Acta* **12**: 189-199. [569, 574]

- Anderberg, M. R. 1973. *Cluster analysis for applications*. Academic Press, New York. xiii + 359 pp. [386]
- Andersen, R., M. Poulin, D. Borcard, R. Laiho, J. Laine, H. Vasander & E.-T. Tuittila. 2011. Environmental control and spatial structures in peatland vegetation. *J. Veg. Sci.* **22**: 878-890. [877]
- Anderson, M. J. 1999. Distinguishing direct from indirect effects of grazers in intertidal estuarine assemblages. *J. Exp. Mar. Biol. Ecol.* **234**: 199-218. [648, 649]
- Anderson, M. J. 2006. Distance-based tests for homogeneity of multivariate dispersions. *Biometrics* **62**: 245-253. [303, 656, 682]
- Anderson, M. J., T. O. Crist, J. M. Chase, M. Vellend, B. D. Inouye, A. L. Freestone, N. J. Sanders, H. V. Cornell, L. S. Comita, K. F. Davies, S. P. Harrison, N. J. B. Kraft, J. C. Stegen & N. G. Swenson. 2011. Navigating the multiple meanings of β diversity: a roadmap for the practicing ecologist. *Ecol. Lett.* **14**: 19-28. [258, 260]
- Anderson, M. J., K. E. Ellingsen & B. H. McArdle. 2006. Multivariate dispersion as a measure of beta diversity. *Ecol. Lett.* **9**: 683-693. [258, 285, 305, 327]
- Anderson, M. J. & N. A. Gribble. 1998. Partitioning the variation among spatial, temporal and environmental components in a multivariate data set. *Aust. J. Ecol.* **23**: 158-167. [853, 857]
- Anderson, M. J. & P. Legendre. 1999. An empirical comparison of permutation methods for tests of partial regression coefficients in a linear model. *J. Statist. Comput. Simulation* **62**: 271-303. [579, 651, 652]
- Anderson, M. J. & T. J. Willis. 2003. Canonical analysis of principal coordinates: a useful method of constrained ordination for ecology. *Ecology* **84**: 511-525. [709]
- Anderson, T. W. 1971. *The statistical analysis of time series*. John Wiley & Sons, New York. 704 pp. [750, 894]
- Anderson, T. W. 2003. *An introduction to multivariate statistical analysis*. 3rd edition. Wiley-Interscience, Hoboken, New Jersey. xx + 721 pp. [143]
- Angot, M. 1961. Analyse quantitative du cycle diurne de la production primaire dans le Pacifique subtropical près de la Nouvelle-Calédonie. *Bull. Inst. Océanogr. (Monaco)* (1200): 1-34. [753]
- Anselin, L. 1995. Local Indicators of Spatial Association—LISA. *Geogr. Anal.* **27**: 93-115. [806]
- Ardisson, P.-L., E. Bourget & P. Legendre. 1990. Multivariate approach to study species assemblages at large spatiotemporal scales: the community structure of the epibenthic fauna of the Estuary and Gulf of St. Lawrence. *Can. J. Fish. Aquat. Sci.* **47**: 1364-1377. [510, 511, 774]
- Arfi, R., F. Blanc & D. Calmet. 1982. Étude d'impact en milieu marin: échantillonnage et traitement des données. 341-364 in: S. Frontier [ed.] *Stratégies d'échantillonnage en écologie*. Masson, Paris et Les Presses de l'Université Laval, Québec. [763, 764]
- Arfi, R. & P. Dumas. 1990. Séries chronologiques: analyse spectrale de Fourier et par maximisation d'entropie – Présentation, simulations, applications. 105-126 in: S. Frontier [ed.] *Biométrie et océanographie*. Actes de Colloques, 10, IFREMER, Brest. [765]
- Arias-González, J. E., P. Legendre & F. A. Rodríguez-Zaragoza. 2008. Scaling up beta diversity on Caribbean coral reefs. *J. Exp. Mar. Biol. Ecol.* **366**: 28-36. [877]
- Armstrong, M. [ed.]. 1989. *Geostatistics. Vol. 1 and 2*. Kluwer Academic Publishers, Dordrecht. xxix + 491 pp., xvii + 546 pp. [832]
- Armstrong, M., D. Renard & P. Berthou. 1989. *Applying geostatistics to the estimation of a population of bivalves*. ICES C. M. 1989/K37. 22 pp. [832]

- Astorga, A., J. Heino, M. Luoto, M. & T. Muotka. 2011. Freshwater biodiversity at regional extent: determinants of macroinvertebrate taxonomic richness in headwater streams. *Ecography* **34**: 705-713. [877]
- Bach, P., P. Legendre, M. Amanieu & G. Lasserre. 1992. Strategy of eel (*Anguilla anguilla* L.) exploitation in the Thau lagoon. *Estuar. Coast. Shelf Sci.* **35**: 55-73. [185, 186]
- Bachraty, C., P. Legendre & D. Desbruyères. 2009. Biogeographic relationships among deep-sea hydrothermal vent faunas at global scale. *Deep-Sea Res. I* **56**: 1371-1378. [849]
- Barbalat, S. & D. Borcard. 1997. Distribution of four beetle families (Coleoptera: Buprestidae, Cerambycidae, phytophagous Scarabaeidae and Lucanidae) in different forest ecotones in the Areuse Gorges (Neuchâtel, Switzerland). *Écologie* **28**: 199-208. [402]
- Barbuji, G., N. L. Oden & R. R. Sokal. 1989. Detecting regions of abrupt change in maps of biological variables. *Syst. Zool.* **38**: 377-389. [844]
- Bare, B. B. & D. W. Hann. 1981. Applications of ridge regression in forestry. *For. Sci.* **27**: 339-348. [564]
- Barnes, H. 1952. The use of transformations in marine biological statistics. *J. Cons. Int. Explor. Mer* **18**: 61-71. [46]
- Barrodale, I. & R. E. Erickson. 1980. Algorithms for least-square linear prediction and maximum entropy spectral analysis. Part I: Theory. *Geophysics* **45**: 420-432. [765]
- Bartlett, M. S. 1938. Further aspects of the theory of multiple regression. *Proc. Camb. Phil. Soc.* **34**: 33-40. [682]
- Bartlett, M. S. 1948. Internal and external factor analysis. *Brit. J. Psychol. Stat. Sect.* **1**: 73-81. [683]
- Bartlett, M. S. 1950. Tests of significance in factor analysis. *Brit. J. Psychol. Stat. Sect.* **3**: 77-85. [448]
- Bartlett, M. S. 1954. A note on the multiplying factors for various chi-squared approximations. *J. Roy. Statist. Soc. Ser. B* **16**: 296-298. [157]
- Bartlett, M. S. 1978. Nearest neighbour models in the analysis of field experiments. *J. Roy. Statist. Soc. Ser. B* **40**: 147-174. [20]
- Barton, D. E. & F. N. David. 1956. Some notes on ordered random intervals. *J. Roy. Statist. Soc. Ser. B* **18**: 79-94. [256]
- Bates, D. M. & J. M. Chambers. 1992. Nonlinear models. Chapter 10 in: J. M. Chambers [ed.] *Statistical models in S*. Wadsworth & Brooks/Cole, Pacific Grove, California. [583]
- Baum, B. R. 1992. Combining trees as a way of combining data for phylogenetic inference and the desirability of combining gene trees. *Taxon* **41**: 3-10. [417]
- Beach, C. M. & J. G. MacKinnon. 1978. A maximum likelihood procedure for regression with autocorrelated errors. *Econometrica* **46**: 51-58. [20]
- Beals, E. W. 1984. Bray-Curtis ordination: an effective strategy for analysis of multivariate ecological data. 1-55 in: A. MacFadyen & E. D. Ford [eds.] *Advances in Ecological Research*, **14**. Academic Press, London. [334]
- Beaugrand, G., M. Edwards & L. Legendre. 2010 Marine biodiversity, ecosystem functioning and carbon cycles. *Proc. Natl. Acad. Sci. USA* **107**: 10120-10124. [130]
- Belbin, L. 1991. Semi-strong hybrid scaling, a new ordination algorithm. *J. Veg. Sci.* **2**: 491-496. [512]

- Belbin, L. & C. McDonald. 1993. Comparing three classification strategies for use in ecology. *J. Veg. Sci.* **4**: 341-348. [383]
- Bell, M. A. & P. Legendre. 1987. Multicharacter chronological clustering in a sequence of fossil sticklebacks. *Syst. Zool.* **36**: 52-61. [773]
- Bellchambers, L. M., J. J. Meeuwig, S. N. Evans & P. Legendre. 2011. Modelling habitat associations of the common spider conch in the Cocos (Keeling) Islands. *Mar. Ecol. Prog. Ser.* **432**: 83-90. [877]
- Bellehumeur, C. & P. Legendre. 1998. Multiscale sources of variation in ecological variables: modelling spatial dispersion, elaborating sampling designs. *Landscape Ecology* **13**: 15-25. [817, 818]
- Bellehumeur, C., P. Legendre & D. Marcotte. 1997. Variance and spatial scales in a tropical rain forest: changing the size of sampling units. *Plant Ecol.* **130**: 89-98. [812]
- Bendat, J. S. & A. G. Piersol. 1971. *Random data – Analysis and measurement procedures*. Wiley-Interscience, New York. xv + 407 pp. [754]
- Beninca, E., J. Huisman, R. Heerkloss, K. D. Jöhnk, P. Branco, E. H. Van Nes, M. Scheffer & S. P. Ellner. 2008. Chaos in a long-term experiment with a plankton community. *Nature* **451**: 822-828. [2]
- Benzécri, J. P. 1969. Statistical analysis as a tool to make patterns emerge from data. 35-60 in: S. Watanabe [ed.] *Methodologies of pattern recognition*. Academic Press, New York. [464]
- Benzécri, J. P. and coll. 1973. *L'analyse des données. Tome I: La taxinomie. Tome II: L'analyse des correspondances*. Dunod, Paris. viii + 615, vii + 619 pp. [428, 464, 477, 483]
- Bergmann, C. 1847. Ueber die Verhältnisse der Wärmeökonomie der Thiere zu ihrer Grösse. *Göttinger Studien* **3**: 595-708. [537]
- Bernstein, B. B. & J. Zalinski. 1983. An optimum sampling design and power tests for environmental biologists. *J. Environ. Manag.* **16**: 35-43. [267]
- Berryman, J. G. 1978. Choice of operator length for maximum entropy spectral analysis. *Geophysics* **43**: 1384-1391. [765]
- Bersier, L.-F. & D. Meyer. 1994. Bird assemblages in mosaic forests: the relative importance of vegetation structure and floristic composition along the successional gradient. *Acta Oecologica* **15**: 561-576. [855]
- Bertalanffy, L. 1968. *General system theory: foundations, development, applications*. Braziller, New York. xv + 289 pp. [221]
- Besag, J. & P. Clifford. 1989. Generalized Monte Carlo significance tests. *Biometrika* **76**: 633-642. [21]
- Beum, C. O. J. & E. G. Brundage. 1950. A method for analyzing the sociomatrix. *Sociometry* **13**: 141-145. [404]
- Bezdek, J. C. 1987. Some non-standard clustering algorithms. 225-287 in: P. Legendre & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI Series, Vol. G-14. Springer-Verlag, Berlin. [338, 423]
- Binet, D., M. Gaborit, A. Dessier & M. Roux. 1972. Premières données sur les copépodes pélagiques de la région congolaise. II. Analyse des correspondances. *Cah. O. R. S. T. O. M. Sér. Océanogr.* **10**: 125-137. [479]
- Birks, H. J. B. 1993. Is the hypothesis of survival on glacial nunataks necessary to explain the present-day distributions of Norwegian mountain plants? *Phytocoenologia* **23**: 399-426. [582, 583]

- Birks, H. J. B. 1996. Statistical approaches to interpreting diversity patterns in the Norwegian mountain flora. *Ecography* **19**: 332-340. [582, 583, 855]
- Birks, H. J. B. 2010. Numerical methods for the analysis of diatom assemblage data. 23-54 in: J. P. Smol & E. F. Stoermer [eds.] *The diatoms – Applications for the environmental and earth sciences. 2nd edition*. Cambridge University Press, New York. [672]
- Birks, H. J. B., H. A. Austin, N. E. Indrevaer, S. M. Peglar & C. Rygh. 1998. *An annotated bibliography of canonical correspondence analysis and related constrained ordination methods 1986-1996*. Available from H. J. B. Birks, Botanical Institute, University of Bergen, Allégaten 41, N-5007 Bergen, Norway. Also available from the WWW page http://numeralecology.com/cca_bib/. [629, 670]
- Birks, H. J. B., S. Juggins & J. M. Line. 1990a. Lake surface-water chemistry reconstructions from palaeolimnological data. 301-313 in: B. J. Mason [ed.] *The surface waters acidification programme*. Cambridge University Press, Cambridge. [671]
- Birks, H. J. B., J. M. Line, S. Juggins, A. C. Stevenson & C. J. F. ter Braak. 1990b. Diatoms and pH reconstruction. *Phil. Trans. R. Soc. Lond. B* **327**: 263-278. [672]
- Birks, H. J. B., A. F. Lotter, S. Juggins & J. P. Smol [eds.] 2012. *Tracking environmental change using lake sediments, Volume 5: Data handling and numerical techniques*. Springer, Dordrecht, The Netherlands. xi + 716 pp. [670]
- Bishop, Y. M. M., S. E. Fienberg & P. W. Holland. 1975. *Discrete multivariate analysis – Theory and practice*. MIT Press, Cambridge, Mass. x + 557 pp. [230, 235, 241, 244, 765]
- Bivand, R. 1980. A Monte Carlo study of correlation coefficient estimation with spatially autocorrelated observations. *Quaest. Geogr.* **6**: 5-10. [18]
- Bjorholm, S., J.-C. Svenning, F. Skov & H. Balslev. 2005. Environmental and spatial controls of palm (Arecaceae) species richness across the Americas. *Global Ecol. Biogeogr.* **14**: 423-429. [855]
- Bjørnstad, O. N. & W. Falck. 2001. Nonparametric spatial covariance functions: estimation and testing. *Environ. Ecol. Stat.* **8**: 53-70. [805]
- Bjørnstad, O. N., N. C. Stenseth & T. Saitoh. 1999. Synchrony and scaling in dynamics of voles and mice in northern Japan. *Ecology* **80**: 622-637. [805]
- Blackith, R. E. & F. O. Albrecht. 1959. Morphometric differences between the eye-stripe polymorphs of the red locust. *Scient. J. Roy. Coll. Sci.* **27**: 13-27. [695]
- Blackith, R. E. & R. A. Reyment. 1971. *Multivariate morphometrics*. Academic Press, London. ix + 412 pp. [695]
- Blanc, F., P. Chardy, A. Laurec & J.-P. Reys. 1976. Choix des métriques qualitatives en analyse d'inertie. Implications en écologie marine benthique. *Mar. Biol. (Berl.)* **35**: 49-67. [270]
- Blanchet, F. G., P. Legendre & D. Borcard. 2008a. Modelling directional spatial processes in ecological data. *Ecol. Model.* **215**: 325-336. [888, 892]
- Blanchet F. G., P. Legendre & D. Borcard. 2008b. Forward selection of explanatory variables. *Ecology* **89**: 2623-2632. [658]
- Blanchet, F. G., P. Legendre & D. Borcard. 2009. Erratum to “Modelling directional spatial processes in ecological data” [Ecological Modelling 215 (2008): 325-336]. *Ecol. Model.* **220**: 82-83. [888]
- Blanchet, F. G., P. Legendre, R. Maranger, D. Monti & P. Pepin. 2011. Modelling the effect of directional spatial ecological processes at different scales. *Oecologia* **166**: 357-368. [889, 890, 893]

- Blashfield, R. K. & M. S. Aldenderfer. 1978. The literature on cluster analysis. *Multivar. Behav. Res.* **13**: 271-295. [340]
- Bloom, S. A. 1981. Similarity indices in community studies: potential pitfalls. *Mar. Ecol. Prog. Ser.* **5**: 125-128. [312, 323]
- Bloomfield, P. 1976. *Fourier analysis of time series – An introduction*. Wiley, New York. xiii + 258 pp. [714]
- Bock, H. H. 1989. Probabilistic aspects in cluster analysis. 12-44 in: O. Opitz [ed.] *Conceptual and numerical analysis of data*. Springer-Verlag, Berlin. [415]
- Bock, H. H. 1996. Probability models and hypotheses testing in partitioning cluster analysis. 377-453 in: P. Arabie, L. J. Hubert & G. De Soete [eds.] *Clustering and Classification*. World Scientific Publ. Co., River Edge, New Jersey. [415]
- Boggs, P. T. & J. E. Rogers. 1990. Orthogonal distance regression. *Contemp. Math.* **112**: 183-194. [556]
- Boltzmann, L. 1898. *Vorlesungen über Gastheorie, Vol. II*. J. A. Barth, Leipzig. [222]
- Bonferroni, C. E. 1935. Il calcolo delle assicurazioni su gruppi di teste. 13-60 in: *Studi in onore del Professore Salvatore Ortu Carboni*. Roma. [23]
- Borcard, D. 1996. Typologie des assemblages d'espèces d'Oribates (Acari, Oribatei) de la tourbière du Cachot (Jura suisse): espèces indicatrices ou groupements caractéristiques? *Bull. Soc. Neuchâtel. Sci. Nat.* **119**: 63-73. [402]
- Borcard, D., W. Geiger & W. Matthey. 1995. Oribatid mite assemblages in a contact zone between a peat-bog and a meadow in the Swiss Jura (Acari, Oribatei): influence of landscape structures and historical processes. *Pedobiologia* **39**: 318-330. [849]
- Borcard, D., F. Gillet & P. Legendre. 2011. *Numerical ecology with R*. Use R! series, Springer Science, New York. xi + 306 pp. [xvi, 33, 217, 396, 403, 409, 423, 424, 566, 656, 658-660, 695, 703, 773, 858, 866, 887, 898, 900, 904]
- Borcard, D. & P. Legendre. 1994. Environmental control and spatial structure in ecological communities: an example using oribatid mites (Acari, Oribatei). *Environ. Ecol. Stat.* **1**: 37-53. [396, 658, 700, 815, 878, 879, 881, 898]
- Borcard, D. & P. Legendre. 2002. All-scale spatial analysis of ecological data by means of principal coordinates of neighbour matrices. *Ecol. Model.* **153**: 51-68. [861]
- Borcard, D. & P. Legendre. 2012. Is the Mantel correlogram powerful enough to be useful in ecological analysis? A simulation study. *Ecology* **93**: 1473-1481. [819]
- Borcard, D., P. Legendre, C. Avois-Jacquet & H. Tuomisto. 2004. Dissecting the spatial structure of ecological data at multiple scales. *Ecology* **85**: 1826-1832. [861, 866, 870, 877]
- Borcard, D., P. Legendre & P. Drapeau. 1992. Partialling out the spatial component of ecological variation. *Ecology* **73**: 1045-1055. [571, 658]
- Borcard, D. & C. Vaucher-von Ballmoos. 1997. Oribatid mites (Acari, Oribatida) of a primary peat bog-pasture transition in the Swiss Jura mountains. *Écoscience* **4**: 470-479. [402]
- Borgman, L. E. & W. F. Quimby. 1988. Sampling for tests of hypothesis when data are correlated in space and time. 25-43 in: L. H. Keith [ed.] *Principles of environmental sampling*. ACS Professional Reference Book. American Chemical Society. [21]
- Bos, A. (van den) 1971. Alternative interpretation of maximum entropy spectral analysis. *IEEE Trans. Inf. Theory* **17**: 493-494. [764, 765]
- Botta-Dukát, Z. 2005. Rao's quadratic entropy as a measure of functional diversity based on multiple traits. *J. Veg. Sci.* **16**: 533-540. [255]

- Boudoux, M. & C.-H. Ung. 1979. Applications de la régression pseudo-orthogonale en recherche forestière. *Biom-Praxim*. **19**: 59-89. [564]
- Boudreault, F. R., J. D. Dupont & C. Sylvain. 1977. Modèles linéaires de prédiction des débarquements de homard aux îles de la Madeleine (Golfe du Saint-Laurent). *J. Fish. Res. Board Can.* **34**: 379-383. [782]
- Bourbaki, N. 1960. *Éléments d'histoire des mathématiques*. Hermann, Paris. 277 pp. [59]
- Bourbeau, L., F. Ouellette & F. Pinard. 1984. *Le système BLOPS 2.0: un dictionnaire morphologique informatisé du français et sa logithèque*. Université de Montréal, Montréal. [228]
- Bourgault, G., D. Marcotte & P. Legendre. 1992. The multivariate (co)variogram as a spatial weighting function in classification methods. *Math. Geol.* **24**: 463-478. [843]
- Bowerman, B. L. & R. T. O'Connell. 1987. *Time series forecasting*. Duxbury Press, Boston. xi + 540 pp. [780]
- Box, G. E. P. & D. R. Cox. 1964. An analysis of transformations. *J. Roy. Statist. Soc. Ser. B* **26**: 211-243. [49]
- Box, G. E. P. & G. M. Jenkins. 1976. *Time series analysis – Forecasting and control. Revised edition*. Holden-Day, San Francisco. xxi + 575 pp. [20, 714, 780, 781]
- Bray, J. R. & J. T. Curtis. 1957. An ordination of the upland forest communities of southern Wisconsin. *Ecol. Monogr.* **27**: 325-349. [xii, 12, 311, 582, 669, 707, 785]
- Breiman, L., J. H. Friedman, R. A. Olshen & C. G. Stone. 1984. *Classification and regression trees*. Wadsworth International Group, Belmont, California. [406, 409]
- Brill, R., H. Christanson, G. F. Estabrook, H. S. Fleming, B. Handley, P. Legendre, F. Ouellette, D. J. Rogers & M. Wirth. 1972. *Program CHARANAL. User's manual*. H. S. Fleming & S. G. Appan [eds.] Gulf Universities Research Corp., NASA/Mississippi Test Facility, Bay St-Louis. [378]
- Brillinger, D. R. 1981. *Time series – Data analysis and theory. Expanded edition*. Holden-Day, San Francisco. xii + 540 pp. [714, 763]
- Brillouin, L. 1956. *Science and information theory*. Academic Press, New York. 320 pp. [228, 253]
- Brind'Amour, A., D. Boisclair, P. Legendre & D. Borcard. 2005. Multiscale spatial distribution of a littoral fish community in relation to environmental variables. *Limnol. Oceanogr.* **50**: 465-479. [876, 877]
- Brock, G., V. Pihur, S. Datta & S. Datta. 2008. clValid: an R package for cluster validation. *J. Stat. Softw.* **25**(4). <http://www.jstatsoft.org/v25/i04>. [418, 424]
- Bronson, R. 2011. *Schaum's outline of matrix operations. 2nd edition*. McGraw-Hill, New York. 240 pp. [59]
- Brown, B. M. & J. S. Maritz. 1982. Distribution-free methods in regression. *Aust. J. Stat.* **24**: 318-331. [31]
- Brown, M. B. 1976. Screening effects in multidimensional contingency tables. *Appl. Statist.* **25**: 37-46. [240]
- Brown, T. A. 2006. *Confirmatory factor analysis for applied research*. Guilford, New York. xviii + 475 pp. [535]
- Buckingham, E. 1914. On physically similar systems; illustrations of the use of dimensional equations. *Phys. Rev. (2nd series)* **4**: 345-376. [117]

- Burbidge, A. A., N. L. McKenzie, K. E. C. Brennan, J. C. Z. Woinarski, C. R. Dickman, A. Baynes, G. Gordon, P. W. Menkhorst & A. C. Robinson. 2008. Conservation status and biogeography of Australia's terrestrial mammals. *Aust. J. Zool.* **56**: 411-422. [855]
- Burg, J. P. 1967. *Maximum entropy spectral analysis*. Paper presented at the 37th Annual Meeting of Exploration Geophysics, October 31, Oklahoma City, Okla. [764, 765]
- Burgman, M. A. 1987. An analysis of the distribution of plants on granite outcrops in southern Western Australia using Mantel tests. *Vegetatio* **71**: 79-86. [601]
- Burgman, M. A. 1988. Spatial analysis of vegetation patterns in southern Western Australia: implications for reserve design. *Aust. J. Ecol.* **13**: 415-429. [601]
- Burnham, K. P. & D. R. Anderson. 2002. *Model selection and multimodel inference: a practical information-theoretic approach*. 2nd edition. Springer-Verlag, New York. xxvi + 488 pp. [567]
- Burt, C. 1952. Tests of significance in factor analysis. *Brit. J. Psychol. Stat. Sect.* **5**: 109-133. [448]
- Buttler, A., B. G. Warner, P. Grosvernier & Y. Matthey. 1996. Vertical patterns of testate amoebae (Protozoa: Rhizopoda) and peat-forming vegetation on cutover bogs in the Jura, Switzerland. *New Phytol.* **134**: 371-382. [855]
- Cadoret, L., P. Legendre, M. Adjeroud & R. Galzin. 1995. Répartition spatiale des Chaetodontidae dans différents secteurs récifaux de l'île de Moorea, Polynésie française. *Écoscience* **2**: 129-140. [487, 489, 670, 671]
- Cailliez, F. 1983. The analytical solution of the additive constant problem. *Psychometrika* **48**: 305-308. [503]
- Cailliez, F. & J.-P. Pagès. 1976. *Introduction à l'analyse des données*. Société de Mathématiques appliquées et de Sciences humaines, Paris. xxii + 616 pp. [39, 269, 505, 506]
- Cain, A. J. & G. A. Harrison. 1958. An analysis of the taxonomist's judgement of affinity. *Proc. Zool. Soc. Lond.* **131**: 85-98. [44]
- Calinski, T. & J. Harabasz. 1974. A dendrite method for cluster analysis. *Commun. Stat.* **3**: 1-27. [389]
- Campbell, D. J. & E. Shipp. 1974. Spectral analysis of cyclic behaviour with examples from the field cricket *Teleogryllus commodus* (Walk.). *Anim. Behav.* **22**: 862-875. [758]
- Campbell, V., P. Legendre & F.-J. Lapointe. 2009. Assessing congruence among ultrametric distance matrices. *J. Classif.* **26**: 103-117. [218]
- Campbell, V., P. Legendre & F.-J. Lapointe. 2011. The performance of the Congruence Among Distance Matrices (CADM) test in phylogenetic analysis. *BMC Evol. Biol.* **11**: 64. <http://www.biomedcentral.com/1471-2148/11/64>. [218]
- Carlier, A. & P. M. Kroonenberg. 1996. Decompositions and biplots in three-way correspondence analysis. *Psychometrika* **61**: 355-373. [269]
- Carpenter, S. R. & J. E. Chaney. 1983. Scale of spatial pattern: four methods compared. *Vegetatio* **53**: 153-160. [789]
- Carroll, J. D. 1987. Some multidimensional scaling and related procedures devised at Bell Laboratories, with ecological applications. 65-138 in: P. Legendre & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI Series, Vol. G-14. Springer-Verlag, Berlin. [512, 516]
- Casgrain, P., P. Legendre, J.-L. Sixou & C. Mouton. 1996. A graph-theory method to establish serological relationships within a bacterial taxon, with example from *Porphyromonas gingivalis*. *J. Microbiol. Methods* **26**: 225-236. [68]

