

1. Record Nr.	UNINA9910144390203321
Autore	Bi Jian <1949->
Titolo	Sensory discrimination tests and measurements [[electronic resource] ] : statistical principles, procedures, and tables // Jian Bi
Pubbl/distr/stampa	Ames, Iowa, : Blackwell Pub., 2006
ISBN	1-282-36521-5 9786612365218 0-470-27766-1 0-470-27640-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (312 p.)
Disciplina	150.287 630/.72/7
Soggetti	Agriculture - Statistical methods Sensory discrimination - Statistical methods Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Sensory Discrimination Tests and Measurements: Statistical Principles, Procedures and Tables; Contents; Preface; 1 Introduction; 1.1 A brief review of sensory analysis methodologies; 1.2 Method, test, and measurement; 1.3 Standard discrimination methods; 1.4 Classification of sensory discrimination methods; References; 2 Standard discrimination tests; 2.1 Binomial model for discrimination testing; 2.2 Discrimination tests using forced-choice methods; 2.3 Discrimination tests using the methods with response bias; References; 3 Statistical power analysis for standard discrimination tests 3.1 Introduction 3.2 Power and sample size for forced-choice methods; 3.3 Power and sample size for the methods with response bias; 3.4 Efficiency comparisons of discrimination tests; References; 4 Modified discrimination tests; 4.1 The modified triangle test; 4.2 The degree of difference test; 4.3 The double discrimination test; 4.4 The preference test with "no preference" option; References; 5 Multiple-sample discrimination tests; 5.1 Multiple-sample comparison based on proportions; 5.2 Multiple-sample comparison based on ranks; 5.3

Multiple-sample comparison based on categorical scales

References  
6 Replicated discrimination tests: beta-binomial model; 6.1 Introduction; 6.2 The beta-binomial distribution; 6.3 Estimation of parameters of beta-binomial model; 6.4 Applications of beta-binomial model in replicated tests; 6.5 Testing power and sample size for beta-binomial tests; References; Appendix 6A;  
7 Replicated discrimination tests: corrected beta-binomial model; 7.1 Introduction; 7.2 The corrected beta-binomial distribution; 7.3 Estimation of parameters of corrected beta-binomial model; 7.4 Statistical testing for parameters in corrected beta-binomial model

7.5 Testing power and sample size  
References; Appendix 7A;  
8 Replicated discrimination tests: Dirichlet-multinomial model; 8.1 The Dirichlet-multinomial distribution; 8.2 Estimation of parameters of Dirichlet-multinomial model; 8.3 Applications of DM model in replicated tests; 8.4 Testing power for Dirichlet-multinomial model; References;  
9 Measurements of sensory difference: Thurstonian model; 9.1 Introduction; 9.2 Thurstonian; 9.3 Variance of; 9.4 Tables for  $d$  and variance of  $d$ ; References;  
10 Statistical analysis for  $d$  data; 10.1 Estimates of population or group

10.2 Statistical inference for data  
References;  
11 Similarity testing; 11.1 Introduction; 11.2 Similarity testing for preference; 11.3 Similarity testing using forced-choice methods; 11.4 Similarity testing using the A-Not A and the Same-Different methods; References; Appendix 11A; Appendix A List of a part of S-PLUS codes; Author Index; Subject Index

---

Sommario/riassunto

Sensory discriminative analysis forms a fundamental type of methodology and is used widely in sensory and consumer research. Sensory Discrimination Tests and Measurements: Statistical Principles, Procedures and Tables provides a comprehensive discussion of sensory discriminative analysis from a statistical perspective. A wide variety of test and measurement methods, which were developed during the past decades and scattered in various statistical and non-statistical journals, are included in the book. The book gives a unified picture of the state of the subject and reflects some feature

---