Record Nr. UNINA9910779428703321 **Titolo** Postharvest handling: a systems approach // editors, Robert L. Shewfelt, Stanley E. Prussia Pubbl/distr/stampa San Diego, : Academic Press, Inc., c1993 **ISBN** 1-299-19281-5 Descrizione fisica 1 online resource (375 pages): illustrations Collana Food Science and Technology Altri autori (Persone) ShewfeltRobert L PrussiaStanley Eugene Disciplina 631.56 664.8 Soggetti Fruit - Handling Vegetables - Handling Fruit - Postharvest technology Vegetables - Postharvest technology Fruit - United States - Marketing Vegetables - United States - Marketing 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 index. Nota di contenuto Front Cover; Postharvest Handling: A Systems Approach; Copyright Page; Table of Contents; Contributors; Foreword; Preface; CHAPTER 1. MARKETING SYSTEM FOR FRESH PRODUCE IN THE UNITED STATES; I. Changing Patterns in Food Consumption, Markets, and Supply Sources; II. Marketing System for Fresh Fruits and Vegetables; III. Current Practices-A Critical Assessment; Bibliography; CHAPTER 2. CHALLENGES IN HANDLING FRESH FRUITS AND VEGETABLES; I. Handling of Fruits and Vegetables from Farm to Consumer; II. Toward a More Integrated Approach to Handling; III. Challenges Amenable to Systems Solutions Bibliography CHAPTER 3. SYSTEMS APPROACH TO POSTHARVEST HANDLING; I. Postharvest Systems; II. Systems Approaches; III.

Applications of a Systems Approach to Postharvest Handling; IV. Implications of a Systems Approach to Postharvest Handling; V.

Summary; Bibliography; CHAPTER 4. PREHARVEST PHYSIOLOGICAL AND CULTURAL EFFECTS ON POSTHARVEST QUALITY; I. Introduction; II. Whole Plant Model: Physiological Responses to Environmental Effects;

III. Whole Field Model: Cultural Practices to Optimize Produce Quality: IV. Coordinating Production and Marketing to Enhance Quality V. Future Directions in Production Research and Management Bibliography; CHAPTER 5. MEASURING QUALITY AND MATURITY; I. Quality and Acceptability; II. Commodity-Specific Quality Attributes; III. Sample Collection and Preparation; IV. Maturity Indices; V. Measuring Quality; VI. Sensory Evaluation Techniques; VII. Quality in a Systems Context; Bibliography; CHAPTER 6. MICROBIAL QUALITY; I. Microorganisms of Concern; II. Factors Affecting Microbial Growth; III. Factors Affecting Microbial Quality; IV. Methods to Evaluate Microbial Quality; V. Maintaining Optimal Quality; Bibliography CHAPTER 7. MEASURING AND MODELING CONSUMER ACCEPTANCE I. Introduction; II. Data Collection; III. Modeling; IV. Hypothetical Illustration of a Consumer Acceptance Test; Bibliography; CHAPTER 8. MODELING QUALITY CHARACTERISTICS; I. Introduction; II. General Approach to Modeling; III. Models of Fruit and Vegetable Quality; IV. Conclusions; Bibliography; CHAPTER 9. VISUAL INSPECTION AND SORTING: FINDING POOR QUALITY BEFORE THE CONSUMER DOES: I. Background; II. Design and Operation of Sorting Equipment; III. Analysis of Sorting Operations; IV. Economics of Sorting Operations; V. Summary Bibliography CHAPTER 10. LATENT DAMAGE: A SYSTEMS PERSPECTIVE: I. Types of Latent Damage; II. Importance of Latent Damage; III. Implications; IV. Future Directions; Bibliography; CHAPTER 11. NONDESTRUCTIVE EVALUATION: DETECTION OF EXTERNAL AND INTERNAL ATTRIBUTES FREQUENTLY ASSOCIATED WITH QUALITY OR DAMAGE; I. Optical Evaluation: Surface Appearance and Internal Attributes; II. Acoustic or Ultrasonic Evaluation: Firmness, Texture, and Maturity; III. X-Ray and Gamma Ray Evaluation: Solids Distribution and Density; IV. Nuclear Magnetic Resonance Evaluation: Internal Features and Composition; V. Electrical Property Evaluation

Sommario/riassunto

Postharvest Handling: A Systems Approach introduces a new concept in the handling of fresh fruits and vegetable. Traditional treatments have been either physiologically based with an emphasis on biological tissue or technologically based with an emphasis on storage and handling. This book integrates all processes from production practices through consumer consumption with an emphasis on understanding market forces and providing fresh product that meets consumer expectations. Postharvest physiologists and technologists across the disciplines of agricultural economics, agricultural engineering.