- Cassie, R. M. & A. D. Michael. 1968. Fauna and sediments of an intertidal mud flat: a multivariate analysis. *J. Exp. Mar. Biol. Ecol.* **2**: 1-23. [450]
- Cattaneo, A., P. Legendre & T. Niyonsenga. 1993. Exploring periphyton unpredictability. *J. North Am. Benthol. Soc.* **12**: 418-430. [855]
- Cattell, R. B. 1952. *Factor analysis — An introduction and manual for the psychologist and social scientist*. Harper, New York. 462 pp. [266]
- Cattell, R. B. 1966. The data box: its ordering of total resources in terms of possible relational systems. 67-128 in: R. B. Cattell [ed.] *Handbook of multivariate experimental psychology*. Rand McNally & Co., Chicago. [266, 267]
- Cavalli-Sforza, L. L. & A. W. F. Edwards. 1967. Phylogenetic analysis: models and estimation procedures. *Evolution* **21**: 550-570. [301, 346]
- Cazelles, B., M. Chavez, D. Berteaux, F. Ménard, J. O. Vik, S. Jenouvrier & N. C. Stenseth. 2008. Wavelet analysis of ecological time series. *Oecologia* **156**: 287-304. [766, 767]
- Cazelles, B. & S. Hales. 2006. Infectious diseases, climate influences and nonstationarity. *PLoS Med.* **3**: 1212-1213 (e328). [767]
- Chalmond, B. 1986. Régression avec résidus spatialement autocorrélés et recherche de la tendance spatiale. *Statist. Anal. Données* **11**: 1-25. [18]
- Chambers, J. M. 1977. *Computational methods for data analysis*. Wiley, New York. xi + 268 pp. [589]
- Chambers, J. M., W. S. Cleveland, B. Kleiner & P. A. Tukey. 1983. *Graphical methods for data analysis*. Wadsworth International Group, Belmont, California. xiv + 395 pp. [591]
- Chambers, J. M. & B. Kleiner. 1982. Graphical techniques for multivariate data and for clustering. 209-244 in: P. R. Krishnaiah & L. N. Kanal [eds.] *Handbook of statistics. Vol. 2*. North-Holland Publ. Co., Amsterdam. [418]
- Chao, A., R. L. Chazdon, R. K. Colwell & T.-J. Shen. 2005. A new statistical approach for assessing similarity of species composition with incidence and abundance data. *Ecol. Lett.* **8**: 148-159. [284, 285]
- Chase, J. M., N. J. B. Kraft, K. G. Smith, M. Vellend & B. D. Inouye. 2011. Using null models to disentangle variation in community dissimilarity from variation in α -diversity. *Ecosphere* **2**: art24. doi:10.1890/ES10-00117.1. [294]
- Chatfield, C. 1989. *The analysis of time series. 4th edition*. Chapman & Hall, London. xiii + 241 pp. [714]
- Cheetham, A. H. & J. E. Hazel. 1969. Binary (presence-absence) similarity coefficients. *J. Paleontol.* **43**: 1130-1136. [270]
- Chipman, J. S. 1979. Efficiency of least squares estimation of linear trend when residuals are autocorrelated. *Econometrica* **47**: 115-128. [20]
- Chodorowski, A. 1959. Ecological differentiation of turbellarians in Harsz-Lake. *Pol. Arch. Hydrobiol.* **6**: 33-73. [249]
- Cicéri, M.-F., B. Marchand & S. Rimbert. 1977. *Introduction à l'analyse de l'espace*. Collection de Géographie applicable. Masson, Paris. ix + 173 pp. [789]
- Clark, I. 1979. *Practical geostatistics*. Elsevier Applied Sciences, London. xii + 129 pp. [831]
- Clark, P. J. 1952. An extension of the coefficient of divergence for use with multiple characters. *Copeia* **1952**: 61-64. [306]

- Clarke, K. R. 1988. Detecting change in benthic community structure. 131-142 in: R. Oger [ed.] *Proceedings of invited papers, fourteenth international biometric conference, Namur, Belgium*. Société Adolphe Quételet, Gembloux, Belgium. [608–610]
- Clarke, K. R. 1993. Non-parametric multivariate analyses of changes in community structure. *Aust. J. Ecol.* **18**: 117-143. [608–610]
- Clarke, K. R. & R. M. Warwick. 1994. *Change in marine communities – An approach to statistical analysis and interpretation*. Plymouth Marine Laboratory, Plymouth. 144 pp. [609, 610]
- Cleveland, W. S. 1979. Robust locally weighted regression and smoothing scatterplots. *J. Amer. Statist. Assoc.* **74**: 829-836. [590]
- Cleveland, W. S. 1985. *The elements of graphing data*. Wadsworth, Monterey, California. xii + 323 pp. [591]
- Cliff, A. D. & J. K. Ord. 1973. *Spatial autocorrelation*. Pion, London. 178 pp. [20]
- Cliff, A. D. & J. K. Ord. 1975. The comparison of means when samples consist of spatially autocorrelated observations. *Environment and Planning A* **7**: 725-734. [18]
- Cliff, A. D. & J. K. Ord. 1981. *Spatial processes – Models and applications*. Pion, London. 266 pp. [12, 15, 18, 20, 790, 792, 793, 797-800, 804, 834]
- Clifford, H. T. & D. W. Goodall. 1967. A numerical contribution to the classification of the Poaceae. *Aust. J. Bot.* **15**: 499-519. [349]
- Clifford, H. T. & W. Stephenson. 1975. *An introduction to numerical classification*. Academic Press, New York. xii + 229 pp. [270]
- Clifford, P., S. Richardson & D. Hémon. 1989. Assessing the significance of the correlation between two spatial processes. *Biometrics* **45**: 123-134. [18, 20]
- Clint, M. & A. Jennings. 1970. The evaluation of eigenvalues and eigenvectors of real symmetric matrices by simultaneous iteration. *Computer J.* **13**: 76-80. [456, 479]
- Clua, E., N. Buray, P. Legendre, J. Mourier & S. Planes. 2010. Behavioural response of sicklefin lemon sharks *Negaprion acutidens* to underwater feeding for ecotourism purposes. *Mar. Ecol. Prog. Ser.* **414**: 257-266. [318]
- Cochran, W. G. 1954. Some methods for strengthening the common χ^2 tests. *Biometrics* **10**: 417-451. [230]
- Cochran, W. G. 1977. *Sampling techniques. 3rd edition*. Wiley, New York. [21, 241]
- Cochrane, D. & G. H. Orcutt. 1949. Application of least squares regression to relationships containing autocorrelated error terms. *J. Amer. Statist. Assoc.* **44**: 32-61. [20]
- Cohen, J. 1988. *Statistical power analysis for the behavioral sciences. 2nd edition*. Lawrence Erlbaum Assoc., Publ., Hillsdale, New Jersey. xxi + 567 pp. [804]
- Cole, L. C. 1949. The measurement of interspecific association. *Ecology* **30**: 411-424. [270]
- Cole, L. C. 1957. The measurement of partial interspecific association. *Ecology* **38**: 226-233. [270]
- Colebrook, J. M. & A. H. Taylor. 1984. Significant time scale of long-term variability in the plankton and the environment. *Rapp. P.-V. Réun. Cons. Int. Explor. Mer.* **183**: 20-26. [766]
- Coleman, J. S. 1964. *Introduction to mathematical sociology*. The Free Press of Glencoe, Collier-Macmillan Ltd., New York. xiv + 554 pp. [68]
- Colwell, R. K. 1974. Predictability, constancy and contingency of periodic phenomena. *Ecology* **55**: 1148-1153. [744]

- Conover, W. J. 1980. *Practical nonparametric statistics*. 2nd edition. Wiley, New York. xiv + 493 pp. [584]
- Cook, D. G. & S. J. Pocock. 1983. Multiple regression in geographical mortality studies, with allowance for spatially correlated errors. *Biometrics* **39**: 361-371. [20]
- Cordier, B. 1965. *Sur l'analyse factorielle des correspondances*. Thèse de doctorat, Université de Rennes, France. [465]
- Couteron, P. & S. Ollier, S. 2005. A generalized, variogram-based framework for multi-scale ordination. *Ecology* **86**: 828-834. [894]
- Cox, D. R. 1957. Note on grouping. *J. Amer. Statist. Assoc.* **52**: 543-547. [241]
- Cramér, H. 1946. *Mathematical methods of statistics*. Princeton Univ. Press. xvi + 575 pp. [1]
- Crawley, M. J. 2007. *The R book*. Wiley, Chichester. viii + 942 pp. [33]
- Cressie, N. A. C. 1991. *Statistics for spatial data*. Wiley, New York. xx + 900 pp. [810, 832]
- Cressie, N. A. C. & C. K. Wikle. 2011. *Statistics for spatio-temporal data*. Wiley Series in Probability and Statistics. John Wiley & Sons, Hoboken, New Jersey. xxii + 588 pp. [901]
- Crowder, M. J. & D. J. Hand. 1990. *Analysis of repeated measures*. Chapman and Hall, London. [18]
- Cryer, J. D. 1986. *Time series analysis*. PWS-Kent Pub. Co., Boston. xi + 286 pp. [780]
- Cullis, B. R. & A. C. Gleeson. 1991. Spatial analysis of field experiments. An extension to two dimensions. *Biometrics* **47**: 1449-1460. [20]
- Czekanowski, J. 1909. Zur Differentialdiagnose der Neandertalgruppe. *Korrespondenz-Blatt deutsch. Ges. Anthropol. Ethnol. Urgesch.* **40**: 44-47. [xv, 285, 304, 403]
- Czekanowski, J. 1913. *Zarys metod statystycznych w zastosowaniu do antropologii*. Travaux de la Société des Sciences de Varsovie. III. Classe des sciences mathématiques et naturelles, no. 5. iv + 228 pp. [xv, 276, 285]
- Daget, J. 1976. *Les modèles mathématiques en écologie*. Collection d'Écologie, No. 8. Masson, Paris. viii + 172 pp. [270]
- Daget, P. 1980. Le nombre de diversité de Hill, un concept unificateur dans la théorie de la diversité écologique. *Acta Oecol. Oecol. Gen.* **1**: 51-70. [253, 255]
- Dagnelie, P. 1960. Contribution à l'étude des communautés végétales par l'analyse factorielle. *Bull. Serv. Carte phytogéogr. B* **5**: 7-71, 93-195. [xii, 270]
- Dagnelie, P. 1965. L'étude des communautés végétales par l'analyse statistique des liaisons entre les espèces et les variables écologiques: principes fondamentaux. *Biometrics* **21**: 345-361. [xii]
- Dagnelie, P. 1975. *L'analyse statistique à plusieurs variables*. Les Presses agronomiques de Gembloux, Gembloux (Belgique). 362 pp. [193]
- D'Agostino, R. B. 1971. An omnibus test of normality for moderate and large sample sizes. *Biometrika* **58**: 341-348. [191]
- D'Agostino, R. B. 1972. Small sample probability points for the *D* test of normality. *Biometrika* **59**: 219-221. [191]
- D'Agostino, R. B. 1982. Departures from normality, tests for. 315-324 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 2. Wiley, New York. [187, 188, 191]
- Dale, M. R. T. 1999. *Spatial pattern analysis in plant ecology*. Cambridge University Press, Cambridge. x + 326 pp. [790]

- Dale, M. R. T. & M.-J. Fortin. 2010. From graphs to spatial graphs. *Annu. Rev. Ecol. Evol. Syst.* **41**: 21-38. [884, 886]
- Dale, M. R. T. & M. Mah. 1998 The use of wavelets for spatial pattern analysis in ecology. *J. Veg. Sci.* **9**: 805-814. [767]
- Damsleth, E. & E. Spjøtvoll. 1982. Estimation of trigonometric components in time series. *J. Amer. Statist. Assoc.* **77**: 381-387. [752]
- d'Aubigny, G. 2006. Dépendance spatiale et autocorrélation. 17-45 in: J.-J. Droesbeke, M. Lejeune & G. Saporta [eds.] *Analyse statistique de données spatiales*. Éditions TECHNIP, Paris. [793]
- David, M. 1977. *Geostatistical ore reserve estimation*. Developments in Geomathematics, 2. Elsevier Scient. Publ. Co., Amsterdam. xix + 364 pp. [21, 797, 810, 812, 831]
- Davies, P. T. & M. K.-S. Tso. 1982. Procedures for reduced-rank regression. *Appl. Statist.* **31**: 244-255. [649]
- Davis, A. W. 1978. On the asymptotic distribution of Gower's m^2 goodness-of-fit criterion in a particular case. *Ann. Inst. Statist. Math. Part A* **30**: 71-79. [704]
- Davis, L. S. 1975. A survey of edge detection techniques. *Computer Graphics Image Process* **4**: 248-270. [844]
- Day, W. H. E. 1977. Validity of clusters formed by graph-theoretic cluster methods. *Math. Biosci.* **36**: 299-317. [393, 411]
- Day, W. H. E. 1983. Distribution of distances between pairs of classifications. 127-131 in: J. Felsenstein [ed.] *Numerical taxonomy*. NATO ASI Series, Vol. G-1. Springer-Verlag, Berlin. [529]
- Day, W. H. E. 1986. Analysis of quartet dissimilarity measures between undirected phylogenetic trees. *Syst. Zool.* **35**: 325-333. [529]
- De'ath, G. 2002. Multivariate regression trees: a new technique for modeling species-environment relationships. *Ecology* **83**: 1105-1117. [406, 410, 411, 660]
- de Boor, C. 1978. *A practical guide to splines*. Springer-Verlag, Berlin. xxiv + 392 pp. [589]
- De Cáceres, M. & P. Legendre. 2008. Beals smoothing revisited. *Oecologia* **156**: 657-669. [334].
- De Cáceres, M. & P. Legendre. 2009. Associations between species and groups of sites: indices and statistical inference. *Ecology* **90**: 3566-3574. [399, 424]
- De Cáceres, M., P. Legendre & M. Moretti. 2010. Improving indicator species analysis by combining groups of sites. *Oikos* **119**: 1674-1684. [399, 402]
- Declerck, S. A. J., J. S. Coronel, P. Legendre & L. Brendonck. 2011. Scale dependency of processes structuring metacommunities of cladocerans in temporary pools of High-Andes wetlands. *Ecography* **34**: 296-305. [864, 877]
- de Fraga, R., A. P. Lima & W. E. Magnusson. 2011. Mesoscale spatial ecology of tropical snake assemblage: the width of riparian corridors in central Amazonia. *Herpetol. J.* **21**: 51-57. [519]
- de Gruijter, J. J., D. J. Brus, M. F. P. Bierkens & M. Kotters. 2006. *Sampling for natural resource monitoring*. Springer-Verlag, Berlin. xiv + 332 pp. [6]
- de Gruijter, J. J. & C. J. F. ter Braak. 1990. Model-free estimation from spatial samples: a reappraisal of classical sampling theory. *Math. Geol.* **22**: 407-415. [6]
- De Neufville, R. & J. H. Stafford. 1971. *Systems analysis for engineers and managers*. McGraw-Hill, New York. xiii + 353 pp. [182]

- De Soete, G., J. D. Carroll & W. S. DeSarbo. 1987. Least squares algorithms for constructing constrained ultrametric and additive tree representations of symmetric proximity data. *J. Classif.* **4**: 155-173. [842, 843]
- Deevey, E. S. 1969. Coaxing history to conduct experiments. *BioScience* **19**: 40-43. [249]
- Demers, S., P. E. Lafleur, L. Legendre & C. L. Trump. 1979. Short-term covariability of chlorophyll and temperature in the St. Lawrence Estuary. *J. Fish. Res. Board Can.* **36**: 568-573. [757]
- Demers, S. & L. Legendre. 1981. Mélange vertical et capacité photosynthétique du phytoplancton estuarien (estuaire du Saint-Laurent). *Mar. Biol. (Berl.)* **64**: 243-250. [750]
- Denman, K. L. 1976. Covariability of chlorophyll and temperature in the sea. *Deep-Sea Res.* **23**: 539-550. [757]
- Denman, K. L. 1977. Short-term variability in vertical chlorophyll structure. *Limnol. Oceanogr.* **22**: 434-441. [757]
- Denman, K. L., A. Okubo & T. Platt. 1977. The chlorophyll fluctuation spectrum in the sea. *Limnol. Oceanogr.* **22**: 1033-1038. [757]
- Denman, K. L. & T. Platt. 1975. Coherences in the horizontal distributions of phytoplankton and temperature in the upper ocean. *Mém. Soc. R. Sci. Liège, Ser. 6*, **7**: 19-30. [757, 761, 762]
- Denman, K. L. & T. Platt. 1976. The variance spectrum of phytoplankton in a turbulent ocean. *J. Mar. Res.* **34**: 593-601. [757]
- Dessier, A. & A. Laurec. 1978. Le cycle annuel du zooplancton à Pointe-Noire (RP Congo). Description mathématique. *Oceanol. Acta* **1**: 285-304. [768]
- Deutsch, C. V. & A. G. Journel. 1992. *GSLIB – Geostatistical software library and user's guide*. Oxford University Press, New York. [832, 852, 854, 857]
- Dévaux, J. & G. Millerioux. 1976a. Possibilité de l'utilisation de la cotation d'abondance de Frontier (1969) pour l'analyse multivariable des populations phytoplanctoniques. *C. R. Hebd. Séances Acad. Sci., Sér. D Sci. Nat.* **283**: 41-44. [36, 451]
- Dévaux, J. & G. Millerioux. 1976b. Méthode d'estimation de la biomasse totale du phytoplancton à partir des nombres de cellules, issus d'une cotation d'abondance. *C. R. Hebd. Séances Acad. Sci., Sér. D Sci. Nat.* **283**: 927-930. [36]
- Dévaux, J. & G. Millerioux. 1977. Sur la possibilité d'un calcul de la diversité spécifique de populations phytoplanctoniques à partir de dénombrements issus d'une cotation d'abondance. *C. R. Hebd. Séances Acad. Sci., Sér. D Sci. Nat.* **284**: 1569-1571. [36, 199]
- Dice, L. R. 1945. Measures of the amount of ecologic association between species. *Ecology* **26**: 297-302. [276, 317]
- Dickman, M. 1968. Some indices of diversity. *Ecology* **49**: 1191-1193. [250]
- Dietz, E. J. 1983. Permutation tests for association between two distance matrices. *Syst. Zool.* **32**: 21-26. [598, 600]
- Digby, P. G. N. & R. A. Kempton. 1987. *Multivariate analysis of ecological communities*. Chapman & Hall, London. viii + 206. pp. [68]
- Diggle, P. J. 1990. *Time series – A biostatistical introduction*. Oxford University Press, New York. xi + 257 pp. [714]
- Dirichlet, G. L. 1850. Über die Reduktion der positiven quadratischen Formen mit drei unbestimmten ganzen Zahlen. *Journal für die reine und angewandte Mathematik* **40**: 209-234. [835, 839]

- Dixon, W. J. [ed.] 1981. *BMDP statistical software 1981*. Univ. California Press, Berkeley. x + 725 pp. [230, 231, 240, 241]
- Dolédéc, S. & D. Chessel. 1994. Co-inertia analysis: an alternative method for studying species-environment relationships. *Freshwater Biol.* **31**: 277-294. [696]
- Dolédéc, S., D. Chessel, C. J. F. ter Braak & S. Champely. 1996. Matching species traits to environmental variables: a new three-table ordination method. *Environ. Ecol. Stat.* **3**: 143-166. [614, 617, 619]
- Downing, J. A. 1979. Aggregation, transformation, and the design of benthos sampling programs. *J. Fish. Res. Board Can.* **36**: 1454-1463. [50]
- Draper, N. & H. Smith. 1981. *Applied regression analysis. 2nd edition*. Wiley, New York. xiv + 709 pp. [538, 568, 826]
- Dray, S. 2010. *Moran's eigenvectors of spatial weighting matrices in R*. Tutorial included in R package SPACEMAKER. <http://R-Forge.R-project.org/projects/sedar/> [885, 887]
- Dray, S., D. Chessel & J. Thioulouse. 2003. Co-inertia analysis and the linking of the ecological data tables. *Ecology* **84**: 3078-3089. [696, 702]
- Dray, S. & P. Legendre. 2008. Testing the species traits-environment relationships: the fourth-corner problem revisited. *Ecology* **89**: 3400-3412. [613, 616-620]
- Dray, S., P. Legendre & P. R. Peres-Neto. 2006. Spatial modelling: a comprehensive framework for principal coordinate analysis of neighbour matrices (PCNM). *Ecol. Model.* **196**: 483-493. [863, 881, 883, 885, 886]
- Dray, S., R. Pélissier, P. Couteron, M.-J. Fortin, P. Legendre, P. R. Peres-Neto, E. Bellier, R. Bivand, F. G. Blanchet, M. De Cáceres, A.-B. Dufour, E. Heegaard, T. Jombart, F. Munoz, J. Oksanen, J. Thioulouse & H. H. Wagner. 2012. Community ecology in the age of multivariate multiscale spatial analysis. *Ecol. Monogr.* **82**: (in press). [9, 11]
- Dufrêne, M. & P. Legendre. 1991. Geographic structure and potential ecological factors in Belgium. *J. Biogeogr.* **18**: 257-266. [846]
- Dufrêne, M. & P. Legendre. 1997. Species assemblages and indicator species: the need for a flexible asymmetrical approach. *Ecological Monographs* **67**: 345-366. [398-401]
- Dungan, J. L., J. N. Perry, M. R. T. Dale, P. Legendre, S. Citron-Pousty, M.-J. Fortin, A. Jakomulka, M. Miriti & M. S. Rosenberg. 2002. A balanced view of scaling in spatial statistical analysis. *Ecography* **25**: 626-640. [786, 787]
- Dutilleul, P. 1990. *Apport en analyse spectrale d'un périodogramme modifié et modélisation des séries chronologiques avec répétitions en vue de leur comparaison en fréquence*. Doctoral Dissertation, Univ. Cath. Louvain, Louvain-la-Neuve, Belgium. vi + 304 pp. [751, 752]
- Dutilleul, P. 1993a. Modifying the *t* test for assessing the correlation between two spatial processes. *Biometrics* **49**: 305-314. [18, 20]
- Dutilleul, P. 1993b. Spatial heterogeneity and the design of ecological field experiments. *Ecology* **74**: 1646-1658. [21, 790]
- Dutilleul, P. 1998. Incorporating scale in ecological experiments: data analysis. 387-425 in: D. L. Peterson & V. T. Parker [eds.] *Ecological scale – Theory and applications*. Columbia University Press, New York. [752]
- Dutilleul, P. R. L. 2011. *Spatio-temporal heterogeneity – Concepts and analyses*. Cambridge University Press, Cambridge. xxii + 393 pp. [22, 714, 734, 752, 753, 759, 788, 791, 797]
- Dutilleul, P. & P. Legendre. 1992. Lack of robustness in two tests of normality against autocorrelation in sample data. *J. Statist. Comput. Simulation* **42**: 79-91. [18, 187, 191]

- Dutilleul, P. & P. Legendre. 1993. Spatial heterogeneity against heteroscedasticity: an ecological paradigm versus a statistical concept. *Oikos* **66**: 152-171. [22, 788-790]
- Dutilleul, P., J. D. Stockwell, D. Frigon & P. Legendre. 2000. The Mantel test versus Pearson's correlation analysis: assessment of the differences for biological and environmental studies. *J. Agr. Biol. Envir. S.* **5**: 131-150. [603]
- Dutilleul, P. & C. Till. 1992. Evidence of periodicities related to climate and planetary behaviors in ring-width chronologies of Atlas cedar (*Cedrus atlantica*) in Morocco. *Can. J. For. Res.* **22**: 1469-1482. [752]
- Eckart, C. & G. Young. 1936. The approximation of one matrix by another of lower rank. *Psychometrika* **1**: 211-218. [103]
- Edgington, E. S. 1995. *Randomization tests*. 3rd edition. Marcel Dekker, Inc., New York. xxii + 409 pp. [25-27, 30, 31]
- Edwards, A. L. 1948. Note on the "correction for continuity" in testing the significance of the difference between correlated proportions. *Psychometrika* **13**: 185-187. [848]
- Edwards, A. W. F. & L. L. Cavalli-Sforza. 1965. A method for cluster analysis. *Biometrics* **21**: 362-375. [379]
- Efron, B. 1975. The efficiency of logistic regression compared to normal discriminant analysis. *J. Amer. Statist. Assoc.* **70**: 892-898. [708]
- Efron, B. 1979. Bootstrap methods: another look at the jackknife. *Ann. Stat.* **7**: 1-26. [31]
- Efron, B. & R. J. Tibshirani. 1993. *An introduction to the bootstrap*. Chapman & Hall, New York. xvi + 436 pp. [31]
- Eisner, F. 1931. Das Widerstands Problem. in: *3ième Congrès international de Mécanique appliquée*, Stockholm. [118]
- Enright, J. T. 1965. The search for rhythmicity in biological time-series. *J. Theor. Biol.* **8**: 426-468. [740-743]
- Escofier, B. & J. Pagès. 1994. Multiple factor analysis (AFMULT package). *Comput. Stat. Data An.* **18**: 121-140. [703]
- Escofier-Cordier, B. 1969. L'analyse factorielle des correspondances. *Cah. Bur. Univ. Rech. Opér. Univ. Paris* **13**: 25-59. [464, 465]
- Escoufier, Y. 1973. Le traitement des variables vectorielles. *Biometrics* **29**: 751-760. [699]
- Estabrook, G. F. 1966. A mathematical model in graph theory for biological classification. *J. Theor. Biol.* **12**: 297-310. [344, 411, 412]
- Estabrook, G. F. & B. Gates. 1984. Character analysis of the *Banisteriopsis campestris* complex (Malpighiaceae), using spatial autocorrelation. *Taxon* **33**: 13-25. [800]
- Estabrook, G. F. & D. J. Rogers. 1966. A general method of taxonomic description for a computed similarity measure. *BioScience* **16**: 789-793. [280-282]
- Eubank, R. L. 1988. *Spline smoothing and nonparametric regression*. Marcel Dekker, New York. xvii + 438 pp. [589]
- Everitt, B. S. 1977. *The analysis of contingency tables*. Chapman and Hall, London. 128 pp. [245]
- Everitt, B. S. 1980. *Cluster Analysis*. 2nd edition. Halsted Press, New York. 136 pp. [366, 386]
- Ezekiel, M. 1930. *Methods of correlation analysis*. John Wiley and Sons, New York. 427 pp. [565, 566, 633]

