1. Record Nr. UNINA9910299982103321 Autore Lawal Bayo Titolo Applied Statistical Methods in Agriculture, Health and Life Sciences // by Bayo Lawal Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 **ISBN** 3-319-05555-0 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (XXXIII, 799 p. 536 illus., 61 illus. in color.): online resource Disciplina 570.15195 Soggetti **Biometry Statistics** Mathematical statistics - Data processing **Biostatistics** Statistical Theory and Methods Statistics and Computing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Table of Contents attached as well. Introduction -- Frequency Distributions -- Numerical Description of Data -- Probability and Probability Distributions -- Estimation and Hypothesis Testing --Regression Analysis -- Categorical Data Analysis -- Experimental Design -- The Completely Randomized Design -- The Randomized Complete Block Design -- Multiple Blocking Designs -- Analysis of Covariance -- Factorial Treatments Designs -- The Split-Plot Design --Incomplete Block Design -- Quantal-Bioassay -- Repeated Measures Design -- Survival Analysis. Sommario/riassunto This textbook teaches crucial statistical methods to answer research questions using a unique range of statistical software programs, including MINITAB and R. This textbook is developed for undergraduate students in agriculture, nursing, biology and biomedical research. Graduate students will also find it to be a useful way to refresh their

statistics skills and to reference software options. The unique

combination of examples is approached using MINITAB and R for their

individual strengths. Subjects covered include among others data description, probability distributions, experimental design, regression analysis, randomized design and biological assay. Unlike other biostatistics textbooks, this text also includes outliers, influential observations in regression and an introduction to survival analysis. Material is taken from the author's extensive teaching and research in Africa, USA and the UK. Sample problems, references and electronic supplementary material accompany each chapter.