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Nota di contenuto	Horticultural Reviews; Contents; Contributors; Dedication: John Reuben Clark; 1. Postharvest Biology and Technology of Cut Flowers and Potted Plants; I. Introduction; II. The Ornamental Industry; III. Factors Affecting the Postharvest Life of Ornamentals; A. Genotype; B. Preharvest Factors; C. Temperature; D. Controlled and Modified Atmospheres; E. Chilling Injury; F. Water Relations; 1. Cut Flowers; 2. Potted Plants; G. Ethylene and Other Hormones; 1. Ethylene; 2. Abscisic Acid; 3. Cytokinins; 4. Other Hormones and Regulators; H. Disease; I. Growth and Tropic Responses J. Carbohydrate SupplyIV. Biology of Flower Senescence; A. Ultrastructural Changes; B. Changes in the Transcriptome; 1. Gene Expression Analysis; 2. Functional Analysis; C. Changes in the Proteome; D. Senescence Regulation; V. Transgenic Strategies for Extending Floral Life; A. Extending the Life of Ethylene-Sensitive Flowers; B. Extending the Life of Ethylene-Insensitive Flowers; C. Other Transgenic Targets; VI. Future Prospects; Literature Cited; 2. Water Relations of Cut Flowers: An Update; I. Introduction; II. Water Supply to Flowers; III. Water Loss: Influence of Stomata A. Chemicals that Induce Stomatal Closure or Cover the StomataB. Preharvest Conditions can Influence Vase Life through Effects on Stomatal Closure; 1. Effect of High Relative Humidity; 2. Effect of Long Photoperiod; IV. Water Uptake: Xylem Blockage; A. A Wounding-Induced Blockage Related to Polyphenol Oxidase and Peroxidase; B.

Extension of Vase Life by S-Carvone, an Inhibitor of PAL; C. Stems Placed Directly in Water after Cutting; 1. Bacterial Effects; 2. Surfactants; 3. Mechanical Treatments of the Stem Ends; 4. Cavitation in Stems Directly Placed in Water  
D. Stems Stored Dry Before Placing in Water  
1. Stomatal Conductance and Stem Hydraulic Conductance during Dry Storage; 2. Effect of Dry Storage on the Rate of Water Uptake; Effects of Surfactants; 3. Xylem Anatomy in Relation to the Rate of Water Uptake after Slight Dehydration; 4. The Role of Aspirated Air in the Lack of Water Uptake after Dry Storage; 5. Cavitation of the Xylem Conduits of Flowers that are Held Dry; 6. Refilling with Water of Xylem Conduits Filled with Air;  
V. Small and Coalescing Air Bubbles Form in Cut Stems, in the Absence of Cavitation  
VI. Water Flow Rate in the Xylem as Affected by Ions in the Water  
VII. Use of An Artificial Tap Water as a Standard Vase Solution?; VIII. Water Stress and Ethylene; IX. Conclusions; Acknowledgments; Literature Cited; 3. Factors Involved in Fruit Calcium Deficiency Disorders; I. Introduction; II. Physiology of Calcium Deficiency in Fruit Tissue; A. Visual Symptoms; B. Ultrastructure; C. Mineral and Biochemical Changes; III. Calcium Translocation at the Whole Plant Level; A. Calcium in the Soil; B. Root Calcium Uptake; C. Calcium Translocation to the Shoot  
D. Calcium Partitioning Between Leaves and Fruit

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Sommario/riassunto

Horticultural Reviews presents state-of-the-art reviews on topics in horticultural science and technology covering both basic and applied research. Topics covered include the horticulture of fruits, vegetables, nut crops, and ornamentals. These review articles, written by world authorities, bridge the gap between the specialized researcher and the broader community of horticultural scientists and teachers

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