- Fager, E. W. 1957. Determination and analysis of recurrent groups. *Ecology* **38**: 586-595. [316, 318, 392, 393]
- Fager, E. W. & J. A. McGowan. 1963. Zooplankton species groups in the North Pacific. *Science (Wash. D. C.)* **140**: 453-460. [318, 392, 393]
- Faith, D. P. 1983. Asymmetric binary similarity measures. *Oecologia (Berl.)* **57**: 287-290. [277, 297]
- Faith, D. P., P. R. Minchin & L. Belbin. 1987. Compositional dissimilarity as a robust measure of ecological distance. *Vegetatio* **69**: 57-68. [332, 512, 516]
- Falconer, D. S. 1960. *Introduction to quantitative genetics*. Ronald Press Inc., New York. ix + 365 pp. [34]
- Fasham, M. J. R. 1977. A comparison of nonmetric multidimensional scaling, principal component and reciprocal averaging for the ordination of simulated coenoclines and coenoplanes. *Ecology* **58**: 551-561. [519]
- Fausett, L. 1994. *Fundamentals of neural networks – Architectures, algorithms and applications*. Prentice Hall, Englewood Cliffs, New Jersey. xvi + 461 pp. [423]
- Fedriani, J. M., T. K. Fuller & R. M. Sauvajot. 2001. Does availability of anthropogenic food enhance densities of omnivorous mammals? An example with coyotes in southern California. *Ecography* **24**: 325-331. [243]
- Ferligoj, A. & V. Batagelj. 1982. Clustering with relational constraint. *Psychometrika* **47**: 413-426. [842, 843]
- Ferligoj, A. & V. Batagelj. 1983. Some types of clustering with relational constraints. *Psychometrika* **48**: 541-552. [843]
- Ferriere, R., B. Cazelles, F. Cezilly & J.-P. Desportes. 1996. Predictability and chaos in bird vigilant behaviour. *Anim. Behav.* **52**: 457-472. [2]
- Field, J. G. 1969. The use of the information statistic in the numerical classification of heterogeneous systems. *J. Ecol.* **57**: 565-569. [375]
- Field, J. G., K. R. Clarke & R. M. Warwick. 1982. A practical strategy for analysing multispecies distribution patterns. *Mar. Ecol. Prog. Ser.* **8**: 37-52. [523]
- Field, J. G. & F. T. Robb. 1970. Numerical methods in marine ecology. 2. Gradient analysis of rocky shore samples from False Bay. *Zool. Afr.* **5**: 191-210. [509, 510]
- Fienberg, S. E. 1970. The analysis of multidimensional contingency tables. *Ecology* **51**: 419-433. [243]
- Fienberg, S. E. 1980. *The analysis of cross-classified categorical data. 2nd edition*. MIT Press, Cambridge, Mass. xiv + 198 pp. [230, 235, 240-242, 536]
- Fingerut, J. T., C. A. Zimmer & R. K. Zimmer. 2003. Larval swimming overpowers turbulent mixing and facilitates transmission of a marine parasite. *Ecology* **84**: 2502-2515. [243]
- Finn, J. D. 1974. *A general model for multivariate analysis*. Holt, Rinehart and Winston, New York. xiii + 423 pp. [556]
- Fisher, R. A. 1935. *The design of experiments*. Oliver and Boyd, Edinburgh. 252 pp. [25]
- Fisher, R. A. 1936. The use of multiple measurements in taxonomic problems. *Annals of Eugenics* **7**: 179-188. [674]
- Fisher, R. A. 1940. The precision of discriminant functions. *Annals of Eugenics* **10**: 422-429. [464]

- Fisher, R. A. 1954. *Statistical methods for research workers*. 12th edition. Oliver & Boyd, Edinburgh. 356 pp. [23, 27]
- Fisher, R. A., A. S. Corbet & C. B. Williams. 1943. The relation between the number of species and the number of individuals in a random sample of an animal population. *J. Anim. Ecol.* **12**: 42-58. [258]
- Fisher, W. D. 1958. On grouping for maximum homogeneity. *J. Amer. Statist. Assoc.* **53**: 789-798. [383, 769]
- Ford, E. D. 1976. The canopy of a Scots pine forest: description of a surface of complex roughness. *Agric. Meteorol.* **17**: 9-32. [807]
- Fortier, L. & L. Legendre. 1979. Le contrôle de la variabilité à court terme du phytoplancton estuarien: stabilité verticale et profondeur critique. *J. Fish. Res. Board Can.* **36**: 1325-1335. [737]
- Fortier, L., L. Legendre, A. Cardinal & C. L. Trump. 1978. Variabilité à court terme du phytoplancton de l'estuaire du Saint-Laurent. *Mar. Biol. (Berl.)* **46**: 349-354. [723]
- Fortin, M.-J. 1994. Edge detection algorithms for two-dimensional ecological data. *Ecology* **75**: 956-965. [844-846]
- Fortin, M.-J. 1997. Effects of data types on vegetation boundary delineation. *Can. J. For. Res.* **27**: 1851-1858. [844, 846]
- Fortin, M.-J. & M. R. T. Dale. 2005. *Spatial analysis – A guide for ecologists*. Cambridge University Press, Cambridge. xiii + 365 pp. [11, 12, 14, 767, 790, 806, 821, 844]
- Fortin, M.-J. & P. Drapeau. 1995. Delineation of ecological boundaries: comparison of approaches and significance tests. *Oikos* **72**: 323-332. [844, 846]
- Fortin, M.-J., P. Drapeau & G. M. Jacquez. 1996. Quantification of the spatial co-occurrence of ecological boundaries. *Oikos* **77**: 51-60. [844, 846]
- Fortin, M.-J., P. Drapeau & P. Legendre. 1989. Spatial autocorrelation and sampling design in plant ecology. *Vegetatio* **83**: 209-222. [818]
- Fourier, J. 1822. Théorie analytique de la chaleur. in: G. Darboux [ed.] 1888, *Oeuvres de Fourier. Tome I*. Gauthier-Villars, Paris. [109]
- François-Bongarçon, D. 1991. Geostatistical determination of sample variances in the sampling of broken gold ores. *CIM Bulletin* **84** (950): 46-57. [21]
- Fréchet, A. 1990. Catchability variations of cod in the marginal ice zone. *Can. J. Fish. Aquat. Sci.* **47**: 1678-1683. [243]
- Fréchette, M., & L. Legendre. 1982. Phytoplankton photosynthetic response to light in an internal tide dominated environment. *Estuaries* **5**: 287-293. [737, 738]
- Freedman, D. & D. Lane. 1983. A nonstochastic interpretation of reported significance levels. *J. Bus. Econ. Statist.* **1**: 292-298. [651]
- Freund, R. J. & P. D. Minton. 1979. *Regression methods – A tool for data analysis*. Statistics: Textbooks and Monographs, Vol. 30. Marcel Dekker Inc., New York. xi + 261 pp. [562]
- Friedman, M. 1937. The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *J. Amer. Statist. Assoc.* **32**: 675-701. [216]
- Frontier, S. 1969. Sur une méthode d'analyse faunistique rapide du zooplancton. *J. Exp. Mar. Biol. Ecol.* **3**: 18-26. [36]
- Frontier, S. 1973. Evaluation de la quantité totale d'une catégorie d'organismes planctoniques dans un secteur néritique. *J. Exp. Mar. Biol. Ecol.* **12**: 299-304. [36]

- Frontier, S. 1976. Étude de la décroissance des valeurs propres dans une analyse en composantes principales: comparaison avec le modèle du bâton brisé. *J. Exp. Mar. Biol. Ecol.* **25**: 67-75. [449]
- Frontier, S. & F. Ibanez. 1974. Utilisation d'une cotation d'abondance fondée sur la progression géométrique, pour l'analyse en composantes principales en écologie planctonique. *J. Exp. Mar. Biol. Ecol.* **14**: 217-224. [36, 451]
- Frontier, S. & D. Viale. 1977. Utilisation d'une cotation d'abondance mise au point en planctologie pour l'évaluation des troupeaux de cétacés en mer. *J. Rech. Océanogr.* **2**: 15-22. [36]
- Fry, J. C., N. C. B. Humphrey & T. C. Iles. 1981. Time-series analysis for identifying cyclic components in microbiological data. *J. Appl. Bacteriol.* **50**: 189-224. [714, 754]
- Furnas, G. W. 1984. The generation of random, binary unordered trees. *J. Classif.* **1**: 187-233. [30]
- Gabbott, P. A. & V. N. Larman. 1971. Electrophoretic examination of partially purified extracts of *Balanus balanoides* containing a settlement inducing factor. 143-153 in: D. J. Crisp [ed.] *Fourth european marine biology symposium*. Cambridge Univ. Press, Cambridge. [805]
- Gabriel, K. R. 1971. The biplot graphic display of matrices with application to principal component analysis. *Biometrika* **58**: 453-467. [443]
- Gabriel, K. R. 1982. Biplot. 263-271 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 1. Wiley, New York. [443]
- Gabriel, K. R. & R. R. Sokal. 1969. A new statistical approach to geographic variation analysis. *Syst. Zool.* **18**: 259-278. [836]
- Galiano, E. F. 1982. Pattern detection in plant populations through the analysis of plant-to-all-plants distances. *Vegetatio* **49**: 39-43. [789]
- Galton, F. 1889. *Natural inheritance*. Macmillan & Co., London. ix + 259 pp. [539]
- Galzin, R. & P. Legendre. 1987. The fish communities of a coral reef transect. *Pac. Sci.* **41**: 158-165. [774]
- Garland, T. Jr. 1983. The relation between maximal running speed and body mass in terrestrial mammals. *J. Zool. (Lond.)* **199**: 157-170. [122]
- Garrison, W. L. & D. F. Marble. 1964. Factor analytic study of the connectivity of a transportation matrix. *Papers and Proceedings, Regional Science Association* **12**: 231-238. [859]
- Gauch, H. G. Jr. 1982. *Multivariate analysis in community ecology*. Cambridge University Press, Cambridge. x + 298 pp. [483, 486]
- Gauch, H. G. Jr., R. H. Whittaker & T. R. Wentworth. 1977. A comparative study of reciprocal averaging and other ordination techniques. *J. Ecol.* **65**: 157-174. [479]
- Gause, G. F. 1935. *Vérification expérimentale de la théorie mathématique de la lutte pour la vie*. Actual. Sci. Ind. no 277. Hermann Éditeur, Paris. [478]
- Gauss, K. F. 1809. *Theoria motus corporum coelestium in sectionibus conicis solem ambientium*. Frid. Perthes et I. H. Besser, Hamburg. [541]
- Geary, R. C. 1954. The contiguity ratio and statistical mapping. *Incorp. Statist.* **5**: 115-145. [793]
- Geffen, E., M. J. Anderson & R. K. Wayne. 2004. Climate and habitat barriers to dispersal in the highly mobile gray wolf. *Mol. Ecol.* **13**: 2481-2490. [649]

- Gentle, J. E. 2007. *Matrix algebra: theory, computations, and applications in statistics*. Springer Texts in Statistics, Springer Science, New York. xxii + 528 pp. [59]
- Getis, A. & B. Boots. 1978. *Models of spatial processes – An approach to the study of point, line and area patterns*. Cambridge Univ. Press, Cambridge. [789, 790]
- Gifi, A. 1990. *Nonlinear multivariate analysis*. John Wiley & Sons, Chichester. xx + 579 pp. [39]
- Gilbert, R. O. & J. C. Simpson. 1985. Kriging for estimating spatial pattern of contaminants: potential and problems. *Environ. Monit. Assess.* **5**: 113-135. [832]
- Gini, C. 1912. *Variabilità e mutabilità: contributo allo studio delle distribuzioni e delle relazioni statistiche*. Studi Economico-Giuridici, Facoltà di Giurisprudenza della Regia Università di Cagliari, anno III, parte II, Cuppini, Bologna, 156 pp. *Reprinted in*: E. Pizetti & T. Salvemini [eds.] 1955. *Memorie di metodologica statistica*. Libreria Eredi Virgilio Veschi, Roma. [xv, 254]
- Gittins, R. 1985. *Canonical analysis – A review with applications in ecology*. Springer-Verlag, Berlin. 351 pp. [630, 681, 691]
- Glansdorff, P. & I. Prigogine. 1971. *Structure, stabilité et fluctuations*. Masson, Paris. 288 pp. [37]
- Gokhale, D. V. & S. Kullback. 1978. *The information in contingency tables*. Marcel Dekker Inc., New York. x + 365 pp. [235]
- Goldstein, M. & W. R. Dillon. 1978. *Discrete discriminant analysis*. John Wiley & Sons, New York. x + 186 pp. [532]
- Goodall, D. W. 1954. Objective methods for the classification of vegetation. III. An essay in the use of factor analysis. *Aust. J. Bot.* **2**: 304-324. [xii, 425, 483]
- Goodall, D. W. 1964. A probabilistic similarity index. *Nature (Lond.)* **203**: 1098. [288]
- Goodall, D. W. 1966a. A new similarity index based on probability. *Biometrics* **22**: 882-907. [288, 289]
- Goodall, D. W. 1966b. Deviant index: a new tool for numerical taxonomy. *Nature (Lond.)* **210**: 216. [380]
- Goodall, D. W. 1974. A new method for the analysis of spatial pattern by random pairing of quadrats. *Vegetatio* **29**: 135-146. [800]
- Goodman, L. A. & W. H. Kruskal. 1954. Measures of association for cross classifications. *J. Amer. Statist. Assoc.* **49**: 732-764. [270]
- Goodman, L. A. & W. H. Kruskal. 1959. Measures of association for cross classifications. II. Further discussion and references. *J. Amer. Statist. Assoc.* **54**: 123-163. [270]
- Goodman, L. A. & W. H. Kruskal. 1963. Measures of association for cross classifications. III. Approximate sampling theory. *J. Amer. Statist. Assoc.* **58**: 310-364. [270]
- Gordo, O., J. J. Sanz & J. M. Lobo. 2007. Environmental and geographical constraints on common swift and barn swallow spring arrival patterns throughout the Iberian Peninsula. *J. Biogeogr.* **34**: 1065-1076. [855]
- Gordon, A. D. 1973. Classification in the presence of constraints. *Biometrics* **29**: 821-827. [773]
- Gordon, A. D. 1994. Identifying genuine clusters in a classification. *Comput. Statist. Data Anal.* **18**: 561-581. [415, 416, 611]
- Gordon, A. D. 1996a. Hierarchical classification. 65-121 in: P. Arabie, L. J. Hubert & G. De Soete [eds.] *Clustering and Classification*. World Scientific Publ. Co., River Edge, New Jersey. [369, 415, 416]

- Gordon, A. D. 1996b. Null models in cluster validation. 32-44 in: W. Gaul & D. Pfeifer [eds.] *From data to knowledge*. Springer-Verlag, Berlin. [415, 416]
- Gordon, A. D. 1996c. A survey of constrained classification. *Comput. Statist. Data Anal.* **21**: 17-29. [835, 842, 843]
- Gordon, A. D. 1999. *Classification, 2nd edition*. Monographs on Statistics and Applied Probability, 82. Chapman and Hall/CRC, London. x + 256 pp. [841, 843]
- Gordon, A. D. & H. J. B. Birks. 1972. Numerical methods in Quaternary palaeoecology. I. Zonation of pollen diagrams. *New Phytol.* **71**: 961-979. [773]
- Gordon, A. D. & H. J. B. Birks. 1974. Numerical methods in Quaternary palaeoecology. II. Comparison of pollen diagrams. *New Phytol.* **73**: 221-249. [773]
- Gorelick R. & S. M. Bertram. 2010. Multi-way multi-group segregation and diversity indices. *PLoS ONE* **5**: e10912. doi:10.1371/journal.pone.0010912 [243]
- Gosselin, M., L. Legendre, S. Demers, J.-C. Therriault & M. Rochet. 1986. Physical control of the horizontal patchiness of sea-ice microalgae. *Mar. Ecol. Prog. Ser.* **29**: 289-295. [596]
- Gould, P. R. 1967. On the geographical interpretation of eigenvalues. *T. I. Brit. Geogr.* **42**: 53-92. [859]
- Gower, J. C. 1966. Some distance properties of latent root and vector methods used in multivariate analysis. *Biometrika* **53**: 325-338. [xii, 381, 446, 451, 492, 493, 497, 498, 517]
- Gower, J. C. 1967. A comparison of some methods of cluster analysis. *Biometrics* **23**: 623-637. [348, 357, 360, 378, 380]
- Gower, J. C. 1971a. A general coefficient of similarity and some of its properties. *Biometrics* **27**: 857-871. [278, 286]
- Gower, J. C. 1971b. Statistical methods of comparing different multivariate analyses of the same data. 138-149 in: F. R. Hodson, D. G. Kendall & P. Tautu [eds.] *Mathematics in the archaeological and historical sciences*. Edinburgh University Press, Edinburgh. [611, 703, 704]
- Gower, J. C. 1975. Generalized Procrustes analysis. *Psychometrika* **40**: 33-51. [611, 704]
- Gower, J. C. 1982. Euclidean distance geometry. *Math. Scientist* **7**: 1-14. [492, 499, 500]
- Gower, J. C. 1983. Comparing classifications. 137-155 in: J. Felsenstein [ed.] *Numerical taxonomy*. NATO ASI Series, Vol. G-1. Springer-Verlag, Berlin. 644 pp. [413]
- Gower, J. C. 1984. Ordination, multidimensional scaling and allied topics. 727-781 in: W. Lederman [ed.] *Handbook of Applicable Mathematics*. Vol. VI: E. Lloyd [ed.] *Statistics*. Wiley, Chichester. [425, 428]
- Gower, J. C. 1985. Measures of similarity, dissimilarity, and distance. 397-405 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 5. Wiley, New York. [270, 500]
- Gower, J. C. 1987. Introduction to ordination techniques. 3-64 in: P. Legendre & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI Series, Vol. G14. Springer-Verlag, Berlin. [428, 512, 611]
- Gower, J. C. 1990. Three dimensional biplots. *Biometrika* **77**: 773-785. [443]
- Gower, J. C. & P. Legendre. 1986. Metric and Euclidean properties of dissimilarity coefficients. *J. Classif.* **3**: 5-48. [270, 276, 296, 323, 501]
- Gower, J. C., S. Lubbe & N. le Roux. 2011. *Understanding biplots*. Wiley, Chichester. xi + 463 pp. [443]
- Gower, J. C. & G. J. S. Ross. 1969. Minimum spanning trees and single linkage cluster analysis. *Appl. Statist.* **18**: 54-64. [345, 523]

- Grace, J. B. 2006. *Structural equation modeling and natural systems*. Cambridge University Press, Cambridge. xii + 365 pp. [593]
- Gray, D. K. & S. E. Arnott. 2011. Does dispersal limitation impact the recovery of zooplankton communities damaged by a regional stressor? *Ecol. Appl.* **21**: 1241-1256. [893]
- Graybill, F. A. 2001. *Matrices with applications in statistics. 2nd edition*. Duxbury Press, Pacific Grove, California. xi + 461. [59]
- Green, P. G. & J. D. Carroll. 1976. *Mathematical tools for applied multivariate analysis*. Academic Press, New York. 376 pp. [60]
- Green, R. H. 1979. *Sampling design and statistical methods for environmental biologists*. John Wiley & Sons, New York. xi + 257 pp. [21, 241, 267]
- Greenacre, M. J. 1983. *Theory and applications of correspondence analysis*. Academic Press, London. xi + 364 pp. [428, 464]
- Greenacre, M. J. 2007. *Correspondence analysis in practice. 2nd edition*. Chapman & Hall / CRC Press, Boca Raton, Florida. xiii + 280 pp. [464]
- Greenacre, M. J. 2010. *Biplots in practice*. Fundación BBVA, Bilbao. 237 pp. [443]
- Greenberg, J. H. 1956. The measurement of linguistic diversity. *Language* **32**: 109-115. [254]
- Greig-Smith, P. 1983. *Quantitative plant ecology. 3rd edition*. University of California Press, Berkeley. xiv + 359 pp. [319, 390]
- Griffith, D. A. 1978. A spatially adjusted ANOVA model. *Geogr. Anal.* **10**: 296-301. [20]
- Griffith, D. A. 1987. *Spatial autocorrelation – A primer*. Association of American Geographers, Washington, D. C. 10 + 82 pp. [20, 790]
- Griffith, D. A. 1988. *Advanced Spatial Statistics*. Kluwer, Dordrecht. xiv + 273 pp. [15, 18]
- Griffith, D. A. 1996. Spatial autocorrelation and eigenfunctions of the geographic weights matrix accompanying geo-referenced data. *Can. Geogr.* **40**: 351-367. [859, 884, 885]
- Griffith, D. A. & P. R. Peres-Neto. 2006. Spatial modelling in ecology: the flexibility of eigenfunction spatial analyses. *Ecology* **87**: 2603-2613. [859, 884]
- Grondona, M. O. & N. Cressie. 1991. Using spatial considerations in the analysis of experiments. *Technometrics* **33**: 381-392. [20]
- Guedj, D. 1999. *La méridienne*. Robert Laffont, Paris. 302 pp. [142]
- Guedj, D. (translated by A. Goldhammer). 2001. *The measure of the world: a novel*. University of Chicago Press, Chicago. 310 pp. [142]
- Guénard, G., P. Legendre, D. Boisclair & M. Bilodeau. 2010. Multiscale codependence analysis: an integrated approach to analyze relationships across scales. *Ecology* **91**: 2952-2964. [865, 901]
- Guille, A. 1970. Bionomie benthique du plateau continental de la côte catalane française. II. Les communautés de la macrofaune. *Vie Milieu* **21**: 149-280. [406]
- Günther, B. 1975. Dimensional analysis and theory of biological similarity. *Physiol. Rev.* **55**: 659-699. [122, 141]
- Haberman, S. J. 1973. The analysis of residuals in cross-classified tables. *Biometrics* **29**: 205-220. [244]
- Hahsler, M., K. Hornik & C. Buchta. 2008. Getting things in order: an introduction to the R package seriation. *J. Stat. Softw.* **25**: 1-34. [403]

- Haining, R. 1987. Trend-surface models with regional and local scales of variation with an application to aerial survey data. *Technometrics* **29**: 461-469. [828]
- Haining, R. 1990. *Spatial data analysis in the social and environmental sciences*. Cambridge University Press, Cambridge. xxi + 409 pp. [18]
- Haining, R. 2003. *Spatial data analysis – Theory and practice*. Cambridge University Press, Cambridge. xx + 432 pp. [18]
- Hair, J. F., W. C. Black, B. J. Babin & R. E. Anderson. 2010. *Multivariate data analysis, 7th edition*. Prentice Hall, New Jersey. xxviii + 785 pp. [143]
- Hajdu, L. J. 1981. Geographical comparison of resemblance measures in phytosociology. *Vegetatio* **48**: 47-59. [322]
- Hájek, J. 1969. *A course in nonparametric statistics*. Holden-Day, San Francisco. viii + 184 pp. [201]
- Hall, A. V. 1965. The peculiarity index, a new function for use in numerical taxonomy. *Nature (Lond.)* **206**: 952. [380]
- Hall, P., N. I. Fisher & B. Hoffmann. 1994. On the nonparametric estimation of covariance functions. *Ann. Stat.* **22**: 2115-2134. [805]
- Hall, P. & P. Patil. 1994. Properties of nonparametric estimators of autocovariance for stationary random fields. *Probability Theory and Related Fields* **99**: 399-424. [805]
- Hann, B. J., P. R. Leavitt & P. S. S. Chang. 1994. Cladocera community response to experimental eutrophication in Lake 227 as recorded in laminated sediments. *Can. J. Fish. Aquat. Sci.* **51**: 2312-2321. [773]
- Harrington, D. 2009. *Confirmatory factor analysis*. Oxford University Press, New York. ix + 122 pp. [535]
- Harris, R. E. & W. A. G. Charleston. 1977. An examination of the marsh microhabitats of *Lymnaea tomentosa* and *L. columella* (Mollusca: Gastropoda) by path analysis. *N. Z. J. Zool.* **4**: 395-399. [596, 597]
- Hartigan, J. A. 1975. *Cluster algorithms*. John Wiley & Sons, New York. xiii + 349 pp. [386]
- Harvey, A. C. 1981. *The econometric analysis of time series*. Wiley, New York. xi + 384 pp. [20]
- Harvey, A. C. & G. D. A. Phillips. 1979. Maximum likelihood estimation of regression models with autoregressive-moving average disturbances. *Biometrika* **66**: 49-58. [20]
- Hatcher, A. & C. A. Frith. 1985. The control of nitrate and ammonium concentrations in a coral reef lagoon. *Coral Reefs* **4**: 101-110. [124]
- Hatcher, B. G., J. Imberger & S. V. Smith. 1987. Scaling analysis of coral reef systems: an approach to problems of scale. *Coral Reefs* **5**: 171-181. [124]
- Hatheway, W. H. 1971. Contingency-table analysis of rain forest vegetation. 271-313 in: G. P. Patil, E. C. Pielou & W. E. Waters [eds.] *Statistical ecology*. Vol. 3: *Many species populations, ecosystems, and systems analysis*. Pennsylvania State University Press, University Park and London. [464]
- Hawkins, D. M. & D. F. Merriam. 1973. Optimal zonation of digitized sequential data. *Math. Geol.* **5**: 389-395. [769]
- Hawkins, D. M. & D. F. Merriam. 1974. Zonation of multivariate sequences of digitized geologic data. *Math. Geol.* **6**: 263-269. [769]
- Hawksorth, F. G., G. F. Estabrook & D. J. Rogers. 1968. Application of an information theory model for character analysis in the genus *Arceuthobium* (Viscaceae). *Taxon* **17**: 605-619. [234]

- He, F. & P. Legendre. 1996. On species-area relations. *Am. Nat.* **148**: 719-737. [327]
- He, F. & P. Legendre. 2002. Species diversity patterns derived from species-area models. *Ecology* **83**: 1185-1198. [327]
- He, F., P. Legendre, C. Bellehumeur & J. V. LaFrankie. 1994. Diversity pattern and spatial scale: a study of a tropical rain forest of Malaysia. *Environ. Ecol. Stat.* **1**: 265-286. [586, 786, 788]
- He, F., P. Legendre & J. V. LaFrankie. 1996. Spatial pattern of diversity in a tropical rain forest of Malaysia. *J. Biogeogr.* **23**: 57-74. [251, 327, 586]
- He, F., P. Legendre & J. V. LaFrankie. 1997. Distribution patterns of tree species in a Malaysian tropical rain forest. *J. Veg. Sci.* **8**: 105-114. [586]
- Healy, M. J. R. 1984. The use of R^2 as a measure of goodness of fit. *J. R. Statist. Soc. A* **147**: 608-609. [566]
- Hecky, R. E. & P. Kilham. 1988. Nutrient limitation of phytoplankton in freshwater and marine environments. A review of recent evidence on the effects of enrichment. *Limnol. Oceanogr.* **33**: 796-822. [8]
- Heikkinen, R. K. & H. J. B. Birks. 1996. Spatial and environmental components of variation in the distribution patterns of subarctic plant species at Kevo, N. Finland. A case study at the meso-scale level. *Ecography* **19**: 341-351. [855]
- Helmus, M. R., T. J. Bland, C. K. Williams & A. R. Ives. 2007. Phylogenetic measures of biodiversity. *Am. Nat.* **169**: E68-E83. [255]
- Heo, M. & K. R. Gabriel. 1998. A permutation test of association between configurations by means of the RV coefficient. *Commun. Stat. Simul. Comput.* **27**: 843-856. [700]
- Hermý, M. 1987. Path analysis of standing crop and environmental variables in the field layer of two Belgian riverine forests. *Vegetatio* **70**: 127-134. [596]
- Hewitt, J. E., P. Legendre, B. H. McArdle, S. F. Thrush, C. Bellehumeur & S. M. Lawrie. 1997. Identifying relationships between adult and juvenile bivalves at different spatial scales. *J. Exp. Mar. Biol. Ecol.* **216**: 77-98. [745, 818]
- Hill, A. V. 1950. The dimensions of animals and their muscular dynamics. *Sci. Prog.* **38**: 209-230. [119, 121]
- Hill, M. O. 1973a. Diversity and evenness: a unifying notation and its consequences. *Ecology* **54**: 427-432. [250, 251, 254, 255]
- Hill, M. O. 1973b. Reciprocal averaging: an eigenvector method of ordination. *J. Ecol.* **61**: 237-249. [456, 464, 478, 479, 491]
- Hill, M. O. 1974. Correspondence analysis: a neglected multivariate method. *Appl. Statist.* **23**: 340-354. [428, 464, 469, 478]
- Hill, M. O. 1979a. *TWINSPAN – A FORTRAN program for arranging multivariate data in an ordered two-way table by classification of the individuals and attributes*. Section of Ecology and Systematics, Cornell University, Ithaca, New York. iv + 49 pp. [381, 382, 397]
- Hill, M. O. 1979b. *DECORANA – A FORTRAN program for detrended correspondence analysis and reciprocal averaging*. Section of Ecology and Systematics, Cornell University, Ithaca, New York. 52 pp. [485]
- Hill, M. O. & H. G. Gauch Jr. 1980. Detrended correspondence analysis, an improved ordination technique. *Vegetatio* **42**: 47-58. [483, 485, 486]
- Hirschfeld, H. O. 1935. A connection between correlation and contingency. *Proc. Camb. Phil. Soc.* **31**: 520-524. [464]

- Hobbs, R. J. & H. A. Mooney [eds.]. 1990. *Remote sensing of biosphere functioning*. Springer-Verlag, New York. 350 pp. [844]
- Hochberg, Y. 1988. A sharper Bonferroni procedure for multiple tests of significance. *Biometrika* **75**: 800-802. [23]
- Hocking, R. R. 1976. The analysis and selection of variables in linear regression. *Biometrics* **32**: 1-49. [561]
- Hoerl, A. E. 1962. Application of ridge analysis to regression problems. *Chem. Eng. Prog.* **58**: 54-59. [563, 564]
- Hoerl, A. E. & R. W. Kennard. 1970a. Ridge regression: biased estimation for nonorthogonal problems. *Technometrics*. **12**: 55-67. [563]
- Hoerl, A. E. & R. W. Kennard. 1970b. Ridge regression: applications to nonorthogonal problems. *Technometrics* **12**: 69-82. [563]
- Hollander, M. & D. A. Wolfe. 1973. *Nonparametric statistical methods*. Wiley, New York. [583]
- Holm, S. 1979. A simple sequentially rejective multiple test procedure. *Scand. J. Stat.* **6**: 65-70. [23]
- Hope, A. C. A. 1968. A simplified Monte Carlo significance test procedure. *J. Roy. Statist. Soc. Ser. B* **30**: 582-598. [27, 294]
- Hotelling, H. 1931. The generalization of Student's ratio. *Ann. Math. Statist.* **2**: 360-378. [304]
- Hotelling, H. 1933. Analysis of a complex of statistical variables into principal components. *J. Educ. Psychol.* **24**: 417-441, 498-520. [xv, 430]
- Hotelling, H. 1936. Relations between two sets of variates. *Biometrika* **28**: 321-377. [690]
- Hotelling, H. & M. R. Pabst. 1936. Rank correlation and tests of significance involving no assumption of normality. *Ann. Math. Statist.* **7**: 29-43. [212]
- Huang, J. S. & D. H. Tseng. 1988. Statistical theory of edge detection. *Comp. Vis. Graph. Image Proc.* **43**: 337-346. [844]
- Hubálek, Z. 1982. Coefficients of association and similarity, based on binary (presence-absence) data: an evaluation. *Biol. Rev.* **57**: 669-689. [323]
- Hubbell, S. P. 2001. *The unified neutral theory of biodiversity and biogeography*. Princeton University Press, Princeton, New Jersey. xiv + 375 pp. [12, 598, 607]
- Hubert, L. J. & P. Arabie. 1985. Comparing partitions. *J. Classif.* **2**: 193-218. [413]
- Hubert, L. J. & F. B. Baker. 1977. The comparison and fitting of given classification schemes. *J. Math. Psychol.* **16**: 233-253. [417]
- Hubert, L. J. & R. G. Golledge. 1981. A heuristic method for the comparison of related structures. *J. Math. Psychol.* **23**: 214-226. [606]
- Hudon, C., E. Bourget & P. Legendre. 1983. An integrated study of the factors influencing the choices of the settling site of *Balanus crenatus* cyprid larvae. *Can. J. Fish. Aquat. Sci.* **40**: 1186-1194. [805]
- Hudon, C. & Lamarche, G. 1989. Niche segregation between American lobster *Homarus americanus* and rock crab *Cancer irroratus*. *Mar. Ecol. Prog. Ser.* **52**: 155-168. [601]
- Huet, S., E. Jolivet & A. Messéan. 1992. *La régression non-linéaire – Méthodes et applications en biologie*. Institut National de la Recherche Agronomique, Paris. 247 pp. [583]
- Huntley, H. E. 1967. *Dimensional analysis*. Dover, New York. 153 pp. [109]

- Hurlbert, S. H. 1971. The nonconcept of species diversity: a critique and alternative parameters. *Ecology* **52**: 577-586. [249-251, 254, 256]
- Hurlbert, S. H. 1984. Pseudoreplication and the design of ecological field experiments. *Ecol. Monogr.* **54**: 187-211. [8, 143, 535, 785]
- Hurley, J. R. & R. B. Cattell. 1962. The Procrustes program: producing direct rotation to test a hypothesized factor structure. *Behav. Sci.* **7**: 258-262. [703]
- Hurvich, C. M. & C.-L. Tsai. 1993. A corrected Akaike information criterion for vector autoregressive model selection. *J. Time Ser. Anal.* **14**: 271-279. [566]
- Hutchinson, G. E. 1957. Concluding remarks. *Cold Spring Harbor Symp. Quant. Biol.* **22**: 415-427. [4, 12, 258, 271, 478, 785]
- Hutchinson, G. E. 1965. *The ecological theater and the evolutionary play*. Yale Univ. Press, New Haven. xiii + 139 pp. [4, 258]
- Ibanez, F. 1971. Effet des transformations des données dans l'analyse factorielle en écologie planctonique. *Cah. Océanogr.* **23**: 545-561. [450]
- Ibanez, F. 1972. Interprétation de données écologiques par l'analyse des composantes principales: écologie planctonique de la mer du Nord. *J. Cons. Cons. Int. Explor. Mer* **34**: 323-340. [452]
- Ibanez, F. 1973. Méthode d'analyse spatio-temporelle du processus d'échantillonnage en planctologie, son influence dans l'interprétation des données par l'analyse en composantes principales. *Ann. Inst. Océanogr. (Paris)* **49**: 83-111. [448]
- Ibanez, F. 1981. Immediate detection of heterogeneities in continuous multivariate, oceanographic recordings. Application to time series analysis of changes in the bay of Villefranche sur Mer. *Limnol. Oceanogr.* **26**: 336-349. [772]
- Ibanez, F. 1982. L'échantillonnage en continu en océanographie. 365-384 in: S. Frontier [ed.] *Stratégies d'échantillonnage en écologie*. Collection d'Écologie, No. 17. Masson, Paris et les Presses de l'Université Laval, Québec. [781]
- Ibanez, F. 1984. Sur la segmentation des séries chronologiques planctoniques multivariées. *Oceanol. Acta* **7**: 481-491. [769]
- Ibanez, F. & G. Seguin. 1972. Etude du cycle annuel du zooplancton d'Abidjan. Comparaison de plusieurs méthodes d'analyse multivariable: composantes principales, correspondances, coordonnées principales. *Invest. Pesq.* **36**: 81-108. [464, 479]
- Ifrah, G. 1981. *Histoire universelle des chiffres*. Éditions Seghers, Paris. 568 pp. [67]
- Iman, R. L. & W. J. Conover. 1979. The use of the rank transformation in regression. *Technometrics* **21**: 499-509. [36]
- Iman, R. L. & W. J. Conover. 1983. *A modern approach to statistics*. Wiley, New York. xxiii + 497 pp. [584]
- Ipsen, D. C. 1960. *Units, dimensions and dimensionless numbers*. McGraw-Hill, New York. xii + 236 pp. [109]
- Isaaks, E. H. & R. M. Srivastava. 1989. *Applied geostatistics*. Oxford Univ. Press, New York. xix + 561 pp. [810, 811, 813, 817, 830, 832-834, 839]
- Jaccard, P. 1900. Contribution au problème de l'immigration post-glaciaire de la flore alpine. *Bull. Soc. Vaudoise Sci. Nat.* **36**: 87-130. [xiv, 275]
- Jaccard, P. 1901. Etude comparative de la distribution florale dans une portion des Alpes et du Jura. *Bull. Soc. Vaudoise Sci. nat.* **37**: 547-579. [275]

- Jaccard, P. 1908. Nouvelles recherches sur la distribution florale. *Bull. Soc. Vaudoise Sci. nat.* **44**: 223-270. [275]
- Jackson, D. A. 1993. Stopping rules in principal components analysis: a comparison of heuristical and statistical approaches. *Ecology* **74**: 2204-2214. [448, 449]
- Jackson, D. A. 1995. PROTEST: a PROcrustean randomization TEST of community environment concordance. *Écoscience* **2**: 297-303. [612, 704]
- Jackson, D. A. & K. M. Somers. 1989. Are probability estimates from the permutation model of Mantel's test stable? *Can. J. Zool.* **67**: 766-769. [31]
- Jackson, D. A. & K. M. Somers. 1991a. The spectre of 'spurious' correlations. *Oecologia* **86**: 147-151. [43]
- Jackson, D. A. & K. M. Somers. 1991b. Putting things in order: the ups and downs of detrended correspondence analysis. *Am. Nat.* **137**: 704-712. [486, 487]
- Jackson, D. A., K. M. Somers & H. H. Harvey. 1992. Null models and fish communities: evidence of nonrandom patterns. *Am. Nat.* **139**: 930-951. [391]
- Jackson, R. C. & T. J. Crovello. 1971. A comparison of numerical and biosystematic studies in *Haplopappus*. *Brittonia* **23**: 54-70. [523, 524]
- Jain, A. K. & R. C. Dubes. 1988. *Algorithms for clustering data*. Prentice Hall, Englewood Cliffs, New Jersey. xiv + 320 pp. [346, 366, 369, 377, 383, 386, 415]
- Jambu, M. & M.-O. Lebeaux. 1983. *Cluster analysis and data analysis*. Elsevier-North-Holland, Amsterdam. xxiv + 898 pp. [349]
- Jardine, N. & R. Sibson. 1968. The construction of hierarchic and non-hierarchic classifications. *Comput. J.* **11**: 177-184. [393]
- Jardine, N. & R. Sibson. 1971. *Mathematical taxonomy*. Wiley, London. xviii + 286 pp. [393]
- Jenkins, G. M. & D. G. Watts. 1968. *Spectral analysis and its applications*. Holden-Day, San Francisco. xviii + 525 pp. [714, 729]
- Jenkins, S. H. 1975. Food selection by beavers. A multidimensional contingency table analysis. *Oecologia (Berl.)* **21**: 157-173. [243]
- Jolicoeur, P. 1959. Multivariate geographical variation in the wolf *Canis lupus* L. *Evolution* **13**: 283-299. [675]
- Jolicoeur, P. 1973. Imaginary confidence limits of the slope of the major axis of a bivariate normal distribution: a sampling experiment. *J. Amer. Statist. Assoc.* **68**: 866-871. [546]
- Jolicoeur, P. 1975. Linear regression in fishery research: some comments. *J. Fish. Res. Board Can.* **32**: 1491-1494. [550]
- Jolicoeur, P. 1990. Bivariate allometry: interval estimation of the slopes of the ordinary and standardized normal major axes and structural relationship. *J. Theor. Biol.* **144**: 275-285. [548, 550, 552, 553]
- Jolicoeur, P. & J. E. Mosimann. 1960. Size and shape variation in the painted turtle. A principal component analysis. *Growth* **24**: 339-354. [443]
- Jolicoeur, P. & J. E. Mosimann. 1968. Intervalles de confiance pour la pente de l'axe majeur d'une distribution normale bidimensionnelle. *Biom-Praxim.* **9**: 121-140. [548, 551]
- Jones, M. M., H. Tuomisto, D. Borcard, P. Legendre, D. B. Clark & P. C. Olivas. 2008. Explaining variation in tropical plant community composition: influence of environmental and spatial data quality. *Oecologia* **155**: 593-604. [877]
- Jones, R. H. 1964. Prediction of multivariate time series. *J. Appl. Meteorol.* **3**: 285-289. [782]

- Josse, J., J. Pagès & F. Husson. 2008. Testing the significance of the RV coefficient. *Comput. Stat. Data An.* **53**: 82-91. [700]
- Journel, A. G. & C. J. Huijbregts. 1978. *Mining geostatistics*. Academic Press, London. x + 600 pp. [37, 38, 812, 831]
- Jumars, P. A., D. Thistle & M. L. Jones. 1977. Detecting two-dimensional spatial structure in biological data. *Oecologia (Berl.)* **28**: 109-123. [794]
- Kaplan, D. 2009. *Structural equation modeling: foundations and extensions. 2nd edition*. Sage Publ., Thousand Oaks, California. xi + 255 pp. [593]
- Kaufman, L. & P. J. Rousseeuw. 1990. *Finding groups in data – An introduction to cluster analysis*. J. Wiley & Son, New York. xiv + 342 pp. [365, 384, 386, 424]
- Kedem, B. 1980. *Binary time series*. Lecture notes in pure and applied mathematics, Vol. 39. Marcel Dekker, New York. ix + 140 pp. [766]
- Keitt, T. H. & D. L. Urban. 2005 Scale-specific inference using wavelets. *Ecology* **86**: 2497-2504. [767]
- Kemphorne, O. 1952. *The design and analysis of experiments*. Robert E. Krieger Publ. Co., Huntington, N. Y. xix + 631 pp. [6]
- Kendall, D. G. 1971. Seriation from abundance matrices. 215-252 in: F. R. Hodson, D. G. Kendal & P. Tautu [eds.] *Mathematics in the archaeological and historical sciences*. Edinburgh Univ. Press, Edinburgh. [483]
- Kendall, D. G. 1988. Seriation. 417-424 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences. Vol. 8*. John Wiley & Sons, New York. [403]
- Kendall, M. G. 1938. A new measure of rank correlation. *Biometrika* **30**: 81-93. [413]
- Kendall, M. G. 1948. *Rank correlation methods*. Charles Griffin & Co., London. vii + 160 pp. [206, 212, 213]
- Kendall, M. G. 1976. *Time series*. Charles Griffin & Co., London. ix + 197 pp. [725]
- Kendall, M. G. & B. Babington Smith. 1939. The problem of m rankings. *Ann. Math. Stat.* **10**: 275-287. [213, 216]
- Kendall, M. G. & W. R. Buckland. 1960. *A dictionary of statistical terms. 2nd edition*. Oliver and Boyd, Edinburgh. xi + 575 pp. [234]
- Kendall, M. G. & J. K. Ord. 1990. *Time series. 3rd edition*. Edward Arnold, Sevenoaks, Kent. x + 296 pp. [714, 720, 721, 724, 750, 756]
- Kendall, M. G. & A. Stuart. 1963. *The advanced theory of statistics. Vol. 1. 2nd edition*. Charles Griffith & Co., London. xii + 433 pp. [363]
- Kendall, M. G. & A. Stuart. 1966. *The advanced theory of statistics. Vol. 3*. Hafner Publ. Co., New York. ix + 552 pp. [546, 695]
- Kendall, M. G., A. Stuart & J. K. Ord. 1983. *The advanced theory of statistics. Vol. 3. 4th edition*. Charles Griffin & Co., London. x + 780 pp. [714, 725]
- Kenkel, N. C. & L. Orlóci. 1986. Applying metric and nonmetric multidimensional scaling to ecological studies: some new results. *Ecology* **67**: 919-928. [487]
- Kent, M. & P. Coker. 1992. *Vegetation description and analysis – A practical approach*. John Wiley & Sons, New York. x + 363 pp. [382]
- Kerlinger, F. N. & E. J. Pedhazur. 1973. *Multiple regression in behavioral research*. Holt, Rinehart and Winston, Inc. New York. x + 534 pp. [571]

- Kermack, K. A. & J. B. S. Haldane. 1950. Organic correlation and allometry. *Biometrika* **37**: 30-41. [547]
- Kierstead, H. & L. B. Slobodkin. 1953. The size of water masses containing plankton blooms. *J. Mar. Res.* **12**: 141-147. [125, 126, 136]
- Kim, W.-S., H.-T. Huh, J.-G. Je & K.-N. Han. 2003. Evidence of two-clock control of endogenous rhythm in the Washington clam, *Saxidomus purpuratus*. *Mar. Biol.* **142**: 305-309. [766]
- Kline, R. B. 2011. *Principles and practice of structural equation modeling, 3rd edition*. Guilford Press, New York. xvi + 427 pp. [593]
- Kluge, A. G. & J. S. Farris. 1969. Quantitative phyletics and the evolution of anurans. *Syst. Zool.* **18**: 1-32. [53]
- Koch, G. G. & D. B. Gillings. 1983. Inference, design based vs. model based. 84-88 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 4. Wiley, New York. [6]
- Kolasa, J. & S. T. A. Pickett [eds.] 1991. *Ecological heterogeneity*. Springer-Verlag, New York. xi + 332 pp. [22]
- Kolasa, J. & C. D. Rollo. 1991. Introduction: The heterogeneity of heterogeneity: A glossary. 1-23 in: J. Kolasa & S. T. A. Pickett [eds.] *Ecological heterogeneity*. Springer-Verlag, New York. [788, 789]
- Koleff, P., K. J. Gaston & J. J. Lennon. 2003. Measuring beta diversity for presence-absence data. *J. Anim. Ecol.* **72**: 367-382. [260]
- Kotz, S. & N. L. Johnson. 1982. Degrees of freedom. 293-294 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical science*. Vol. 2. Wiley, New York. [19]
- Krackhardt, D. 1988. Predicting with networks: Nonparametric multiple regression analysis of dyadic data. *Soc. Networks* **10**: 359-381. [606]
- Krige, D. G. 1952. A statistical analysis of some of the borehole values in the Orange Free State goldfield. *J. Chem. Metall. Min. Soc. S. Afr.* **53**: 47-70. [831]
- Krige, D. G. 1966. Two-dimensional weighted moving average trend surfaces for ore evaluation. 13-38 in: *Proceedings of the symposium on mathematical statistics and computer applications in ore valuation*, Johannesburg. [831]
- Kroonenberg, P. M. 1983. *Three-mode principal component analysis – Theory and applications*. DSWO Press, Leiden. 398 pp. [269]
- Kroonenberg, P. M. 2008. *Applied multi-way data analysis*. Wiley Series in Probability and Statistics. John Wiley & Sons, Hoboken, New Jersey. xxi + 579 pp. [235, 269]
- Kroonenberg, P. M. & Y. De Roo. 2010. *3WayPack: A program suite for three-way analysis*. The Three-Mode Company, Leiden University, Leiden. 179 pp. + computer programs. [269]
- Kruskal, J. B. 1964a. Multidimensional scaling by optimizing goodness of fit to a nonmetric hypothesis. *Psychometrika* **29**: 1-27. [512, 514]
- Kruskal, J. B. 1964b. Nonmetric multidimensional scaling: a numerical method. *Psychometrika* **29**: 115-129. [512, 514, 516]
- Kruskal, J. B. & M. Wish. 1978. *Multidimensional scaling*. Sage University Paper series on Quantitative Applications in the Social Sciences, 07-011. Sage Publications, Beverly Hills. 93 pp. [512, 516]
- Kruskal, W. H. & F. Mosteller. 1988. Representative sampling. 77-81 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 8. Wiley, New York. [6]

- Krylov, V. V. 1968. Species association in plankton. *Oceanology* (translated from *Okeanologiya*, in Russian) **8**: 243-251. [318, 392, 393]
- Kryszczuk, K. & P. Hurley. 2010. Estimation of the number of clusters using multiple clustering validity indices. *Proceedings of the 9th International Workshop on Multiple Classifier Systems*, Cairo, April 2010 (MCS 2010): 114-123. [418]
- Kulczynski, S. 1928. Die Pflanzenassoziationen der Pieninen. *Bull. Int. Acad. Pol. Sci. Lett. Cl. Sci. Math. Nat. Ser. B*, Suppl. II (1927): 57-203. [277, 286, 339, 403-405]
- Kullback, S. 1959. *Information theory and statistics*. John Wiley & Sons, New York. xvii + 395 pp. [235, 682]
- Kuusipalo, J. 1987. Relative importance of factors controlling the success of *Oxalis acetosella*: an example of linear modelling in ecological research. *Vegetatio* **70**: 171-179. [596]
- Lacey, R. W. J., P. Legendre & A. Roy. 2007. Spatial-scale partitioning of in situ turbulent flow data over a pebble cluster in a gravel-bed river. *Water Resour. Res.* **43**, W03416, doi:10.1029/2006WR005044. [877]
- Laliberté, E. 2008. Analyzing or explaining beta diversity: Comment. *Ecology* **89**: 3232-3237. [607]
- Laliberté, E. & P. Legendre. 2010. A distance-based framework for measuring functional diversity from multiple traits. *Ecology* **91**: 299-305. [255]
- Laliberté, E., A. Paquette, P. Legendre & A. Bouchard. 2009. Assessing the scale-specific importance of niches and other spatial processes on beta diversity: a case study from a temperate forest. *Oecologia* **159**: 377-388. [901]
- Lam, N. S.-N. 1983. Spatial interpolation methods: a review. *Amer. Cartogr.* **10**: 129-149. [821]
- Lambshead, P. J. D. & G. L. J. Paterson. 1986. Ecological cladistics. An investigation of numerical cladistics as a method for analysing ecological data. *J. Nat. Hist.* **20**: 895-909. [391]
- Lance, G. N. & W. T. Williams. 1965. Computer programs for monothetic classification («association analysis»). *Comput. J.* **8**: 246-249. [378]
- Lance, G. N. & W. T. Williams. 1966a. A generalized sorting strategy for computer classifications. *Nature (Lond.)* **212**: 218. [353, 367, 370]
- Lance, G. N. & W. T. Williams. 1966b. Computer programs for hierarchical polythetic classification («similarity analyses»). *Comput. J.* **9**: 60-64. [372, 375]
- Lance, G. N. & W. T. Williams. 1966c. Computer programs for classification. *Proc. ANCCAC Conference*, Canberra, May 1966, Paper 12/3. [306]
- Lance, G. N. & W. T. Williams. 1967a. Mixed-data classificatory programs. I. Agglomerative systems. *Aust. Comput. J.* **1**: 15-20. [306]
- Lance, G. N. & W. T. Williams. 1967b. Mixed-data classificatory programs. II. Divisive systems. *Aust. Comput. J.* **1**: 82-85. [377]
- Lance, G. N. & W. T. Williams. 1967c. A general theory of classificatory sorting strategies. I. Hierarchical systems. *Computer J.* **9**: 373-380. [345, 351, 353, 357, 367, 370, 371]
- Lance, G. N. & W. T. Williams. 1967d. A general theory of classificatory sorting strategies. II. Clustering systems. *Comput. J.* **10**: 271-277. [349, 385]
- Lance, G. N. & W. T. Williams. 1968. Note on a new information-statistic classificatory program. *Comput. J.* **11**: 195. [378]
- Lande, R. 1996. Statistics and partitioning of species diversity, and similarity among multiple communities. *Oikos* **76**: 5-13. [260]

- Landeiro, V. L., W. E. Magnusson, A. S. Melo, H. M. V. Espírito-Santo & L. M. Bini. 2011. Spatial eigenfunction analyses in stream networks: do watercourse and overland distances produce different results? *Freshwater Biol.* **56**: 1184-1192. [888]
- Langhaar, H. L. 1951. *Dimensional analysis and theory of models*. Wiley, New York. xi + 166 p. [109, 126]
- Lapointe, F.-J. 1998. How to validate phylogenetic trees? A stepwise procedure. 71-88 in: C. Hayashi, N. Oshumi, K. Yajima, Y. Tanaka, H.-H. Bock & Y. Baba [eds.] *Data science, classification, and related methods*. Springer-Verlag, Tokyo. [415]
- Lapointe, F.-J. & P. Legendre. 1990. A statistical framework to test the consensus of two nested classifications. *Syst. Zool.* **39**: 1-13. [529, 606]
- Lapointe, F.-J. & P. Legendre. 1991. The generation of random ultrametric matrices representing dendrograms. *J. Classif.* **8**: 177-200. [529, 606]
- Lapointe, F.-J. & P. Legendre. 1992a. A statistical framework to test the consensus among additive trees (cladograms). *Syst. Biol.* **41**: 158-171. [529, 607]
- Lapointe, F.-J. & P. Legendre. 1992b. Statistical significance of the matrix correlation coefficient for comparing independent phylogenetic trees. *Syst. Biol.* **41**: 378-384. [529]
- Lapointe, F.-J. & P. Legendre. 1994. A classification of pure malt Scotch whiskies. *Appl. Statist.* **43**: 237-257. [529, 844]
- Lapointe, F.-J. & P. Legendre. 1995. Comparison tests for dendrograms: a comparative evaluation. *J. Class.* **12**: 265-282. [529]
- Larntz, K. 1978. Small sample comparisons of exact levels for chi-square goodness-of-fit statistics. *J. Amer. Statist. Assoc.* **73**: 253-263. [230]
- Larsen, D. R. & P. L. Speckman. 2004. Multivariate regression trees for analysis of abundance data. *Biometrics* **60**: 543-549. [406]
- Laurec, A. 1979. *Analyse des données et modèles prévisionnels en écologie marine*. Ph.D. Thesis. Univ. Aix-Marseille. 405 pp. + annexes. [763]
- Laws, E. A. & J. W. Archie. 1981. Appropriate use of regression analysis in marine biology. *Mar. Biol. (Berl.)* **65**: 13-16. [555]
- Lear, G., M. J. Anderson, J. P. Smith, K. Boxen & G. D. Lewis. 2008. Spatial and temporal heterogeneity of the bacterial communities in stream epilithic biofilms. *FEMS Microbiol. Ecol.* **65**: 463-473. [649]
- Lebart, L. 1978. Programme d'agrégation avec contraintes (C. A. H. contiguïté). *C. Anal. Données* **3**: 275-287. [840]
- Lebart, L. & J. P. Fénelon. 1971. *Statistique et informatique appliquées*. Dunod, Paris. 426 pp. [309, 469]
- Lebart, L., A. Morineau & J.-P. Fénelon. 1979. *Traitement des données statistiques – Méthodes et programmes*. Dunod, Paris. xiii + 510 pp. [36, 451]
- Le Boulengé, É. 1972. État de nos connaissances sur l'écologie du rat musqué *Ondatra zibethica* L. *La Terre et La Vie* **26**: 3-37. [604]
- Le Boulengé, É., P. Legendre, C. de le Court, P. Le Boulengé-Nguyen & M. Languy. 1996. Microgeographic morphological differentiation in muskrats. *J. Mammal.* **77**: 684-701. [604, 821]
- Leclerc, B. & G. Cucumel. 1987. Consensus en classification: une revue bibliographique. *Math. Sci. Humaines* **100**: 109-128. [418]

- Lefkovitch, L. P. 1976. Hierarchical clustering from principal coordinates: an efficient method for small to very large numbers of objects. *Math. Biosci.* **31**: 157-174. [381, 525]
- Lefkovitch, L. P. 1978. Cluster generation and grouping using mathematical programming. *Math. Biosci.* **41**: 91-110. [840]
- Lefkovitch, L. P. 1980. Conditional clustering. *Biometrics* **36**: 43-58. [840]
- Legend, M. 1958. Variations diurnes du zooplancton autour de la Nouvelle-Calédonie. *O. R. S. T. O. M., Inst. Fr. Océanie Sect. Océanogr. Rapp. Sci.* (6): 1-42. [753]
- Le Gendre, A. M. 1805. *Nouvelles méthodes pour la détermination des orbites des comètes*. Courcier, Paris. [541]
- Legendre, L. 1971. Production primaire dans la Baie-des-Chaleurs (Golfe Saint-Laurent) *Nat. Can. (Qué.)* **98**: 743-773. [114]
- Legendre, L. 1973. Phytoplankton organization in Baie des Chaleurs (Gulf of St-Lawrence). *J. Ecol.* **61**: 135-149. [257, 320]
- Legendre, L. 1987a. Multidimensional contingency table analysis as a tool for biological oceanography. *Biol. Oceanogr.* **5**: 13-28. [238, 239, 242]
- Legendre, L. 2004. *Scientific research and discovery: Process, consequences and practice*. Excellence in Ecology, 16 (O. Kinne, Ed.). International Ecology Institute, Oldendorf-Luhe. xxix + 235 pp. [8, 124, 130]
- Legendre, L. 2008a. *Scientific research and discovery: Process, consequences and practice*. Edition électronique. Excellence in Ecology, 16 (O. Kinne, Ed.). International Ecology Institute, Oldendorf-Luhe. xv + 157 pp. <http://www.int-res.com/book-series/excellence-in-ecology/ee16/> [8]
- Legendre, L., M. Aota, K. Shirasawa, M. J. Martineau & M. Ishikawa. 1991. Crystallographic structure of sea ice along a salinity gradient and environmental control of microalgae in the brine cells. *J. Mar. Syst.* **2**: 347-357. [596, 688, 690]
- Legendre, L. & S. Demers. 1984. Towards dynamic biological oceanography and limnology. *Can. J. Fish. Aquat. Sci.* **41**: 2-19. [757]
- Legendre, L., S. Demers & D. Lefaivre. 1986. Biological production at marine ergoclines. 1-29 in: J.-C. Nihoul [ed.] *Marine interfaces ecohydrodynamics*. Elsevier, Amsterdam. [789]
- Legendre, L., M. Fréchette & P. Legendre. 1981. The contingency periodogram: a method of identifying rhythms in series of nonmetric ecological data. *J. Ecol.* **69**: 965-979. [744, 745, 747]
- Legendre, L., R. G. Ingram & Y. Simard. 1982. Aperiodic changes of water column stability and phytoplankton in an Arctic coastal embayment, Manitousuk Sound, Hudson Bay. *Nat. Can. (Qué.)* **109**: 775-786. [246]
- Legendre, L. & P. Legendre. 1978. Associations. 261-272 in: A. Sournia [ed]. *Phytoplankton manual. Monographs on oceanographic Methodology*, Vol. 6. UNESCO, Paris. [389]
- Legendre, L. & P. Legendre. 1979a. *Écologie numérique. 1. Le traitement multiple des données écologiques*. Masson, Paris et les Presses de l'Université du Québec. xiv + 197 pp. [xii]
- Legendre, L. & P. Legendre. 1979b. *Écologie numérique. 2. La structure des données écologiques*. Masson, Paris et les Presses de l'Université du Québec. viii + 254 pp. [xii]
- Legendre, L. & P. Legendre. 1983a. *Numerical ecology*. Developments in environmental modelling, 3. Elsevier Scientific Publ. Co., Amsterdam, The Netherlands. xvi + 419 pp. [xii]
- Legendre, L. & P. Legendre. 1983b. Partitioning ordered variables into discrete states for discriminant analysis of ecological classifications. *Can. J. Zool.* **61**: 1002-1010. [241, 243]

- Legendre, L. & P. Legendre. 1984a. *Écologie numérique. 2nd edition. 1. Le traitement multiple des données écologiques*. Masson, Paris et les Presses de l'Université du Québec. xv + 260 pp. [xii]
- Legendre, L. & P. Legendre. 1984b. *Écologie numérique. 2nd edition. 2. La structure des données écologiques*. Masson, Paris et les Presses de l'Université du Québec. viii + 335 pp. [xii, 718, 719]
- Legendre, P. 1976. An appropriate space for clustering selected groups of western North American *Salmo*. *Syst. Zool.* **25**: 193-195. [346, 523]
- Legendre, P. 1987b. Constrained clustering. 289-307 in: P. Legendre & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI series, Vol. G-14. Springer-Verlag, Berlin. [777, 842]
- Legendre, P. 1990. Quantitative methods and biogeographic analysis. 9-34 in: D. J. Garbary & R. G. South [eds.] *Evolutionary biogeography of the marine algae of the North Atlantic*. NATO ASI Series, Vol. G 22. Springer-Verlag, Berlin. [850]
- Legendre, P. 1993. Spatial autocorrelation: Trouble or new paradigm? *Ecology* **74**: 1659-1673. [9, 183, 572, 606, 788, 802]
- Legendre, P. 2000. Comparison of permutation methods for the partial correlation and partial Mantel tests. *J. Statist. Comput. Simul.* **67**: 37-73. [604]
- Legendre, P. 2005. Species associations: the Kendall coefficient of concordance revisited. *J. Agr. Biol. Envir. S.* **10**: 226-245. [216, 217, 319, 390, 395-397, 700]
- Legendre, P. 2008b. Model II regression user's guide, R edition. Available as a vignette of the R package LMODEL2. 14 pp. [552, 555]
- Legendre, P. 2010. Coefficient of concordance. 164-169 in: N. J. Salkind [ed.] *Encyclopedia of Research Design, Vol. 1*. SAGE Publications, Inc., Los Angeles. [216]
- Legendre, P. & M. J. Anderson. 1999. Distance-based redundancy analysis: testing multispecies responses in multifactorial ecological experiments. *Ecol. Monogr.* **69**: 1-24. [504, 648]
- Legendre, P. & A. Beauvais. 1978. Niches et associations de poissons des lacs de la Radissonie québécoise. *Nat. Can. (Qué.)* **105**: 137-158. [393, 394]
- Legendre, P. & H. J. B. Birks. 2012. From classical to canonical ordination. 201-248 in: H. J. B. Birks, A. F. Lotter, S. Juggins & J. P. Smol [eds.] *Tracking Environmental Change using Lake Sediments, Volume 5: Data handling and numerical techniques*. Springer, Dordrecht, The Netherlands. [428, 670, 723, 763, 877]
- Legendre, P. & D. Borcard. 2006. Quelles sont les échelles spatiales importantes dans un écosystème ? 425-442 in: J.-J. Driesbeke, M. Lejeune & G. Saporta [éds], *Analyse statistique de données spatiales*. Éditions TECHNIP, Paris. [861, 864]
- Legendre, P., D. Borcard & P. R. Peres-Neto. 2005. Analyzing beta diversity: partitioning the spatial variation of community composition data. *Ecol. Monogr.* **75**: 435-450. [258, 602, 603, 607, 702]
- Legendre, P., D. Borcard & P. R. Peres-Neto. 2008. Analyzing or explaining beta diversity: Comment. *Ecology* **89**: 3238-3244. [607]
- Legendre, P., D. Borcard & D. W. Roberts. 2012. Variation partitioning involving orthogonal spatial eigenfunction submodels. *Ecology* **93**: 1234-1240. [873, 890, 905]
- Legendre, P. & A. Chodorowski. 1977. A generalization of Jaccard's association coefficient for *Q* analysis of multi-state ecological data matrices. *Ekol. Pol.* **25**: 297-308. [282, 283, 287, 290, 342, 343, 524, 525]

- Legendre, P., M. R. T. Dale, M.-J. Fortin, P. Casgrain & J. Gurevitch. 2004. Effects of spatial structures on the results of field experiments. *Ecology* **85**: 3202-3214. [18, 22]
- Legendre, P., M. R. T. Dale, M.-J. Fortin, J. Gurevitch, M. Hohn & D. Myers. 2002. The consequences of spatial structure for the design and analysis of ecological field surveys. *Ecography* **25**: 601-615. [16, 18, 20, 21]
- Legendre, P., S. Dallot & L. Legendre. 1985. Succession of species within a community: chronological clustering, with applications to marine and freshwater zooplankton. *Am. Nat.* **125**: 257-288. [321, 768, 774-779, 842]
- Legendre, P., M. De Cáceres & D. Borcard. 2010. Community surveys through space and time: testing the space-time interaction in the absence of replication. *Ecology* **91**: 262-272. [900]
- Legendre, P. & P. Dutilleul. 1991. Comments on Boyle's "Acidity and organic carbon in lake water: variability and estimation of means". *J. Paleolimnol.* **6**: 103-110. [18]
- Legendre, P. & P. Dutilleul. 1992. Introduction to the analysis of periodic phenomena. 11-25 in: M. A. Ali [ed.] *Rhythms in fishes*. NATO ASI Series, Vol. A-236. Plenum, New York. [714, 715, 718, 719, 752]
- Legendre, P. & M.-J. Fortin. 1989. Spatial pattern and ecological analysis. *Vegetatio* **80**: 107-138. [9, 601, 790, 791, 793, 807, 821, 832, 844]
- Legendre, P. & M.-J. Fortin. 2010. Comparison of the Mantel test and alternative approaches for detecting complex multivariate relationships in the spatial analysis of genetic data. *Mol. Ecol. Resour.* **10**: 831-844. [262, 363, 602-604]
- Legendre, P. & E. D. Gallagher. 2001. Ecologically meaningful transformations for ordination of species data. *Oecologia* **129**: 271-280. [328, 330-332, 463, 648]
- Legendre, P., R. Galzin & M. Harmelin-Vivien. 1997a. Relating behavior to habitat: solutions to the fourth-corner problem. *Ecology* **78**: 547-562. [613, 614, 618, 621-623]
- Legendre, P. & F.-J. Lapointe. 2004. Assessing congruence among distance matrices: single malt Scotch whiskeys revisited. *Aust. N. Z. J. Stat.* **46**: 615-629. [217]
- Legendre, P., F.-J. Lapointe & P. Casgrain. 1994. Modeling brain evolution from behavior: a permutational regression approach. *Evolution* **48**: 1487-1499. [606, 607]
- Legendre, P. & L. Legendre. 1982. Échantillonnage et traitement des données. 163-216 in: S. Frontier [ed.] *Stratégies d'échantillonnage en écologie*. Collection d'Écologie, No. 17. Masson, Paris, and Les Presses de l'Université Laval, Québec. [199, 200, 202, 737]
- Legendre, P. & L. Legendre. 1998. *Numerical ecology, 2nd English edition*. Elsevier Science BV, Amsterdam, The Netherlands. xv + 853 pp. [xiii, xv, 349, 666]
- Legendre, P. & V. Legendre. 1984c. Postglacial dispersal of freshwater fishes in the Québec peninsula. *Can. J. Fish. Aquat. Sci.* **41**: 1781-1802. [840, 844, 847, 849]
- Legendre, P., F. Long, R. Bergeron & J. M. Levasseur. 1978. Inventaire aérien de la faune dans le Moyen Nord québécois. *Can. J. Zool.* **56**: 451-462. [235, 283]
- Legendre, P. & B. H. McArdle. 1997. Comparison of surfaces. *Oceanol. Acta* **20**: 27-41. [790, 826]
- Legendre, P., X. Mi, H. Ren, K. Ma, M. Yu, I. F. Sun & F. He. 2009. Partitioning beta diversity in a subtropical broad-leaved forest of China. *Ecology* **90**: 663-674. [402, 874, 875]
- Legendre, P., N. L. Oden, R. R. Sokal, A. Vaudor & J. Kim. 1990. Approximate analysis of variance of spatially autocorrelated regional data. *J. Classif.* **7**: 53-75. [18, 20, 21]
- Legendre, P., J. Oksanen & C. J. F. ter Braak. 2011. Testing the significance of canonical axes in redundancy analysis. *Methods Ecol. Evol.* **2**: 269-277. [634, 635]

- Legendre, P., D. Planas & M.-J. Auclair. 1984a. Succession des communautés de gastéropodes dans deux milieux différant par leur degré d'eutrophisation. *Can. J. Zool.* **62**: 2317-2327. [768]
- Legendre, P. & D. J. Rogers. 1972. Characters and clustering in taxonomy: a synthesis of two taximetric procedures. *Taxon* **21**: 567-606. [282, 338, 378]
- Legendre, P., S. F. Thrush, V. J. Cummings, P. K. Dayton, J. Grant, J. E. Hewitt, A. H. Hines, B. H. McArdle, R. D. Pridmore, D. C. Schneider, S. J. Turner, R. B. Whitlatch & M. R. Wilkinson. 1997b. Spatial structure of bivalves in a sandflat: scale and generating processes. *J. Exp. Mar. Biol. Ecol.* **216**: 99-128. [828]
- Legendre, P. & M. Troussellier. 1988. Aquatic heterotrophic bacteria: modeling in the presence of spatial autocorrelation. *Limnol. Oceanogr.* **33**: 1055-1067. [606]
- Legendre, P., M. Troussellier & B. Baleux. 1984b. Indices descriptifs pour l'étude de l'évolution des communautés bactériennes. 71-84 in: A. Bianchi [ed.] *Bactériologie marine – Colloque international no 331*. Éditions du CNRS, Paris. [257]
- Legendre, P., M. Troussellier, V. Jarry & M.-J. Fortin. 1989. Design for simultaneous sampling of ecological variables: from concepts to numerical solutions. *Oikos* **55**: 30-42. [844]
- Lehn, W. H. 1979. Atmospheric refraction and lake monsters. *Science (Wash. D. C.)* **205**: 183-185. [226]
- Lehn, W. H. & I. Schroeder. 1981. The Norse merman as an optical phenomenon. *Nature (Lond.)* **289**: 362-366. [226]
- Lekan, J. F. & R. E. Wilson. 1978. Spatial variability of phytoplankton biomass in the surface waters of Long Island Sound. *Estuar. Coast. Mar. Sci.* **6**: 239-251. [757]
- Léonard, R., P. Legendre, M. Jean & A. Bouchard. 2008. Spatial patterns of submerged macrophyte communities in a fluvio-lacustrine section of the St. Lawrence River: a landscape ecology perspective. *Landscape Ecol.* **23**: 91-105. [877]
- Levene, H. 1960. Robust tests for equality of variances. 278-292 in: I. Olkin, S. G. Ghurye, W. Hoeffding, W. G. Madow & H. B. Mann [eds.] *Contributions to probability and statistics*. Stanford University Press, Stanford, California. [682]
- Levin, S. A. 1992. The problem of pattern and scale in ecology. *Ecology* **73**: 1943-1967. [9]
- Levin, S. A. 2000. Multiple scales and the maintenance of biodiversity. *Ecosystems* **3**: 498-506. [9]
- Levings, C. D. 1975. Analyses of temporal variation in the structure of a shallow-water benthic community in Nova Scotia. *Int. Revue ges. Hydrobiol.* **60**: 449-470. [768]
- Levins, R. 1968. *Evolution in changing environments: some theoretical explorations*. Princeton University Press, Princeton, New Jersey. [260]
- Lilliefors, H. W. 1967. The Kolmogorov-Smirnov test for normality with mean and variance unknown. *J. Amer. Statist. Assoc.* **62**: 399-402. [190, 191]
- Lindeman, R. L. 1942. The trophic-dynamic aspect of ecology. *Ecology* **23**: 399-418. [785]
- Line, J. M., C. J. F. ter Braak & H. J. B. Birks. 1994. WACALIB version 3.3 – A computer program to reconstruct environmental variables from fossil assemblages by weighted averaging and to derive sample-specific errors of prediction. *J. Paleolimnol.* **10**: 147-152. [673]
- Lingoes, J. C. 1971. Some boundary conditions for a monotone analysis of symmetric matrices. *Psychometrika* **36**: 195-203. [502]
- Lipschutz, S. & M. L. Lipson. 2009. *Schaum's outline of linear algebra. 4th edition*. McGraw-Hill, New York. viii + 425 pp. [569]

- Little, R. J. A. & D. B. Rubin. 1987. *Statistical analysis with missing data*. Wiley, New York. xiv + 278 pp. [54–56]
- Lloyd, M. & R. J. Ghelardi. 1964. A table for calculating the «equitability» component of species diversity. *J. Anim. Ecol.* **33**: 217–225. [255, 256]
- Lloyd, M., R. F. Inger & F. W. King. 1968. On the diversity of reptile and amphibian species in a Bornean rain forest. *Am. Nat.* **102**: 497–515. [253]
- Logerwell, E. A., R. P. Hewitt & D. A. Demer. 1998. Scale-dependent spatial variance patterns and correlations of seabirds and prey in the southeastern Bering Sea as revealed by spectral analysis. *Ecography* **21**: 212–223. [759, 762]
- Longhurst, A. 2007. *Ecological geography of the sea. 2nd edition*. Elsevier Academic Press, San Diego. 560 pp. [248]
- Loreau, M. 2010. *The challenges of biodiversity science*. Excellence in Ecology, 17 [O. Kinne, Ed.]. International Ecology Institute, Oldendorf/Luhe. xxviii + 120 pp. [247, 250]
- Lotwick, H. W. & B. W. Silverman. 1982. Methods for analysing spatial processes of several types of points. *J. Roy. Statist. Soc. B* **44**: 406–413. [652]
- Ludwig, A., M. Bigras-Poulin & P. Michel. 2009. The analysis of crow population dynamics as a surveillance tool. *Transbound. Emerg. Dis.* **56**: 337–345. [750]
- Lukaszewicz, J. 1951. Sur la liaison et la division des points d'un ensemble fini. *Colloq. Math.* **2**: 282–285. [346, 350]
- MacArthur, R. H. 1957. On the relative abundance of bird species. *Proc. Natl. Acad. Sci. USA* **43**: 293–295. [256]
- MacArthur, R., H. Recher & M. Cody. 1966. On the relation between habitat selection and species diversity. *Am. Nat.* **100**: 319–332. [260]
- Macnaughton-Smith, P., W. T. Williams, M. B. Dale & L. G. Mockett. 1964. Dissimilarity analysis: a new technique of hierarchical sub-division. *Nature (Lond.)* **202**: 1034–1035. [380]
- MacQueen, J. 1967. Some methods for classification and analysis of multivariate observations. 281–297 in: L. M. Le Cam & J. Neyman [eds.] *Proceedings of the fifth Berkeley symposium on mathematical statistics and probability. Vol. 1*. University of California Press, Berkeley. [386]
- Madansky, A. 1959. The fitting of straight lines when both variables are subject to error. *J. Amer. Statist. Assoc.* **54**: 173–205. [546]
- Magnan, P., M. A. Rodriguez, P. Legendre & S. Lacasse. 1994. Dietary variation in a freshwater fish species: Relative contributions of biotic interactions, abiotic factors, and spatial structure. *Can. J. Fish. Aquat. Sci.* **51**: 2856–2865. [54, 892]
- Magurran, A. E. 2004. *Measuring biological diversity*. Blackwell Pub., Oxford. viii + 256 pp. [260]
- Mahalanobis, P. C. 1936. On the generalized distance in statistics. *Proc. Natl. Inst. Sci. India* **2**: 49–55. [303]
- Manly, B. F. J. 1986. Randomization and regression methods for testing for associations with geographical, environmental, and biological distances between populations. *Res. Popul. Ecol. (Kyoto)* **28**: 201–218. [606]
- Manly, B. F. J. 1997. *Randomization, bootstrap and Monte Carlo methods in biology. 2nd edition*. Chapman and Hall, London. xix + 399 pp. [25–27, 30, 31]
- Mantel, N. 1967. The detection of disease clustering and a generalized regression approach. *Cancer Res.* **27**: 209–220. [412, 598, 600]

- Marcotorchino, J. F. & P. Michaud. 1979. *Optimisation en analyse ordinale des données*. Masson, Paris. xii + 211 pp. [269]
- Mardia, K.V., J.T. Kent, and J.M. Bibby. 1979. *Multivariate analysis*. Academic Press, London. xv + 521 pp. [143]
- Margalef, R. 1958. Information theory in ecology. *General Systems* **3**: 36-71. [xii, 252, 253, 255, 257]
- Margalef, R. 1968. *Perspectives in ecological theory*. Univ. Chicago Press, Chicago. viii + 111 pp. [2, 768]
- Margalef, R. 1974. *Ecologia*. Ediciones Omega, Barcelona. xv + 951 pp. [37, 249, 250, 255]
- Margalef, R. & F. González Bernáldez. 1969. Grupos de especies asociadas en el fitoplancton del mar Caribe (NE de Venezuela). *Invest. Pesq.* **33**: 287-312. [452]
- Margalef, R. & E. Gutiérrez. 1983. How to introduce connectance in the frame of an expression for diversity. *Am. Nat.* **121**: 601-607. [254]
- Marquardt, D. W. & R. D. Snee. 1975. Ridge regression in practice. *Am. Statist.* **29**: 3-20. [564]
- Matheron, G. 1962. *Traité de géostatistique appliquée. Tomes 1 et 2*. Éditions Technip, Paris. 334 pp., 172 pp. [831]
- Matheron, G. 1965. *Les variables régionalisées et leur estimation – Une application de la théorie des fonctions aléatoires aux sciences de la nature*. Masson, Paris. 305 pp. [790, 831]
- Matheron, G. 1970. *La théorie des variables régionalisées, et ses applications*. Les Cahiers du Centre de Morphologie Mathématique. Fontainebleau, fascicule 5. 212 pp. [831]
- Matheron, G. 1971. *The theory of regionalised variables and its applications*. Les Cahiers du Centre de Morphologie Mathématique, Fasc. 5, ENSMP, Paris. 211 pp. [831]
- Matheron, G. 1973. The intrinsic random functions and their applications. *Adv. Appl. Prob.* **5**: 439-468. [831]
- Matula, D. W. & R. R. Sokal. 1980. Properties of Gabriel graphs relevant to geographic variation research and the clustering of points in the plane. *Geogr. Anal.* **12**: 205-222. [835]
- Maxwell, J. C. 1871. Remarks on the mathematical classification of physical quantities. *Proc. Lond. Math. Soc.* **3**: 224-232. [109, 111]
- McArdle, B. 1988. The structural relationship: regression in biology. *Can. J. Zool.* **66**: 2329-2339. [546, 547, 550, 552, 554, 556]
- McArdle, B. H. & M. J. Anderson. 2001. Fitting multivariate models to community data: a comment on distance-based redundancy analysis. *Ecology* **82**: 290-297. [263]
- McBratney, A. B. & R. Webster. 1981. The design of optimal sampling schemes for local estimation and mapping of regionalized variables – II. *Comput. Geosci.* **7**: 335-365. [21]
- McBratney, A. B., R. Webster & T. M. Burgess. 1981. The design of optimal sampling schemes for local estimation and mapping of regionalized variables – I. *Comput. Geosci.* **7**: 331-334. [21]
- McCoy, E. D., S. S. Bell & K. Walters. 1986. Identifying biotic boundaries along environmental gradients. *Ecology* **67**: 749-759. [294, 772]
- McCullagh, P. & J. A. Nelder. 1983. *Generalized linear models*. Chapman and Hall, London. 261 pp. [586]
- McCune, B. 1994. Improving community analysis with the Beals smoothing function. *Écoscience* **1**: 82-86. [334]

- McCune, B. 1997. Influence of noisy environmental data on canonical correspondence analysis. *Ecology* **78**: 2617-2623. [673]
- McCune, B. & T. F. H. Allen. 1985. Will similar forest develop on similar sites? *Can. J. Bot.* **63**: 367-376. [601]
- McGeoch, M. A. & S. L. Chown. 1998. Scaling up the value of bioindicators. *Trends Ecol. Evol.* **13**: 46-47. [401]
- McIntyre, R. M. & R. K. Blashfield. 1980. A nearest-centroid technique for evaluating the minimum-variance clustering procedure. *Multivar. Behav. Res.* **15**: 225-238. [417]
- Mead, R. 1988. *The design of experiments – Statistical principles for practical applications*. Cambridge University Press, Cambridge. xiv + 620 pp. [535]
- Mendelssohn, R. & P. Cury. 1987. Fluctuations of a fortnightly abundance index of the Ivoirian coastal pelagic species and associated environmental conditions. *Can. J. Fish. Aquat. Sci.* **44**: 408-421. [56]
- Méot, A., P. Legendre & D. Borcard. 1998. Partialling out the spatial component of ecological variation: questions and propositions in the linear modeling framework. *Environ. Ecol. Stat.* **5**: 1-26. [854]
- Mesplé, F., M. Troussellier, C. Casellas & P. Legendre. 1996. Evaluation of simple statistical criteria to qualify a simulation. *Ecol. Model.* **88**: 9-18. [544, 555]
- Meulman, J. 1982. *Homogeneity analysis of incomplete data*. DSWO Press, Leiden. 168 pp. [465]
- Miller, J. K. 1975. The sampling distribution and a test for the significance of the bimultivariate redundancy statistic: a Monte Carlo study. *Multivar. Behav. Res.* **10**: 233-244. [633]
- Miller, J. K. & S. D. Farr. 1971. Bimultivariate redundancy: a comprehensive measure of interbattery relationship. *Multivar. Behav. Res.* **6**: 313-324. [566, 632]
- Milligan, G. W. 1979. Ultrametric hierarchical clustering algorithms. *Psychometrika* **44**: 343-346. [377]
- Milligan, G. W. 1980. An examination of the effect of six types of error perturbation on fifteen clustering algorithms. *Psychometrika* **45**: 325-342. [415]
- Milligan, G. W. 1981. A Monte Carlo study of thirty internal criterion measures for cluster analysis. *Psychometrika* **46**: 187-199. [416]
- Milligan, G. W. 1996. Clustering validation – Results and implications for applied analyses. 341-375 in: P. Arabie, L. J. Hubert & G. De Soete [eds.] *Clustering and Classification*. World Scientific Publ. Co., River Edge, New Jersey. [350, 389, 415]
- Milligan, G. W. & M. C. Cooper. 1985. An examination of procedures for determining the number of clusters in a data set. *Psychometrika* **50**: 159-179. [389]
- Milligan, G. W. & M. C. Cooper. 1987. Methodological review: clustering methods. *Appl. Psychol. Meas.* **11**: 329-354. [386]
- Milligan, G. W. & M. C. Cooper. 1988. A study of standardization of variables in cluster analysis. *J. Classif.* **5**: 181-204. [44]
- Minchin, P. R. 1987. An evaluation of the relative robustness of techniques for ecological ordination. *Vegetatio* **69**: 89-107. [487, 512, 517]
- Monestiez, P. 1978. Méthodes de classification automatique sous contraintes spatiales. 367-379 in: J. M. Legay & R. Tomassone [eds.] *Biométrie et écologie*. Inst. nat. Rech. agronomique, Jouy-en-Josas. [840]

- Montgomery, D. C. & E. A. Peck. 1982. *Introduction to linear regression analysis*. Wiley, New York. 504 pp. [589, 590]
- Mood, A. M. 1969. Macro-analysis of the American educational system. *Oper. Res.* **17**: 770-784. [571]
- Mood, A. M. 1971. Partitioning variance in multiple regression — Analyses as a tool for developing learning models. *Am. Educ. Res. J.* **8**: 191-202. [571]
- Moran, P. A. P. 1950. Notes on continuous stochastic phenomena. *Biometrika* **37**: 17-23. [793]
- Moreau, G. & L. Legendre. 1979. Relation entre habitat et peuplements de poissons: essai de définition d'une méthode numérique pour des rivières nordiques. *Hydrobiologia* **67**: 81-87. [306]
- Moretti, M., M. De Cáceres, C. Pradella, M. K. Obrist, B. Wermelinger, P. Legendre & P. Duelli. 2010. Fire-induced taxonomic and functional changes in saproxylic beetle communities in fire sensitive regions. *Ecography* **33**: 760-771. [399]
- Moretti, M. & C. Legg. 2009. Combining plant and animal traits to assess community functional responses to disturbance. *Ecography* **32**: 299-309. [702]
- Morice, E. 1968. *Dictionnaire de statistique*. Dunod, Paris. ix + 196 pp. [234]
- Morrall, R. A. A. 1974. Soil microfungi associated with aspen in Saskatchewan: synecology and quantitative analysis. *Can. J. Bot.* **52**: 1803-1817. [455]
- Morrison, D. F. 1990. *Multivariate statistical methods*. 3rd edition. McGraw-Hill, New York. xvii + 495. [2, 10, 146, 429]
- Motyka, J. 1947. O zadaniach i metodach badan geobotanicznych. Sur les buts et les méthodes des recherches géobotaniques. *Annales Universitatis Mariae Curie-Skłodowska (Lublin, Polonia), Sectio C, Supplementum I*. viii + 168 pp. [285, 311]
- Motyka, J., B. Dobrzanski & S. Zawadzki. 1950. Wstepne badania nad lakami poludniowo-wschodniej Lubelszczyzny. Preliminary studies on meadows in the south-east of the province Lublin. *Annales Universitatis Mariae Curie-Skłodowska (Lublin, Polonia), Sectio E*, **13**: 367-447. [285, 311]
- Muirhead, R. J. 1982. *Aspects of multivariate statistical theory*. Wiley, New York. xix + 673 pp. [143]
- Muller, R. A. & G. J. MacDonald. 2002. *Ice ages and astronomical causes: data, spectral analysis and mechanisms*. Springer-Verlag, Berlin. xvii + 323 pp. [754]
- Murray, J. L. S. & P. A. Jumars. 2002. Clonal fitness of attached bacteria predicted by analog modeling. *BioScience* **52**: 343-355. [124]
- Murtagh, F. 1985. A survey of algorithms for contiguity-constrained clustering and related problems. *Comput. J.* **28**: 82-88. [843]
- Myers, D. E. 1982. Matrix formulation of co-kriging. *Math. Geol.* **14**: 249-257. [57]
- Myers, D. E. 1983. Estimation of linear combinations and co-kriging. *Math. Geol.* **15**: 633-637. [57]
- Myers, D. E. 1984. Co-kriging — New developments. 295-305 in: G. Verly, M. David, A. G. Journel & A. Marechal [eds.] *Geostatistics for natural resources characterization, Part 1. Vol. C 122*. NATO ASI Series. D. Reidel Publ. Co., Dordrecht. [57]
- Myers, D. E. 1997. Statistical models for multiple-scaled analysis. 273-293 in: D. A. Quattrochi & M. F. Goodchild [eds.] *Scale in remote sensing and GIS*. Lewis, New York. [813]

- Myster, W. & S. T. A. Pickett. 1992. Dynamics of associations between plants in ten old fields during 31 years of succession. *J. Ecol.* **80**: 291-302. [319, 390]
- Nardi, M., E. Morgan & F. Scapini. 2003. Seasonal variation in the free-running period in two *Talitrus saltator* populations from Italian beaches differing in morphodynamics and human disturbance. *Estuar. Coast. Shelf Sci.* **58**, Supplement: 199-206. [744]
- Nekola, J. C. & P. S. White. 1999. The distance decay of similarity in biogeography and ecology. *J. Biogeogr.* **26**: 867-878. [598]
- Nemec, A. F. L. & R. O. Brinkhurst. 1988. Using the bootstrap to assess statistical significance in the cluster analysis of species abundance data. *Can. J. Fish. Aquat. Sci.* **45**: 965-970. [416]
- Neter, J., M. H. Kutner, C. J. Nachtsheim & W. Wasserman. 1996. *Applied linear statistical models*. Irwin, Chicago. xv + 1408 pp. [538, 558]
- Neu, C. W., C. R. Byers & J. M. Peek. 1974. A technique for analysis of utilization-availability data. *J. Wildl. Manag.* **38**: 541-545. [244]
- Neyman, J. & E. S. Pearson. 1966. *Joint statistical papers of J. Neyman and E. S. Pearson*. University of California Press, Berkeley. vii + 299 pp. [28]
- Nie, N. H., C. H. Hull, J. G. Jenkins, K. Steinbrenner & D. H. Bent. 1975. *SPSS - Statistical package for the social sciences. 2 edition*. McGraw-Hill, New York. xxiv + 675 p. pp. [593, 596]
- Nishisato, S. 1980. *Analysis of categorical data - Dual scaling and its applications*. Mathematical expositions No. 24. University of Toronto Press, Toronto. xiii + 276 pp. [464]
- Noorduijn, S. L., A. Ghadouani, R. Vogwill, K. R. J. Smettem & P. Legendre. 2010. Water table response to an experimental alley farming trial: dissecting the spatial and temporal structure of the data. *Ecol. Appl.* **20**: 1704-1720. [877]
- North, P. M. 1977. A novel clustering method for estimating numbers of bird territories. *Appl. Stat.* **26**: 149-155. [773]
- Norusis, M. J. 1990. *SPSS advanced statistics user's guide*. SPSS Inc., Chicago. 285 pp. [587]
- Noy-Meir, I. & D. Anderson. 1971. Multiple pattern analysis or multiscale ordination: towards a vegetation hologram. 207-232 in: G. P. Patil, E. C. Pielou & E. W. Water [eds.] *Statistical ecology: populations, ecosystems, and systems analysis*. Pennsylvania State University Press, University Park, Pennsylvania. [894]
- Noy-Meir, I., D. Walker & W. T. Williams. 1975. Data transformation in ecological ordination - II. On the meaning of data standardization. *J. Ecol.* **63**: 779-800. [328, 332]
- Obenchain, R. L. 1977. Classical F-tests and confidence regions for ridge regression. *Technometrics* **19**: 429-439. [564]
- Ochiai, A. 1957. Zoogeographic studies on the soleoid fishes found in Japan and its neighbouring regions. *Bull. Jpn. Soc. Sci. Fish.* **22**: 526-530. [277]
- O'Connor, I. & L. W. Aarssen. 1987. Species association patterns in abandoned sand quarries. *Vegetatio* **73**: 101-109. [319, 390]
- Oden, N. L. 1984. Assessing the significance of a spatial correlogram. *Geogr. Anal.* **16**: 1-16. [745, 799]
- Oden, N. L. & R. R. Sokal. 1986. Directional autocorrelation: an extension of spatial correlograms to two dimensions. *Syst. Zool.* **35**: 608-617. [807, 819]
- Oden, N. L., R. R. Sokal, M.-J. Fortin & H. Goebel. 1993. Categorical wombling: detecting regions of significant change in spatially located categorical variables. *Geogr. Anal.* **25**: 315-336. [790, 844, 846]

- Odum, E. P. 1950. Bird populations of the Highlands (North Carolina) plateau in relation to plant succession and avian invasion. *Ecology* **31**: 587-605. [xii, 311]
- Ohtani, K. 2000. Bootstrapping R^2 and adjusted R^2 in regression analysis. *Ecol. Model.* **17**: 473-483. [565]
- Okubo, A. 1987. Fantastic voyage into the deep – Marine biofluids mechanics. 32-47 in: E. Teramoto & M. Yamaguti [eds.] *Mathematical topics in population biology, morphogenesis and neurosciences*. Lecture Notes in Biomathematics. Springer-Verlag, Berlin. [129]
- Olea, R. A. 1991. *Geostatistical glossary and multilingual dictionary*. Oxford University Press. New York. [37]
- Oliver, M. A. & R. Webster. 1989. A geostatistical basis for spatial weighting in multivariate classification. *Math. Geol.* **21**: 15-35. [843]
- O'Neill, R. V., R. H. Gardner, B. T. Milne, M. G. Turner & B. Jackson. 1991. Heterogeneity and spatial hierarchies. 85-96 in: J. Kolasa & S. T. A. Pickett [eds.] *Ecological heterogeneity*. Springer-Verlag, New York. [9]
- Orlói, L. 1966. Geometric models in ecology. I. The theory and application of some ordination methods. *J. Ecol.* **54**: 193-215. [509]
- Orlói, L. 1967a. Data centering: a review and evaluation with reference to component analysis. *Syst. Zool.* **16**: 208-212. [451]
- Orlói, L. 1967b. An agglomerative method for classification of plant communities. *J. Ecol.* **55**: 193-206. [301]
- Orlói, L. 1975. *Multivariate analysis in vegetation research*. Dr. W. Junk B. V., The Hague. ix + 276 pp. [270, 464]
- Orlói, L. 1978. *Multivariate analysis in vegetation research. 2nd edition*. Dr. W. Junk B. V., The Hague. ix + 451 pp. [270, 289, 300, 312, 329, 403, 476]
- Orlói, L. 1981. Probing time series vegetation data for evidence of succession. *Vegetatio* **46**: 31-35. [768]
- Ouellette, M.-H., P. Legendre & D. Borcard. 2012. Cascade multivariate regression tree: a novel approach for modelling nested explanatory sets. *Methods Ecol. Evol.* **3**: 234-244. [409]
- Paloheimo, J. E. & L. M. Dickie. 1965. Food and growth of fishes. I. A growth curve derived from experimental data. *J. Fish. Res. Board. Can.* **22**: 521-542. [127, 137]
- Passy, S. 2007. Community analysis in stream biomonitoring: what we measure and what we don't. *Environ. Monit. Assess.* **127**: 409-417. [855]
- Patrick, R. 1949. A proposed biological measure of stream conditions, based on a survey of the Conestoga basin, Lancaster County, Pennsylvania. *Proc. Acad. Nat. Sci. Phila.* **101**: 277-341. [200, 251]
- Patten, B. C. 1962. Species diversity in net phytoplankton of Raritan Bay. *J. Mar. Res.* **20**: 57-75. [256]
- Pawitan, Y. & J. Huang. 2003. Constrained clustering of irregularly sampled spatial data. *J. Stat. Comput. Sim.* **73**: 853-865. [841]
- Pearson, K. 1897. On a form of spurious correlation which may arise when indices are used in the measurement of organs. *Proc. R. Soc. London* **60**: 487-498. [43]
- Pearson, K. 1900. On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling. *Philos. Mag., Ser. 5* **50**: 157-172. [230]

- Pearson, K. 1901. On lines and planes of closest fit to systems of points in space. *Philos. Mag.* **2**: 559-572. [430, 546]
- Pearson, K. 1926. On the coefficient of racial likeness. *Biometrika* **18**: 105-117. [306]
- Peet, R. K. 1974. The measurement of species diversity. *Annu. Rev. Ecol. Syst.* **5**: 285-307. [250, 251, 255]
- Peet, R. K., R. G. Knox, J. S. Case & R. B. Allen. 1988. Putting things in order: the advantages of detrended correspondence analysis. *Am. Nat.* **131**: 924-934. [486]
- Peitgen, H.-O., H. Jürgens & D. Saupe. 2004. *Chaos and fractals: new frontiers of science*, 2nd ed. Springer-Verlag, New York. xiii + 864 pp. [2]
- Peli, T. & D. Malah. 1982. A study of edge detection algorithms. *Computer Graphics Image Process.* **20**: 1-21. [844]
- Pélissier, R., P. Couteron & S. Dray. 2008. Analyzing or explaining beta diversity: Comment. *Ecology* **89**: 3227-3232. [607]
- Percival, D. B. & A. T. Walden. 2000. *Wavelet methods for time series analysis*. Cambridge University Press, New York. xxv + 594 pp. [767]
- Peres-Neto, P. R. & D. A. Jackson. 2001. How well do multivariate data sets match? The advantages of a Procrustean superimposition approach over the Mantel test. *Oecologia* **129**: 169-178. [612, 704]
- Peres-Neto, P. R. & P. Legendre. 2010. Estimating and controlling for spatial structure in the study of ecological communities. *Global Ecol. Biogeogr.* **19**: 174-184. [20, 902]
- Peres-Neto, P. R., P. Legendre, S. Dray & D. Borcard. 2006. Variation partitioning of species data matrices: estimation and comparison of fractions. *Ecology* **87**: 2614-2625. [566, 571, 573, 578, 633, 667]
- Perruchet, C. 1981. Classification sous contrainte de contiguïté continue. 71-92 in: *Classification automatique et perception par ordinateur*. Séminaires de l'Institut national de Recherche en Informatique et en Automatique (C 118), Rocquencourt. [840]
- Perruchet, C. 1983a. Significance tests for clusters: overview and comments. 199-208 in: J. Felsenstein [ed.] *Numerical taxonomy*. NATO Advanced Study Institute Series G (Ecological Sciences), No. 1. Springer-Verlag, Berlin. [415]
- Perruchet, C. 1983b. Une analyse bibliographique des épreuves de classifiabilité en analyse des données. *Statist. Anal. Données* **8**: 18-41. [415]
- Petchey, O. L. & K. J. Gaston. 2002. Functional diversity (FD), species richness and community composition. *Ecol. Lett.* **5**: 402-411. [255]
- Peters, R. H. 1983. *The ecological implications of body size*. Cambridge Univ. Press, Cambridge. xii + 329 pp. [537]
- Petrie, W. M. F. 1899. Sequences in prehistoric remains. *J. Anthropol. Inst.* **29**: 295-301. [403]
- Piazza, A. & L. L. Cavalli-Sforza. 1975. Spectral analysis of patterned covariance matrices and evolutionary relationships. 76-105 in: G. F. Estabrook [ed.] *Proceedings of the eight international conference on numerical taxonomy*. W. H. Freeman, San Francisco. [381]
- Pickett, S. T. A. & P. S. White [eds.] 1985. *The ecology of natural disturbance and patch dynamics*. Academic Press, New York. xiv + 472 pp. [785]
- Pielou, E. C. 1966. The measurement of diversity in different types of biological collections. *J. Theor. Biol.* **13**: 131-144. [xii, 253, 255]

- Pielou, E. C. 1969. *An introduction to mathematical ecology*. John Wiley & Sons, New York. viii + 286 pp. [xii, 250, 254]
- Pielou, E. C. 1975. *Ecological diversity*. John Wiley & Sons, New York. viii + 165 pp. [221, 227, 249, 250, 256, 257]
- Pielou, E. C. 1977. *Mathematical ecology*. 2nd edition. Wiley, New York. x + 385 pp. [789]
- Pillai, K. C. S. & Y.-S. Hsu. 1979. Exact robustness studies of the test of independence based on four multivariate criteria and their distribution problems under violations. *Ann. I. Stat. Math.* **31**: 85-101. [694]
- Pinel-Alloul, B. 1995. Spatial heterogeneity as a multiscale characteristic of zooplankton community. *Hydrobiologia* **300/301**: 17-42. [855]
- Pinel-Alloul, B., E. Magnin & G. Codin-Blumer. 1982. Effet de la mise en eau du réservoir Desaulniers (Territoire de la Baie de James) sur le zooplancton d'une rivière et d'une tourbière réticulée. *Hydrobiologia* **86**: 271-296. [778]
- Pinel-Alloul, B., G. Méthot, L. Lapierre & A. Willsie. 1996. Macroinvertebrate community as a biological indicator of ecological and toxicological factors in Lake Saint-François (Québec). *Environ. Pollut.* **91**: 65-87. [855]
- Pinel-Alloul, B., G. Méthot, G. Verreault & Y. Vigneault. 1990. Phytoplankton in Quebec lakes: variation with lake morphometry, and with natural and anthropogenic acidification. *Can. J. Fish. Aquat. Sci.* **47**: 1047-1057. [370]
- Pinel-Alloul, B., T. Niyonsenga & P. Legendre. 1995. Spatial and environmental components of freshwater zooplankton structure. *Écoscience* **2**: 1-19. [855]
- Pinty, J. J. & C. Gaultier. 1971. *Dictionnaire pratique de mathématiques et statistiques en sciences humaines*. Editions universitaires, Paris. 298 pp. [227]
- Pitard, F. F. 1992. *Pierre Gy's sampling theory and sampling practice. Volume I: Heterogeneity and sampling*. CRC Press Inc., Boca Raton, Florida. 214 pp. [788]
- Plackett, R. L. 1974. *The analysis of categorical data*. Griffin's statistical monographs and courses, no. 35. Griffin, London. viii + 159 pp. [235]
- Planes, S., A. Lefèvre, P. Legendre & R. Galzin. 1993. Spatio-temporal variability in fish recruitment to a coral reef (Moorea, French Polynesia). *Coral Reefs* **12**: 105-113. [842]
- Platt, T. 1969. The concept of energy efficiency in primary production. *Limnol. Oceanogr.* **14**: 653-659. [114]
- Platt, T. 1972. Local phytoplankton abundance and turbulence. *Deep-Sea Res.* **19**: 183-187. [757]
- Platt, T. 1978. Spectral analysis of spatial structure in phytoplankton populations. 73-84 in: J. H. Steele [ed.] *Spatial pattern in plankton communities*. Plenum Press, New York. [757]
- Platt, T. 1981. Thinking in term of scale: introduction to dimensional analysis. 112-121 in: T. Platt, K. H. Mann & R. E. Ulanowicz [eds.] *Mathematical models in biological oceanography*. The UNESCO Press, Paris. [125, 127, 129]
- Platt, T. & K. L. Denman. 1975. Spectral analysis in ecology. *Annu. Rev. Ecol. Syst.* **6**: 189-210. [754, 757]
- Platt, T., L. M. Dickie & R. W. Trites. 1970. Spatial heterogeneity of phytoplankton in a near-shore environment. *J. Fish. Res. Board Can.* **27**: 1453-1473. [732, 734, 760, 761]
- Platt, T. & D. V. Subba Rao. 1970. Energy flow and species diversity in a marine phytoplankton bloom. *Nature (Lond.)*. **227**: 1059-1060. [114, 732, 734, 760, 761]

- Platt, T. & D. V. Subba Rao. 1973. Some current problems in marine phytoplankton productivity. *Fish. Res. Board Can. Tech. Rep.* **307**: 1-90. [123, 124]
- Podani, J. 1999. Extending Gower's general coefficient of similarity to ordinal characters. *Taxon* **48**: 331-340. [279]
- Podani, J. & B. Csányi. 2010. Detecting indicator species: some extensions of the IndVal measure. *Ecol. Indic.* **10**: 1119-1124. [400]
- Powell, T. M., P. J. Richerson, T. M. Dillon, B. A. Agee, B. J. Dozier, D. A. Godden & L. O. Myrup. 1975. Spatial scales of current speed and phytoplankton biomass fluctuations in Lake Tahoe. *Science (Wash. D. C.)* **189**: 1088-1090. [757]
- Prentice, I. C. 1980. Multidimensional scaling as a research tool in quaternary palynology: a review of theory and methods. *Rev. Palaeobot. Palyno.* **31**: 71-104. [270, 310, 328, 332]
- Press, W. H., S. A. Teukolsky, W. T. Vetterling & B. P. Flannery. 2007. *Numerical recipes – The art of scientific computing. 3rd edition.* Cambridge Univ. Press, Cambridge. xxi + 1235 pp. [85, 503, 516, 718]
- Priestley, M. B. 1964. The analysis of two dimensional stationary processes with discontinuous spectra. *Biometrika* **51**: 195-217. [793, 807]
- Priestley, M. B. 1981a. *Spectral analysis and time series. 1. Univariate series.* Academic Press, London. xviii + 653 pp. [714]
- Priestley, M. B. 1981b. *Spectral analysis and time series. 2. Multivariate series, prediction and control.* Academic Press, London. xviii + 237 pp. [714]
- Prim, R. C. 1957. Shortest connection networks and some generalizations. *Bell Syst. Tech. J.* **36**: 1389-1401. [346]
- Pugesek, B. H., A. Tomer & A. von Eye. 2003. *Structural equation modeling: applications in ecological and evolutionary biology.* Cambridge University Press, Cambridge. xiii + 409 pp. [593]
- Quenouille, M. H. 1950. *Introductory statistics.* London. [46]
- Quinghong, L. & S. Bråkenhielm. 1995. A statistical approach to decompose ecological variation. *Water Air Soil Pollut.* **85**: 1587-1592. [856]
- Ragan, M. A. 1992. Phylogenetic inference based on matrix representation of trees. *Mol. Phylogenet. Evol.* **1**: 53-58. [417]
- Rajski, C. 1961. Entropy and metric spaces. 44-45 in: C. Cherry [ed.] *Information theory.* Butterworths, London. [233]
- Rand, W. M. 1971. Objective criteria for the evaluation of clustering methods. *J. Amer. Statist. Assoc.* **66**: 846-850. [413]
- Rao, C. R. 1948. The utilization of multiple measurements in problems of biological classification. *J. Roy. Statist. Soc. B* **10**: 159-203. [674]
- Rao, C. R. 1951. An asymptotic expansion of the distribution of Wilks' criterion. *Bull. Internat. Stat. Inst.* **33**: 177-181. [682]
- Rao, C. R. 1952. *Advanced statistical methods in biometric research.* John Wiley & Sons, New York. xvii + 390 pp. [674]
- Rao, C. R. 1964. The use and interpretation of principal component analysis in applied research. *Sankhyā, Ser. A* **26**: 329-358. [381, 430, 451, 492, 630, 635, 637]
- Rao, C. R. 1973. *Linear statistical inference and its applications. 2nd edition.* Wiley, New York. 625 pp. [635, 637]

- Rao, C. R. 1982. Diversity and dissimilarity coefficients: a unified approach. *Theor. Popul. Biol.* **21**: 24-43. [255, 264]
- Rao, C. R. 1995. A review of canonical coordinates and an alternative to correspondence analysis using Hellinger distance. *Qüestió (Quaderns d'Estadística i Investigació Operativa)* **19**: 23-63. [310]
- Ratkowsky, D. A. 1983. *Nonlinear regression modeling – A unified practical approach*. Marcel Dekker Inc., New York. viii + 276 pp. [538, 583]
- Raup, D. M. & R. E. Crick. 1979. Measurement of faunal similarity in paleontology. *J. Paleontol.* **53**: 1213-1227. [293, 295]
- Redford, A. J., R. M. Bowers, R. Knight, Y. Linhard & N. Fierer. 2010. The ecology of the phyllosphere: geographic and phylogenetic variability in the distribution of bacteria on tree leaves. *Environ. Microbiol.* **12**: 2885-2893. [518]
- Rejmánek, M. & J. Leps. 1996. Negative associations can reveal interspecific competition and reversal of competitive hierarchies during succession. *Oikos* **76**: 161-168. [390]
- Rendón, E., I. Abudez, A. Arizmendi & E. M. Quiroz. 2011. Internal versus external cluster validation indexes. *International Journal of Computers and Communications* **5**: 27-34. [418]
- Rendu, J.-M. 1981. *An introduction to geostatistical methods of mineral evaluation*. South African Institute of Mining and Metallurgy, Johannesburg. 84 pp. [831]
- Renfrew, C. & P. G. Bahn. 2008. *Archaeology: theories, methods and practice. 5th edition*. Thames & Hudson, London. 656 pp. [403]
- Renshaw, E. & E. D. Ford. 1984. The description of spatial pattern using two-dimensional spectral analysis. *Vegetatio* **56**: 75-85. [793, 807]
- Rényi, A. 1961. On measures of entropy and information. 547-561 in: J. Neyman [ed.] *Proceedings of the fourth Berkeley symposium on mathematical statistics and probability*. University of California Press, Berkeley. [250]
- Reynolds, C. S. 1987. Community organization in the freshwater plankton. Ch. 14. in: J. H. R. Gee & P. S. Giller [eds.] *Organization of communities: past and present*. Blackwell Scient. Publ., Oxford. [785]
- Reyssac, J. & M. Roux. 1972. Communautés planctoniques dans les eaux de Côte d'Ivoire. Groupes d'espèces associées. *Mar. Biol. (Berl.)* **13**: 14-33. [317, 452, 479]
- Ricker, W. E. 1973. Linear regression in fishery research. *J. Fish. Res. Board Can.* **30**: 409-434. [547]
- Rigler, F. H. 1982. The relation between fisheries management and limnology. *Trans. Am. Fish. Soc.* **111**: 121-132. [226]
- Ripley, B. D. 1981. *Spatial statistics*. Wiley, New York. x + 252 pp. [790, 793, 807]
- Ripley, B. D. 1987. Spatial point pattern analysis in ecology. 407-429 in: P. Legendre, & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI Series, Vol. G 14. Springer-Verlag, Berlin. [790]
- Robert, P. & Y. Escoufier. 1976. A unifying tool for linear multivariate statistical methods: the RV-coefficient. *Appl. Stat.-J. Roy. St. C* **25**: 257-265. [699]
- Robertson, G. P. 1987. Geostatistics in ecology: interpolating with known variance. *Ecology* **68**: 744-748. [832]
- Robinson, G. K. 1982. Behrens-Fisher problem. 205-209 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences. Vol. 1*. Wiley, New York. [25]

- Roche, C. 1978. Exemple de classification hiérarchique avec contrainte de contiguïté. Le partage d'Aix-en-Provence en quartiers homogènes. *C. Anal. Données* **3**: 289-305. [840]
- Rodríguez, M. A. & P. Magnan. 1995. Application of multivariate analyses in studies of the organization and structure of fish and invertebrate communities. *Aquat. Sci.* **57**: 199-216. [855]
- Rogers, D. J. & T. T. Tanimoto. 1960. A computer program for classifying plants. *Science (Wash. D. C.)* **132**: 1115-1118. [274]
- Rohlf, F. J. 1963. Classification of *Aedes* by numerical taxonomic methods (Diptera: Culicidae). *Ann. Entomol. Soc. Am.* **56**: 798-804. [353]
- Rohlf, F. J. 1970. Adaptive hierarchical clustering schemes. *Syst. Zool.* **19**: 58-82. [523]
- Rohlf, F. J. 1972. An empirical comparison of three ordination techniques in numerical taxonomy. *Syst. Zool.* **21**: 271-280. [428]
- Rohlf, F. J. 1974. Methods for comparing classifications. *Annu. Rev. Ecol. Syst.* **5**: 101-113. [413]
- Rohlf, F. J. 1978. A probabilistic minimum spanning tree algorithm. *Information Processing Letters* **7**: 44-48. [349]
- Rohlf, F. J. 1982a. Single linkage clustering algorithms. 267-284 in: P. R. Krishnaiah [ed.] *Handbook of Statistics*. North-Holland, Amsterdam. [349]
- Rohlf, F. J. 1982b. Consensus indices for comparing classifications. *Math. Biosci.* **59**: 131-144. [413, 418]
- Rolecek, J., L. Tichy, D. Zeleny & M. Chytrý. 2009. Modified TWINSpan classification in which the hierarchy respects cluster heterogeneity. *J. Veg. Sci.* **20**: 596-602. [383]
- Ross, G. J. S. 1990. *Nonlinear estimation*. Springer-Verlag, New York. viii + 189 pp. [538, 583, 716]
- Rossi, R. E., D. J. Mulla, A. G. Journel & E. H. Franz. 1992. Geostatistical tools for modeling and interpreting ecological spatial dependence. *Ecol. Monogr.* **62**: 277-314. [790, 807, 811, 817, 832]
- Roux, G. & M. Roux. 1967. À propos de quelques méthodes de classification en phytosociologie. *Rev. Stat. Appl.* **15**: 59-72. [464]
- Roux, M. & J. Reyssac. 1975. Essai d'application au phytoplancton marin de méthodes statistiques utilisées en phytosociologie terrestre. *Ann. Inst. Océanogr. (Paris)* **51**: 89-97. [309]
- Roxburgh, S. H. & P. Chesson. 1998. A new method for detecting species associations with spatially autocorrelated data. *Ecology* **79**: 2180-2192. [390]
- Roy, M. L., A. G. Roy & P. Legendre. 2010. The relations between 'standard' fluvial habitat variables and turbulent flow at multiple scales in morphological units of a gravel-bed river. *River Res. Appl.* **26**: 439-455. [877]
- Royston, J. P. 1982a. An extension of Shapiro and Wilk's *W* test for normality to large samples. *Appl. Statist.* **31**: 115-124. [191]
- Royston, J. P. 1982b. Algorithm AS 177. Expected normal order statistics (exact and approximate). *Appl. Statist.* **31**: 161-165. [191]
- Royston, J. P. 1982c. Algorithm AS 181. The *W* test for normality. *Appl. Statist.* **31**: 176-177. [191]
- Rubenstein, D. I. & M. A. R. Koehl. 1977. The mechanisms of filter feeding: some theoretical considerations. *Am. Nat.* **111**: 981-994. [129]

- Russell, P. F. & T. R. Rao. 1940. On habitat and association of species of anopheline larvae in south-eastern Madras. *J. Malar. Inst. India* **3**: 153-178. [277]
- Sakai, A. K. & N. L. Oden. 1983. Spatial pattern of sex expression in silver maple (*Acer saccharinum* L.): Morisita's index and spatial autocorrelation. *Am. Nat.* **122**: 489-508. [800]
- Sale, P. F. 1978. Coexistence of coral reef fishes – A lottery for living space. *Environ. Biol. Fishes* **3**: 85-102. [619]
- Sanders, H. L. 1960. Benthic studies in Buzzards Bay. III. The structure of the soft-bottom community. *Limnol. Oceanogr.* **5**: 138-153. [406]
- Sanders, H. L. 1968. Marine benthic diversity: a comparative study. *Am. Nat.* **102**: 243-282. [251]
- Särndal, C.-E. 1978. Design-based and model-based inference in survey sampling. *Scand. J. Stat.* **5**: 27-52. [6]
- SAS Institute Inc. 2011. SAS/STAT 9.3 User's Guide. SAS Institute Inc., Cary, North Carolina. xii + 8621 pp. [386]
- Scheider, W. & P. Wallis. 1973. An alternate method of calculating the population density of monsters in Loch Ness. *Limnol. Oceanogr.* **18**: 343. [226]
- Scherrer, B. 1982. Techniques de sondage en écologie. 63-162 in: S. Frontier [Ed.] *Stratégies d'échantillonnage en écologie*. Collection d'Écologie, No. 17. Masson, Paris et les Presses de l'Université Laval, Québec. [21]
- Schmidt, E. 1907. Zur Theorie der linearen und nichtlinearen Integralgleichungen. I Teil. Entwicklung willkürlichen Funktionen nach System vorgeschriebener. *Math. Ann.* **63**: 433-476. [103]
- Schneider, D. C. 1994. *Quantitative ecology – Spatial and temporal scaling*. Academic Press, San Diego. xv + 395 pp. [109, 124, 786]
- Schnell, G. D. 1970. A phenetic study of the suborder Lari (Aves). I. Methods and results of principal components analyses. *Syst. Zool.* **19**: 35-57. [523]
- Schoener, T. W. 1970. Nonsynchronous spatial overlap of lizards in patchy habitats. *Ecology* **51**: 408-418. [243]
- Schoener, T. W. & G. H. Adler. 1991. Greater resolution of distributional complementarities by controlling for habitat affinities: A study with Bahamian lizards and birds. *Am. Nat.* **137**: 669-692. [243]
- Schönemann, P. H. 1966. A generalized solution of the orthogonal Procrustes problem. *Psychometrika* **31**: 1-10. [703]
- Schönemann, P. H. & R. M. Carroll. 1970. Fitting one matrix to another under choice of a central dilation and a rigid motion. *Psychometrika* **35**: 245-256. [703]
- Schuster, A. 1898. On the investigation of hidden periodocities with application to a supposed 26 day period of meteorological phenomena. *Terrestrial Magnetism* **3**: 13-41. [748, 793]
- Searle, S. R. 1987. *Linear models for unbalanced data*. Wiley. xxiv + 536 pp. [568]
- Shannon, C. E. 1948. A mathematical theory of communications. *Bell System Technical Journal* **27**: 379-423. [221, 225]
- Shao, K. & F. J. Rohlf. 1983. Sampling distributions of consensus indices when all bifurcating trees are equally likely. 132-137 in: J. Felsenstein [ed.] *Numerical taxonomy*. NATO ASI Series, Vol. G-1. Springer-Verlag, Berlin. [529]

- Shao, K. & R. R. Sokal. 1986. Significance tests of consensus indices. *Syst. Zool.* **35**: 582-590. [529]
- Shapiro, S. S. & M. B. Wilk. 1965. An analysis of variance test for normality (complete samples). *Biometrika* **52**: 591-611. [190, 191]
- Sharma, S., P. Legendre, M. De Cáceres & D. Boisclair. 2011. The role of environmental and spatial processes in structuring native and non-native fish communities across thousands of lakes. *Ecography* **34**: 762-771. [893]
- Sharpe, D. M., G. R. Guntenspergen, C. P. Dunn, L. A. Leitner & F. Stearns. 1987. Vegetation dynamics in a southern Wisconsin agricultural landscape. 137-155 in: M. G. Turner [ed.] *Landscape heterogeneity and disturbance*. Ecological Studies 64. Springer-Verlag, New York. [489, 490]
- Sheldon, R. W. & S. R. Kerr. 1972. The population density of monsters in Loch Ness. *Limnol. Oceanogr.* **17**: 796-798. [226]
- Shepard, R. N. 1962. The analysis of proximities: multidimensional scaling with an unknown distance function. *Psychometrika* **27**: 125-139. [414, 427, 512]
- Shepard, R. N. 1966. Metric structures in ordinal data. *J. Math. Psychol.* **3**: 287-315. [512]
- Shipley, B. 2002. *Cause and correlation in biology: a user's guide to path analysis, structural equations and causal inference*. 1st paperback edition. Cambridge University Press, Cambridge. xii + 317 pp. [593]
- Shumway, R. H. & D. S. Stoffer. 1982. An approach to time series smoothing and forecasting using the EM algorithm. *J. Time Ser. Anal.* **3**: 253-264. [56]
- Shumway, R. H. & D. S. Stoffer. 2011. *Time series analysis and its applications – With R examples*. 3rd edition. Springer Texts in Statistics. Springer, New York. viii + 596 pp. [714, 722]
- Sidák, Z. 1967. Rectangular confidence regions for the means of multivariate normal distributions. *J. Amer. Statist. Assoc.* **62**: 626-633. [23]
- Siegel, S. 1956. *Nonparametric statistics for the behavioral sciences*. McGraw-Hill Series in Psychology, McGraw-Hill, New York. xvii + 312 pp. [25, 31, 201, 202, 213, 215, 230, 396]
- Siegel, S. and N. J. Castellan, Jr. 1988. *Nonparametric statistics for the behavioral sciences*. 2nd edition. McGraw-Hill, New York. xxiii + 399 pp. [25, 201, 213, 215]
- Simon, H. A. 1962. The architecture of complexity. *Proc. Am. Philos. Soc.* **106**: 467-482. [9]
- Simpson, E. H. 1949. Measurement of diversity. *Nature (Lond.)* **163**: 688. [253]
- Slutzky, E. 1927. The summation of random causes as the source of cyclic processes. In Russian. Translation revised by the author in 1937. *Econometrica* **5**: 105-146. [725]
- Smol, J. P. & E. F. Stoermer [eds.]. 2010. *The diatoms – Applications for the environmental and earth sciences*. 2nd edition. Cambridge University Press, New York. xviii + 667 pp. [672]
- Smouse, P. E., J. C. Long & R. R. Sokal. 1986. Multiple regression and correlation extensions of the Mantel test of matrix correspondence. *Syst. Zool.* **35**: 627-632. [604, 606]
- Sneath, P. H. A. 1957. The application of computers to taxonomy. *J. Gen. Microbiol.* **17**: 201-226. [341]
- Sneath, P. H. A. 1966. A comparison of different clustering methods as applied to randomly-spaced points. *Classification Soc. Bull.* **1**: 2-18. [352]
- Sneath, P. H. A. & R. R. Sokal. 1973. *Numerical taxonomy – The principles and practice of numerical classification*. W. H. Freeman, San Francisco. xv + 573 pp. [35, 36, 44, 270, 289, 346-349, 352, 353, 355, 357, 360, 369, 373, 412, 418, 523]

- Snedecor, G. W. & W. G. Cochran. 1967. *Statistical methods*. 6th Iowa State Univ. Press, Ames. xiv + 593 pp. [25]
- Soares, A., J. Távora, L. Pinheiro, C. Freitas & J. Almeida. 1992. *Predicting probability maps of air pollution concentration – A case study on Barreiro/Seixal industrial area*. Fourth international geostatistics congress, 13-18 september 1992, Troya, Portugal. [832]
- Sokal, R. R. 1979. Ecological parameters inferred from spatial correlograms. 167-196 in: G. P. Patil & M. L. Rosenzweig [eds.] *Contemporary quantitative ecology and related econometrics. Vol. 12*. Statistical Ecology Series. International Co-operative Publ. House, Fairland, Maryland. [804]
- Sokal, R. R. 1986. Spatial data analysis and historical processes. 29-43 in: E. Diday *et al.* [eds.] *Data analysis and informatics, IV*. North-Holland, Amsterdam. [529, 819]
- Sokal, R. R., I. A. Lengyel, P. A. Derish, M. C. Wooten & N. L. Oden. 1987. Spatial autocorrelation of ABO serotypes in mediaeval cemeteries as an indicator of ethnic and familial structure. *J. Archaeol. Sci.* **14**: 615-633. [31]
- Sokal, R. R. & C. D. Michener. 1958. A statistical method for evaluating systematic relationships. *Univ. Kans. Sci. Bull.* **38**: 1409-1438. [274, 340, 355]
- Sokal, R. R., N. L. Oden & B. A. Thomson. 1997a. A simulation study of microevolutionary inferences by spatial autocorrelation analysis. *Biol. J. Linn. Soc.* **60**: 73-93. [805]
- Sokal, R. R., N. L. Oden, J. Walker & D. M. Waddle. 1997b. Using distance matrices to choose between competing theories and an application to the origin of modern humans. *J. Hum. Evol.* **32**: 501-522. [805]
- Sokal, R. R. & F. J. Rohlf. 1962. The comparison of dendrograms by objective methods. *Taxon* **11**: 33-40. [346, 412]
- Sokal, R. R. & F. J. Rohlf. 1981. Taxonomic congruence in Leptopodomorpha re-examined. *Syst. Zool.* **30**: 309-325. [48]
- Sokal, R. R. & F. J. Rohlf. 1995. *Biometry – The principles and practice of statistics in biological research. 3rd edition*. W. H. Freeman, New York. xix + 887 pp. [23, 26, 31, 48–50, 190, 191, 201, 230, 231, 235, 244, 538, 543, 546, 548, 550, 554, 562, 592, 593, 595, 601, 610, 720, 848]
- Sokal, R. R. & P. H. A. Sneath. 1963. *Principles of numerical taxonomy*. W. H. Freeman, San Francisco. xvi + 359 pp. [xv, 270, 274–277]
- Sokal, R. R. & J. D. Thomson. 1987. Applications of spatial autocorrelation in ecology. 431-466 in: P. Legendre & L. Legendre [eds.] *Developments in numerical ecology*. NATO ASI Series, Vol. G-14. Springer-Verlag, Berlin. [800]
- Sokolove, P. G. & W. N. Bushell. 1978. The chi square periodogram: its utility for analysis of circadian rhythms. *J. Theor. Biol.* **72**: 131-160. [741]
- Somers, K. M. & R. H. Green. 1993. Seasonal patterns in trap catches of the crayfish *Cambarus bartoni* and *Orconectes virilis* in six south-central Ontario lakes. *Can. J. Zool.* **71**: 1136-1145. [601]
- Song, C. Q., B. Y. Wang & X. J. Sun. 1996. Implication of paleovegetational changes in Diaojiao Lake, Inner Mongolia. (In Chinese). *Acta Bot. Sin.* **38**: 568-575. [773]
- Sørensen, T. 1948. A method of establishing groups of equal amplitude in plant sociology based on similarity of species content and its application to analysis of the vegetation on Danish commons. *Biol. Skr.* **5**: 1-34. [350, 351]
- Sousa, W. P. 1979. Experimental investigations of disturbance and ecological succession in a rocky intertidal algal community. *Ecol. Monogr.* **49**: 227-254. [785]

- Southwood, T. R. E. 1966. *Ecological methods with particular reference to the study of insect populations*. Chapman and Hall, London. xviii + 391 pp. [50]
- Southwood, T. R. E. 1987. The concept and nature of the community. 3-27 in: J. H. R. Gee & P. S. Giller [eds.] *Organization of communities: past and present*. Blackwell Scientific Publ., Oxford. [785]
- Soyer, J. 1970. Bionomie benthique du plateau continental de la côte catalane française. III. Les peuplements de copépodes harpacticoides (Crustacea). *Vie Milieu* **21**: 337-511. [406]
- Späth, H. 1975. *Cluster-Analyse-Algorithmen zur Objektklassifizierung und Datenreduktion*. R. Oldenbourg Verlag, München. 217 pp. [386]
- Späth, H. 1980. *Cluster analysis algorithms*. Ellis Horwood, Chichester. 226 pp. [386]
- Spearman, C. 1904. "General intelligence," objectively determined and measured. *Am. J. Psychol.* **15**: 201-292. [xv, 340]
- Sprules, W. G. 1980. Nonmetric multidimensional scaling analyses of temporal variation in the structure of limnetic zooplankton communities. *Hydrobiologia* **69**: 139-146. [518, 768]
- Steel, M. A. & D. Penny. 1993. Distributions of tree comparison metrics. Some new results. *Syst. Biol.* **42**: 126-141. [529]
- Steiner, D., K. Baumberger & H. Maurer. 1969. Computer-processing and classification of multi-variate information from remote sensing imagery – A review of the methodology as applied to a sample of agricultural crops. 895-907 in: *Proc. sixth int. Symp. on Remote Sensing of Environment. Vol. II*. Willow Run Laboratories, Inst. of Science and Technology, Univ. of Michigan. [688]
- Stephens, M. A. 1974. EDF statistics for goodness of fit and some comparisons. *J. Amer. Statist. Assoc.* **69**: 730-737. [188, 190, 191]
- Stephenson, W., W. T. Williams & S. D. Cook. 1972. Computer analyses of Petersen's original data on bottom communities. *Ecol. Monogr.* **42**: 387-415. [306]
- Steven, D. M. & R. Glombitza. 1972. Oscillatory variation of a phytoplankton population in a tropical ocean. *Nature (Lond.)* **237**: 105-107. [733, 735, 737, 738, 750, 751]
- Stewart, D. & W. Love. 1968. A general canonical correlation index. *Psychol. Bull.* **70**: 160-163. [630, 695]
- Stewart, G. W. 1993. On the early history of the singular value decomposition. *SIAM Review* **35**: 551-566. [103]
- Stewart-Oaten, A., W. M. Murdoch & K. R. Parker. 1986. Environmental impact assessment: 'pseudoreplication' in time? *Ecology* **67**: 929-940. [267]
- St-Louis, N. & P. Legendre. 1982. A water quality index for lake beaches. *Water Res.* **16**: 945-948. [723]
- Student [W. S. Gosset]. 1914. The elimination of spurious correlation due to position in time or space. *Biometrika* **10**: 179-180. [822]
- Sturges, H. A. 1926. The choice of a class interval. *J. Amer. Statist. Assoc.* **21**: 65-66. [796]
- Swan, J. M. A. 1970. An examination of some ordination problems by use of simulated vegetational data. *Ecology* **51**: 89-102. [483, 487]
- Taguchi, S. 1976. Short-term variability of photosynthesis in natural marine phytoplankton populations. *Mar. Biol. (Berl.)* **37**: 197-207. [754]

- Tardif, J., P. Dutilleul & Y. Bergeron. 1998. Variations in periodicities of the ring width of black ash (*Fraxinus nigra* Marsh.) in relation to flooding and ecological site factors at Lake Duparquet in northwestern Quebec. *Biol. Rhythm Res.* **29**: 1-29. [753]
- Taylor, L. R. 1961. Aggregation, variance, and the mean. *Nature* **189**: 732-735. [50]
- Teissier, G. 1948. La relation d'allométrie: sa signification statistique et biologique. *Biometrics* **4**: 14-53. [547, 549]
- ter Braak, C. J. F. 1983. Principal components biplots and alpha and beta diversity. *Ecology* **64**: 454-462. [443]
- ter Braak, C. J. F. 1985. Correspondence analysis of incidence and abundance data: properties in terms of a unimodal response model. *Biometrics* **41**: 859-873. [478]
- ter Braak, C. J. F. 1986. Canonical correspondence analysis: a new eigenvector technique for multivariate direct gradient analysis. *Ecology* **67**: 1167-1179. [410, 660, 661, 666]
- ter Braak, C. J. F. 1987a. The analysis of vegetation-environment relationships by canonical correspondence analysis. *Vegetatio* **69**: 69-77. [661, 666]
- ter Braak, C. J. F. 1987b. Calibration. 78-90 in: R. H. G. Jongman, C. J. F. ter Braak & O. F. R. van Tongeren [eds.] *Data analysis in community and landscape ecology*. Pudoc, Wageningen, The Netherlands. Reissued in 1995 by Cambridge Univ. Press, Cambridge. [672, 674]
- ter Braak, C. J. F. 1987c. Ordination. 91-173 in: R. H. G. Jongman, C. J. F. ter Braak & O. F. R. van Tongeren [eds.] *Data analysis in community and landscape ecology*. Pudoc, Wageningen, The Netherlands. Reissued in 1995 by Cambridge Univ. Press, Cambridge. [271, 428, 456, 457, 470, 471, 477, 485, 486, 490, 491, 526, 632, 635, 642, 661, 708]
- ter Braak, C. J. F. 1988a. Partial canonical correspondence analysis. 551-558 in: H.-H. Bock [ed.] *Classification and related methods of data analysis*. North-Holland, Amsterdam. [667]
- ter Braak, C. J. F. 1988b. CANOCO – an extension of DECORANA to analyze species-environment relationships. *Vegetatio* **75**: 159-160. [490, 629, 661]
- ter Braak, C. J. F. 1988c. *CANOCO – a FORTRAN program for canonical community ordination by [partial] [detrended] [canonical] correspondence analysis, principal component analysis and redundancy analysis (version 2.1)*. Agricultural Mathematics Group, Ministry of Agriculture and Fisheries, Wageningen. ii + 95 pp. [490, 661]
- ter Braak, C. J. F. 1990. *Update notes: CANOCO version 3.10*. Agricultural Mathematics Group, Wageningen. [21, 470, 471, 490, 634, 651, 658, 661]
- ter Braak, C. J. F. 1992. Permutation versus bootstrap significance tests in multiple regression and ANOVA. 79-86 in: K.-H. Jöckel, G. Rothe & W. Sendler [eds.] *Bootstrapping and related techniques*. Springer-Verlag, Berlin. [651]
- ter Braak, C. J. F. 1994. Canonical community ordination. Part I: Basic theory and linear methods. *Écoscience* **1**: 127-140. [443, 639]
- ter Braak, C. J. F. 1995. Non-linear methods for multivariate statistical calibration and their use in palaeoecology: a comparison of inverse (*k*-nearest neighbours, partial least squares and weighted averaging partial least squares) and classical approaches. *Chemometrics Intelligent Lab. Syst.* **28**: 165-180. [672, 709]
- ter Braak, C. J. F., A. Cormont & S. Dray. 2012. Improved testing of species trait-environment relationships in the fourth-corner problem. *Ecology* **93**: 1525-1526. [613, 620]
- ter Braak, C. J. F. & S. Juggins. 1993. Weighted averaging partial least squares regression (WAPLS): an improved method for reconstructing environmental variables from species assemblages. *Hydrobiologia* **269**: 485-502. [672, 673]

- ter Braak, C. J. F. & C. W. N. Looman. 1987. Regression. 29-77 in: R. H. G. Jongman, C. J. F. ter Braak & O. F. R. van Tongeren [eds.] *Data analysis in community and landscape ecology*. Pudoc, Wageningen, The Netherlands. Reissued in 1995 by Cambridge Univ. Press, Cambridge. [568, 588]
- ter Braak, C. J. F. & I. C. Prentice. 1988. A theory of gradient analysis. *Adv. Ecol. Res.* **18**: 271-317. [271, 327, 632, 672]
- ter Braak, C. J. F. & A. P. Schaffers. 2004. Co-correspondence analysis: a new ordination method to relate two community compositions. *Ecology* **85**: 834-846. [699]
- ter Braak, C. J. F. & P. Smilauer. 1998. *CANOCO reference manual and user's guide to CanoCo for Windows – Software for canonical community ordination (version 4)*. Microcomputer Power, Ithaca, New York. [490, 519, 661]
- ter Braak, C. J. F. & P. Smilauer. 2002. *CANOCO reference manual and CanoDraw for Windows user's guide – Software for canonical community ordination (version 4.5)*. Microcomputer Power, Ithaca, New York. 500 pp. [558, 651]
- ter Braak, C. J. F. & H. van Dam. 1989. Inferring pH from diatoms: a comparison of old and new calibration methods. *Hydrobiologia* **178**: 209-223. [672]
- ter Braak, C. J. F. & P. F. M. Verdonschot. 1995. Canonical correspondence analysis and related multivariate methods in aquatic ecology. *Aquat. Sci.* **57**: 255-289. [666]
- Thiessen, A. W. 1911. Precipitation averages for large areas. *Monthly Weather Review* **39**: 1082-1084. [839]
- Thioulouse, J., D. Chessel & S. Champely. 1995. Multivariate analysis of spatial patterns: a unified approach to local and global structures. *Environ. Ecol. Stat.* **2**: 1-14. [852]
- Thompson, S. K. 1992. *Sampling*. Wiley, New York. 368 pp. [241]
- Thorington-Smith, M. 1971. West Indian Ocean phytoplankton: a numerical investigation of phytohydrographic regions and their characteristic phytoplankton associations. *Mar. Biol. (Berl.)* **9**: 115-137. [317, 391]
- Thrush, S. F., D. C. Schneider, P. Legendre, R. B. Whitlatch, P. K. Dayton, J. E. Hewitt, A. H. Hines, V. J. Cummings, S. M. Lawrie, J. Grant, R. D. Pridmore, S. J. Turner & B. H. McArdle. 1997. Scaling-up from experiments to complex ecological systems: where to next? *J. Exp. Mar. Biol. Ecol.* **216**: 243-254. [788]
- Tinkler, K. J. 1972. The physical interpretation of eigenfunctions of dichotomous matrices. *T. I. Brit. Geogr.* **55**: 17-46. [859, 884]
- Tobler, W. 1970. A computer movie simulating urban growth in the Detroit region. *Econ. Geogr.* **46**: 234-240. [859]
- Torgerson, W. S. 1958. *Theory and methods of scaling*. Wiley, New York. 460 pp. [492]
- Toussaint, G. 1980. The relative neighbourhood graph of a finite planar set. *Pattern Recogn.* **12**: 261-268. [835, 838]
- Tranter, D. J. & P. E. Smith. 1968. Filtration performance. 27-56 in: *Zooplankton sampling. Monographs on Oceanographic Methodology*, 2. UNESCO, Paris. [129]
- Trexler, J. C. & J. Travis. 1993. Nontraditional regression analyses. *Ecology* **74**: 1629-1637. [588, 591]
- Troussellier, M. & P. Legendre. 1981. A functional evenness index for microbial ecology. *Microb. Ecol.* **7**: 283-296. [257]

- Troussellier, M. & P. Legendre. 1989. Dynamics of fecal coliform and culturable heterotroph densities in an eutrophic ecosystem: stability of models and evolution of these bacterial groups. *Microb. Ecol.* **17**: 227-235. [564]
- Troussellier, M., P. Legendre & B. Baleux. 1986. Modeling of the evolution of bacterial densities in an eutrophic ecosystem (sewage lagoons). *Microb. Ecol.* **12**: 355-379. [564, 596]
- Tukey, J. W. 1958. Bias and confidence in not-quite large samples. (Abstract). *Ann. Math. Statist.* **29**: 614. [31]
- Tukey, J. W. 1977. *Exploratory data analysis*. Addison-Wesley, Reading, Mass. xvi + 688 pp. [722]
- Tuomisto, H. 2010. A diversity of beta diversities: straightening up a concept gone awry. Part 2. Quantifying beta diversity and related phenomena. *Ecography* **33**: 23-45. [260]
- Tuomisto, H. & A. D. Poulsen. 2000. Pteridophyte diversity and species composition in four Amazonian rain forests. *J. Veg. Sci.* **11**: 383-396. [870]
- Tuomisto, H. & K. Ruokolainen. 1994. Distribution of *Pteridophyta* and *Melastomataceae* along an edaphic gradient in an Amazonian rain forest. *J. Veg. Sci.* **5**: 25-34. [774]
- Tuomisto, H. & K. Ruokolainen. 2006. Analyzing or explaining beta diversity? Understanding the targets of different methods of analysis. *Ecology* **87**: 2697-2708. [607]
- Tuomisto, H. & K. Ruokolainen. 2008. Analyzing or explaining beta diversity: Reply. *Ecology* **89**: 3244-3256. [607]
- Tuomisto, H., K. Ruokolainen, M. Aguilar & A. Sarmiento. 2003. Floristic patterns along a 43-km long transect in an Amazonian rain forest. *J. Ecol.* **91**: 743-756. [402, 774, 779]
- Ulrych, T. J. & T. N. Bishop. 1975. Maximum entropy spectral analysis and autoregressive decomposition. *Rev. Geophys. Space Phys.* **13**: 183-200. [765]
- Ulrych, T. J. & R. W. Clayton. 1976. Time series modelling and maximum entropy. *Phys. Earth Planet. Inter.* **12**: 188-200. [765]
- Ulrych, T. J. & O. Jensen. 1974. Cross-spectral analysis using maximum entropy. *Geophysics* **39**: 353-354. [766]
- Underwood, A. J. 1991. Beyond BACI: experimental designs for detecting human environmental impacts on temporal variations in natural populations. *Aust. J. Mar. Freshwater Res.* **42**: 569-587. [267]
- Underwood, A. J. 1992. Beyond BACI: the detection of environmental impacts on populations in the real, but variable, world. *J. Exp. Mar. Biol. Ecol.* **161**: 145-178. [267]
- Underwood, A. J. 1994. On beyond BACI: sampling designs that might reliably detect environmental disturbances. *Ecol. Appl.* **4**: 3-15. [267]
- Underwood, A. J. 1997. *Experiments in ecology – Their logical design and interpretation using analysis of variance*. Cambridge University Press, Cambridge. xviii + 504 pp. [535]
- Upton, G. J. G. 1978. *The analysis of cross-tabulated data*. John Wiley & Sons, New York. xii + 148 pp. [235]
- Upton, G. J. G. & B. Fingleton. 1985. *Spatial data analysis by example. Vol. 1: Point pattern and quantitative data*. Wiley, Chichester. xi + 410 pp. [601, 790, 835, 839]
- Upton, G. J. G. & B. Fingleton. 1989. *Spatial data analysis by example. Vol. 2: categorical and directional data*. Wiley, Chichester. xi + 416 pp. [790]
- Urban, D. L., E. S. Minor, E. A. Treml & R. S. Schick. 2009. Graph models of habitat mosaics. *Ecol. Lett.* **12**: 260-273. [884]

- van den Brink, P. J., P. J. den Besten, A. bij de Vaate & C. J. F. ter Braak. 2009. Principal response curves technique for the analysis of multivariate biomonitoring time series. *Environ. Monit. Assess.* **152**: 271-281. [657]
- van den Brink, P. J. & C. J. F. ter Braak. 1998. Multivariate analysis of stress in experimental ecosystems by Principal Response Curves and similarity analysis. *Aquat. Ecol.* **32**: 163-178. [657]
- van den Brink, P. J. & C. J. F. ter Braak. 1999. Principal Response Curves: Analysis of time-dependent multivariate responses of a biological community to stress. *Environ. Toxicol. Chem.* **18**: 138-148. [657]
- van den Brink, P. J., N. W. van den Brink & C. J. F. ter Braak. 2003. Multivariate analysis of ecotoxicological data using ordination: Demonstrations of utility on the basis of various examples. *Australas. J. Ecotox.* **9**: 141-156. [657]
- van Rijkevorsel, J. L. A. & J. de Leeuw. 1988. *Component and correspondence analysis – Dimension, reduction by functional approximation*. John Wiley & Sons, Chichester. xiii + 146 pp. [464]
- Veech, J. A., K. S. Summerville, T. O. Crist & J. C. Gering. 2002. The additive partitioning of species diversity: recent revival of an old idea. *Oikos* **99**: 3-9. [260]
- Vellend, M. 2004. Parallel effects of land-use history on species diversity and genetic diversity of forest herbs. *Ecology* **85**: 3043-3055. [295]
- Vellend, M., K. Verheyen, K. M. Flinn, H. Jacquemyn, A. Kolb, H. van Calster, G. Peterken, B. J. Graae, J. Bellemare, O. Honnay, J. Brunet, M. Wulf, F. Gerhardt & M. Hermy. 2007. Homogenization of forest plant communities and weakening of species-environment relationships via agricultural land use. *J. Ecol.* **95**: 565-573. [295]
- Venables, W. N. & B. D. Ripley. 2002. *Modern applied statistics with S. 4th edition*. Springer-Verlag, New York. xi + 495 pp. [33, 714, 722, 729, 731]
- Venrick, E. L. 1971. Recurrent groups of diatoms in the North Pacific. *Ecology* **52**: 614-625. [393]
- Ver Hoef, J. M. & D. C. Glenn-Lewin. 1989. Multiscale ordination: a method for detecting pattern at several scales. *Vegetatio* **82**: 59-67. [894]
- Verly, G., M. David, A. G. Journel, & A. Marechal. 1984. *Geostatistics for natural resources characterization. Parts 1 and 2*. Reidel, Dordrecht. xxi + 585 pp., xii + 506 pp. [832]
- Verneaux, J. 1973. Cours d'eau de Franche-Comté (Massif du Jura). Recherches écologiques sur le réseau hydrographique du Doubs – Essai de biotypologie. *Annales Scientifiques de l'Université de Franche-Comté, Biologie Animale* **3**: 1-260. [659, 695]
- Villéger, S., N. W. H. Mason & D. Mouillot. 2008. New multidimensional functional diversity indices for a multifaceted framework in functional ecology. *Ecology* **89**: 2290-2301. [255]
- Vinod, H. D. 2011. *Hands-on matrix algebra using R: active and motivated learning with applications*. World Scientific Publishing, Hackensack, New Jersey. 348 pp. [60]
- Visscher, J. P. 1928. Reactions of the cyprid larvae of barnacles at the time of attachment. *Biol. Bull. (Woods Hole)* **54**: 327-335. [805]
- Voronoi, G. F. 1909. Recherches sur les paralléloèdres primitifs. *Journal für die reine und angewandte Mathematik* **136**: 67-179. [839]
- Wagner, H. H. 2003. Spatial covariance in plant communities: integrating ordination, variogram modeling, and variance testing. *Ecology* **84**: 1045-1057. [813, 814, 894]

- Wagner, H. H. 2004. Direct multi-scale ordination with canonical correspondence analysis. *Ecology* **85**: 342-351. [814, 894]
- Wagner, H. H. & M.-J. Fortin. 2005. Spatial analysis of landscapes: concepts and statistics. *Ecology* **86**: 1975-1987. [896]
- Walliser, B. 1977. *Systèmes et modèles*. Seuil, Paris. [38]
- Ward, J. H. 1963. Hierarchical grouping to optimize an objective function. *J. Amer. Statist. Assoc.* **58**: 236-244. [360, 365, 419]
- Wartenberg, D., S. Ferson & F. J. Rohlf. 1987. Putting things in order: a critique of detrended correspondence analysis. *Am. Nat.* **129**: 434-448. [483, 486]
- Warton, D. I., I. J. Wright, D. S. Falster & M. Westoby. 2006. Bivariate line-fitting methods for allometry. *Biol. Rev.* **81**: 259-291. [550, 552, 554, 555]
- Watson, L., W. T. Williams & G. N. Lance. 1966. Angiosperm taxonomy: a comparative study of some novel numerical techniques. *J. Linn. Soc. Lond. Bot.* **59**: 491-501. [310]
- Webster, R. 1973. Automatic soil-boundary location from transect data. *Math. Geol.* **5**: 27-37. [770]
- Webster, R. & T. M. Burgess. 1984. Sampling and bulking strategies for estimating soil properties in small regions. *J. Soil Sci.* **35**: 127-140. [21]
- Wegman, E. J. & I. W. Wright. 1983. Splines in statistics. *J. Amer. Statist. Assoc.* **78**: 351-365. [589]
- Whittaker, E. T. & G. Robinson. 1924. *The calculus of observations – A treatise on numerical mathematics*. Blackie & Son, London. xvi + 396 pp. [740]
- Whittaker, J. 1984. Model interpretation from the additive elements of the likelihood function. *Appl. Statist.* **33**: 52-64. [580, 582]
- Whittaker, R. H. 1952. A study of summer foliage insect communities in the Great Smoky Mountains. *Ecol. Monogr.* **22**: 1-44. [305]
- Whittaker, R. H. 1956. Vegetation of the Great Smoky Mountains. *Ecol. Monogr.* **26**: 1-80. [12, 582, 669, 707, 785]
- Whittaker, R. H. 1960. Vegetation of the Siskiyou Mountains, Oregon and California. *Ecol. Monogr.* **30**: 279-338. [260, 478]
- Whittaker, R. H. 1962. Classification of natural communities. *Bot. Rev.* **28**: 1-239. [337, 389]
- Whittaker, R. H. 1967. Gradient analysis of vegetation. *Biol. Rev. (Camb.)* **42**: 207-264. [271, 478, 482]
- Whittaker, R. H. 1972. Evolution and measurement of species diversity. *Taxon* **21**: 213-251. [249, 260, 261, 271, 319]
- Whittaker, R. H. & H. G. Gauch. 1973. Evaluation of ordination techniques. 287-321 in: R. H. Whittaker [ed.] *Handbook of vegetation science. Part V*. Dr. W. Junk, The Hague. [452]
- Whittington, H. B. & C. P. Hughes. 1972. Ordovician geography and faunal provinces deduced from trilobite distribution. *Phil. Trans. R. Soc. Lond. B* **263**: 235-278. [519]
- Whittle, P. 1963. On the fitting of multivariate autoregressions and the approximate canonical factorization of a spectral density matrix. *Biometrika* **50**: 129-154. [782]
- Wiens, J. A. 1989. Spatial scaling in ecology. *Funct. Ecol.* **3**: 385-397. [786-788]
- Wieser, W. 1960. Benthic studies in Buzzards Bay. II. The meiofauna. *Limnol. Oceanogr.* **5**: 121-137. [404, 406]

- Wilhm, J. L. 1968. Use of biomass units in Shannon's formula. *Ecology* **49**: 153-156. [250]
- Wilkinson, G. N., S. R. Eckert, T. W. Hancock & O. Mayo. 1983. Nearest neighbour (NN) analysis of field experiments. *J. R. Stat. Soc. Ser. B* **45**: 151-211. [20]
- Wilks, S. S. 1932. Certain generalizations in the analysis of variance. *Biometrika* **24**: 471-494. [682]
- Wilks, S. S. 1935. The likelihood test of independence in contingency tables. *Ann. Math. Statist.* **6**: 190-196. [230]
- Williams, B. K. 1983. Some observations on the use of discriminant analysis in ecology. *Ecology* **64**: 1283-1291. [588]
- Williams, B. K. & K. Titus. 1988. Assessment of sampling stability in ecological applications of discriminant analysis. *Ecology* **69**: 1275-1285. [708]
- Williams, D. A. 1976a. Improved likelihood ratio tests for complete contingency tables. *Biometrika* **63**: 33-37. [230, 238]
- Williams, E. J. 1952. Use of scores for the analysis of association in contingency tables. *Biometrika* **39**: 274-289. [476]
- Williams, W. T. 1976b. Hierarchical divisive strategies. In: W. T. Williams [ed.] *Pattern analysis in agricultural science*. CSIRO, Melbourne, Australia. [381]
- Williams, W. T., H. J. Clay & J. S. Bunt. 1982. The analysis, in marine ecology, of three-dimensional data matrices with one dimension of variable length. *J. Exp. Mar. Biol. Ecol.* **60**: 189-196. [269]
- Williams, W. T. & M. B. Dale. 1965. Fundamental problems in numerical taxonomy. *Adv. Bot. Res.* **2**: 35-68. [270, 380]
- Williams, W. T. & J. M. Lambert. 1959. Multivariate methods in plant ecology. I. Association-analysis in plant communities. *J. Ecol.* **47**: 83-101. [xii, 377]
- Williams, W. T. & J. M. Lambert. 1961. Multivariate methods in plant ecology. III. Inverse association-analysis. *J. Ecol.* **49**: 717-729. [379]
- Williams, W. T., J. M. Lambert & G. N. Lance. 1966. Multivariate methods in plant ecology. V. Similarity analyses and information-analysis. *J. Ecol.* **54**: 427-445. [372, 375]
- Williams, W. T., G. N. Lance, M. B. Dale & H. T. Clifford. 1971. Controversy concerning the criteria for taxonomic strategies. *Computer J.* **14**: 162-165. [341]
- Williams, W. T., G. N. Lance, L. J. Webb, J. G. Tracey & M. B. Dale. 1969. Studies in the numerical analysis of complex rain-forest communities. III. The analysis of successional data. *J. Ecol.* **57**: 515-535. [768]
- Williams, W. T. & W. Stephenson. 1973. The analysis of three-dimensional data (sites x species x times) in marine ecology. *J. Exp. Mar. Biol. Ecol.* **11**: 207-227. [269]
- Wilson, B. & R. A. Dawe. 2006. Detecting seasonality using time series analysis: comparing foraminiferal population dynamics with rainfall data. *J. Foramin. Res.* **36**: 108-115. [734, 739]
- Wirth, M., G. F. Estabrook & D. J. Rogers. 1966. A graph theory model for systematic biology, with an example for the Oncidiinae (Orchidaceae). *Syst. Zool.* **15**: 59-69. [412, 419]
- Wishart, D. 1969. An algorithm for hierarchical classifications. *Biometrics* **25**: 165-170. [365]
- Wold, S. 1974. Spline functions in data analysis. *Technometrics* **16**: 1-11. [589]
- Wolda, H. 1981. Similarity indices, sample size and diversity. *Oecologia (Berl.)* **50**: 296-302. [323]

-
- Wollenberg, A. L. van den. 1977. Redundancy analysis. An alternative for canonical correlation analysis. *Psychometrika* **42**: 207-219. [630, 635, 637]
- Womble, W. H. 1951. Differential systematics. *Science* **114**: 315-322. [844]
- Wright, S. 1921. Correlation and causation. *J. Agric. Res.* **20**: 557-585. [592]
- Wright, S. 1943. Isolation by distance. *Genetics* **28**: 114-138. [598]
- Wright, S. 1960. Path coefficients and path regressions: alternative or complementary concepts? *Biometrics* **16**: 189-202. [592]
- Wright, S. P. 1992. Adjusted P-values for simultaneous inference. *Biometrics* **48**: 1005-1013. [23]
- Young, F. W. 1985. Multidimensional scaling. 649-659 in: S. Kotz & N. L. Johnson [eds.] *Encyclopedia of statistical sciences*. Vol. 5. Wiley, New York. [512]
- Yule, G. U. 1927. On a method of investigating periodicities in disturbed series, with special reference to Wolfer's sunspot numbers. *Phil. Trans. R. Soc. Lond. A* **226**: 267-298. [725]
- Zar, J. H. 1999. *Biostatistical analysis*. 4th edition. Prentice Hall, Upper Saddle River, New Jersey. xii + 663 pp. + appendices. [215, 566]
- Zeeb, B. A., C. E. Christie, J. P. Smol, D. L. Findlay, H. J. Kling & H. J. B. Birks. 1994. Responses of diatom and chrysophyte assemblages in Lake 227 sediments to experimental eutrophication. *Can. J. Fish. Aquat. Sci.* **51**: 2300-2311. [855]

References to R packages

The list provides, in alphabetic order, references for the R packages cited in the Software sections of the chapters, and listed under the R packages entry of the Subject index. The references in the list are those provided by the author(s) in the package documentation files. The current package version numbers are also shown.

ade4, version 1.4-17

Chessel, D., A.-B. Dufour & S. Dray [with contributions of T. Jombart, J. R. Lobry, S. Ollier, S. Pavoine & J. Thioulouse]. 2011. ade4: Analysis of ecological data: exploratory and Euclidean methods in environmental sciences. R package version 1.4-17. <http://cran.r-project.org/web/packages/ade4/>.

AEM, version 0.4-1

Blanchet, F. G. [with contributions from P. Legendre]. 2012. AEM: Tools to construct asymmetric eigenvector maps (AEM) spatial variables. R package version 0.4-1. https://r-forge.r-project.org/R/?group_id=195.

ape, version 3.0-1

Paradis, E., B. Bolker, J. Claude, H. S. Cuong, R. Desper, B. Durand, J. Dutheil, O. Gascuel, C. Heibl, D. Lawson, V. Lefort, P. Legendre, J. Lemon, Y. Noel, J. Nylander, R. Opgen-Rhein, A.-A. Popescu, K. Schliep, K. Strimmer & D. de Vienne. 2012. ape: Analyses of phylogenetics and evolution. R package version 3.0-1. <http://cran.r-project.org/web/packages/ape/>.

base, **stats** and **splines** in R version 2.14.2

R Development Core Team. 2012. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL <http://www.R-project.org/>.

BiodiversityR, version 1.6

Kindt, R. 2011. BiodiversityR: GUI for biodiversity and community ecology analysis. R package version 1.6. <http://cran.r-project.org/web/packages/BiodiversityR/>.

ca, version 0.33

Greenacre, M. & O. Nenadic. 2010. ca: Simple, multiple and joint correspondence analysis. R package version 0.33. <http://cran.r-project.org/web/packages/ca/>.

car, version 2.0-12

Fox, J., S. Weisberg, D. Bates, D. Firth, M. Friendly, G. Gorjanc, S. Graves, R. Heiberger, R. Laboissiere, G. Monette, H. Nilsson, D. Ogle, B. Ripley & A. Zeileis. 2012. car: Companion to Applied regression. R package version 2.0-12. <http://cran.r-project.org/web/packages/car/>.

cclust, version 0.6-16

Dimitriadou, E. 2009. cclust: Convex clustering methods and clustering indexes. R package version 0.6-16. <http://cran.r-project.org/web/packages/cclust/>.

cluster, version 1.14.2

Maechler, M. [based on S original by P. Rousseeuw, A. Struyf & M. Hubert]. 2012. cluster: Cluster analysis extended Rousseeuw *et al.* R package version 1.14.2. <http://cran.r-project.org/web/packages/cluster/>.

clValid, version 0.6-4

Brock, G., V. Pihur, S. Datta & S. Datta. 2011. clValid: Validation of clustering results. R package version 0.6-4. <http://cran.r-project.org/web/packages/clValid/>.

cocorresp, version 0.1-9

Simpson, G. L. [from original Matlab routines by C.J.F. ter Braak & A.P. Schaffers]. 2010. cocorresp: Co-correspondence analysis methods. R package version 0.1-9. <http://cran.r-project.org/web/packages/cocorresp/>.

codep, version 0.1-6

Guénard, G. [with contributions from B. Pagès]. 2010. codep: Multiscale codependence analysis. R package version 0.1-6. <http://cran.r-project.org/web/packages/codep/>.

const.clust, version 1.2

Legendre, P. 2011. const.clust: Space- and time-constrained clustering package. R package version 1.2. <http://numerationecology.com/rcode/>.

DAAG, version 1.12

Maindonald, J. & W. J. Braun. 2012. DAAG: Data analysis and graphics data and functions. R package version 1.12. <http://cran.r-project.org/web/packages/DAAG/>.

DierckxSpline, version 1.1-4

Dorai-Raj, S. & S. Graves. 2009. DierckxSpline: R companion to “Curve and surface fitting with splines”. R package version 1.1-4. <http://cran.r-project.org/web/packages/DierckxSpline/>.

ecodist, version 1.2.7

Goslee, S. & D. Urban. 2012. ecodist: Dissimilarity-based functions for ecological analysis. R package version 1.2.7. <http://cran.r-project.org/web/packages/ecodist/>.

FactoMineR, version 1.18

Husson, F., J. Josse, S. Le & J. Mazet. 2012. FactoMineR: Multivariate exploratory data analysis and data mining with R. R package version 1.18. <http://cran.r-project.org/web/packages/FactoMineR/>.

FD, version 1.0-11

Laliberté, E. & B. Shipley. 2011. FD: Measuring functional diversity (FD) from multiple traits, and other tools for functional ecology. R package version 1.0-11. <http://cran.r-project.org/web/packages/FD/>.

flexclust, version 1.3-2

Leisch, F. [with contributions by E. Dimitriadou]. 2011. flexclust: Flexible cluster algorithms. R package version 1.3-2. <http://cran.r-project.org/web/packages/flexclust/>.

geoR, version 1.7-2

Ribeiro, P. J. Jr. & P. J. Diggle. 2012. geoR: Analysis of geostatistical data. R package version 1.7-2. <http://cran.r-project.org/web/packages/geoR/>.

indicspecies, version 1.6.0

De Cáceres, M. & F. Jansen. 2011. indicspecies: Functions to assess the strength and significance of relationship of species site group associations. R package version 1.6.0. <http://cran.r-project.org/web/packages/indicspecies/>.

kernlab, version 0.9-14

Karatzoglou, A., A. Smola & K. Hornik. 2011. kernlab: Kernel-based machine learning lab. R package version 0.9-14. <http://cran.r-project.org/web/packages/kernlab/>.

klaR, version 0.6-6

Roever, C., N. Raabe, K. Luebke, U. Ligges, G. Szepannek & M. Zentgraf. 2011. klaR: Classification and visualization. R package version 0.6-6. <http://cran.r-project.org/web/packages/klaR/>.

labdsv, version 1.4-1

Roberts, D. W. 2010. labdsv: Ordination and multivariate analysis for ecology. R package version 1.4-1. <http://cran.r-project.org/web/packages/labdsv/>.

lmodel2, version 1.7-0

Legendre, P. 2011. lmodel2: Model II regression. R package version 1.7-0. <http://cran.r-project.org/web/packages/lmodel2/>.

MASS, version 7.3-17

Ripley, B., K. Hornik, A. Gebhardt & D. Firth. 2012. MASS: Support functions and datasets for Venables and Ripley's MASS. R package version 7.3-17. <http://cran.r-project.org/web/packages/MASS/>.

Matrix, version 1.0-5

Douglas Bates, D. & M. Maechler. 2012. Matrix: Sparse and dense matrix classes and methods. R package version 1.0-5. <http://cran.r-project.org/web/packages/Matrix/>.

mice, version 2.11

van Buuren, S. & K. Groothuis-Oudshoorn. 2011. mice: Multivariate imputation by chained equations. R package version 2.11. <http://cran.r-project.org/web/packages/mice/>.

missMDA, version 1.2

Husson, F. & J. Josse. 2010. missMDA: Handling missing values with/in multivariate data analysis (principal component methods). R package version 1.2. <http://cran.r-project.org/web/packages/missMDA/>.

mlogit, version 0.2-2

Croissant, Y. 2011. mlogit: Multinomial logit model. R package version 0.2-2. <http://cran.r-project.org/web/packages/mlogit/>.

mvpart, version 1.6-0

De'ath, G. 2012. mvpart: Multivariate partitioning. R package version 1.6-0. <http://cran.r-project.org/web/packages/mvpart/>.

MVPARTwrap, version 0.1-8

Ouellette, M.-H. [with contributions from P. Legendre]. 2011. MVPARTwrap: Additional functionalities for package mvpart. R package version 0.1-8. <http://cran.r-project.org/web/packages/MVPARTwrap/>.

ncf, version 1.1-3

Bjornstad, O. N. 2009. ncf: Spatial nonparametric covariance functions. R package version 1.1-3. <http://cran.r-project.org/web/packages/ncf/>.

nlme, version 3.1-103

Pinheiro, J., D. Bates, S. DebRoy, D. Sarkar & the R Core team. 2012. nlme: Linear and nonlinear mixed effects models. R package version 3.1-103. <http://cran.r-project.org/web/packages/nlme/>.

nortest, version 1.0

Gross, J. 2006. nortest: Tests for normality. R package version 1.0. <http://cran.r-project.org/web/packages/nortest/>.

packfor, version 0.0-8

Dray, S. [with contributions of P. Legendre & G. Blanchet]. 2012. packfor: Forward selection with permutation (Canoco p. 46). R package version 0.0-8. https://r-forge.r-project.org/R/?group_id=195.

pastecs, version 1.3-11

Ibanez, F., P. Grosjean & M. Etienne. 2009. pastecs: Package for analysis of space-time ecological series. R package version 1.3-11. <http://cran.r-project.org/web/packages/pastecs/>.

PCNM, version 2.1-2

Legendre, P., D. Borcard, F. G. Blanchet & S. Dray. 2012. PCNM: MEM spatial eigenfunction and principal coordinate analyses. R package version 2.1-2. https://r-forge.r-project.org/R/?group_id=195.

penalized, version 0.9-38

Goeman, J. & R. Meijer. 2012. penalized: L1 (lasso) and L2 (ridge) penalized estimation in GLMs and in the Cox model. R package version 0.9-38. <http://cran.r-project.org/web/packages/penalized/>.

picante, version 1.3-0

Kembel, S. W., D. D. Ackerly, S. P. Blomberg, W. K. Cornwell, P. D. Cowan, M. R. Helmus, Helene Morlon & C. O. Webb. 2011. picante: R tools for integrating phylogenies and ecology. R package version 1.3-0. <http://cran.r-project.org/web/packages/picante/>.

Rcmdr, version 1.8-3

Fox, J., L. Andronic, M. Ash, M. Bouchet-Valat, T. Boye, S. Calza, A. Chang, P. Grosjean, R. Heiberger, K. K. Pour, G. J. Kerns, R. Lancelot, M. Lesnoff, U. Ligges, S. Messad, M. Maechler, R. Muenchen, D. Murdoch, E. Neuwirth, D. Putler, B. Ripley, M. Ristic & P. Wolf. 2012. Rcmdr: R commander. R package version 1.8-3. <http://cran.r-project.org/web/packages/Rcmdr/>.

rdaTest, version 1.8

Legendre, P. & S. Durand. 2012. rdaTest: Canonical redundancy analysis. R package version 1.8. <http://numeralecology.com/rcode/>.

rioja, version 0.7-3

Juggins, S. 2012. rioja: Analysis of Quaternary science data. R package version 0.7-3. <http://cran.r-project.org/web/packages/rioja/>.

sem, version 2.1-1

Fox, J. & J. Byrnes [with contributions from M. Culbertson, M. Friendly, A. Kramer & G. Monette]. 2011. sem: Structural equation models. R package version 2.1-1. <http://cran.r-project.org/web/packages/sem/>.

seriation, version 1.0-6

Hahsler, M., C. Buchta & K. Hornik. 2011. seriation: Infrastructure for seriation. R package version 1.0-6. <http://cran.r-project.org/web/packages/seriation/>.

sgeostat, version 1.0-24

Majure, J. J. & A. Gebhardt. 2012. sgeostat: An object-oriented framework for geostatistical modeling in S+. R package version 1.0-24. <http://cran.r-project.org/web/packages/sgeostat/>.

smatr, version 3.2.4

Warton, D., R. Duursma, D. Falster & S. Taskinen. 2011. smatr: (Standardised) major axis estimation and testing routines. R package version 3.2.4. <http://cran.r-project.org/web/packages/smatr/>.

SoDA, version 1.0-4

Chambers, J. M. 2012. SoDA: Functions and examples for “Software for data analysis”. R package version 1.0-4. <http://cran.r-project.org/web/packages/SoDA/>.

spacemakeR, version 0.0-5

Dray, S. 2010. spacemakeR: Spatial modelling. R package version 0.0-5. https://r-forge.r-project.org/R/?group_id=195.

spdep, version 0.5-45

Bivand, R. [with contributions by M. Altman, L. Anselin, R. Assunção, O. Berke, A. Bernat, G. Blanchet, E. Blankmeyer, M. Carvalho, B. Christensen, Y. Chun, C. Dormann, S. Dray, R. Halbersma, E. Krainski, P. Legendre, N. Lewin-Koh, H. Li, J. Ma, G. Millo, W. Mueller, H. Ono, P. Peres-Neto, G. Piras, M. Reder, M. Tiefelsdorf & D. Yu]. 2011. spdep: Spatial dependence: weighting schemes, statistics and models. R package version 0.5-45. <http://cran.r-project.org/web/packages/spdep/>.

splines: *see entry* **base**, **stats** and **splines**

stats: *see entry* **base**, **stats** and **splines**

STI, version 1.0.2

Legendre, P., D. Borcard & M. De Cáceres. 2010. STI: Space-time ANOVA models without replications. R package version 1.0.2. <http://sites.google.com/site/miqueldecaceres/software>.

survey, version 3.28

Lumley, T. 2012. survey: Analysis of complex survey samples. R package version 3.28. <http://cran.r-project.org/web/packages/survey/>.

survival, version 2.36-12

Therneau, T. & T. Lumley 2012. survival: Survival analysis, including penalised likelihood. R package version 2.36-12. <http://cran.r-project.org/web/packages/survival/>.

vegan, version 2.0-3

Oksanen, J., F. G. Blanchet, R. Kindt, P. Legendre, P. R. Minchin, R. B. O'Hara, G. L. Simpson, P. Solymos, M. H. H. Stevens & H. Wagner. 2012. vegan: Community ecology package. R package version 2.0-3. <http://cran.r-project.org/web/packages/vegan/>.

vegclust, version 1.5.1

De Cáceres, M. 2011. vegclust: Fuzzy clustering of vegetation data. R package version 1.5.1. <http://cran.r-project.org/web/packages/vegclust/>.

venneuler, version 1.1-0

Wilkinson, L. 2011. venneuler: Venn and Euler Diagrams. R package version 1.1-0. <http://cran.r-project.org/web/packages/venneuler/>.

waveslim, version 1.7.1

Whitcher, B. 2012. waveslim: Basic wavelet routines for one-, two- and three-dimensional signal processing. R package version 1.7.1. <http://cran.r-project.org/web/packages/waveslim/>.

wmtsa, version 1.1-1

Constantine, W. & D. Percival. 2011. wmtsa: Wavelet methods for time series analysis. R package version 1.1-1. <http://cran.r-project.org/web/packages/wmtsa/>.