Record Nr. UNINA9910877156703321 **Titolo** Plant desiccation tolerance / / editors, Matthew A. Jenks, Andrew J. Wood Pubbl/distr/stampa Ames, Iowa, : Blackwell Pub., 2007 **ISBN** 1-281-38204-3 9786611382049 0-470-37688-0 0-470-37665-1 Edizione [1st ed.] Descrizione fisica 1 online resource (339 p.) Altri autori (Persone) JenksMatthew A WoodAndrew J Disciplina 581.4 Soggetti Plant-water relationships Plants - Drought tolerance Plants - Adaptation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Plant desiccation tolerance: diversity, distribution, and real-world applications / Andrew J. Wood and Matthew A. Jenks -- Lessons on dehydration tolerance from desiccation-tolerant plants / Melvin J. Oliver -- Mechanisms of desiccation tolerance in Angiosperm resurrection plants / Jill M. Farrant -- Desiccation tolerance in lichens / Richard P. Beckett and Farida V. Minibayeva -- Desiccation tolerance : gene expression, pathways and regulation of gene expression / Dorothea Bartels, Jonathan Phillips, and John Chandler -- Seed desiccation-tolerance mechanisms / Patricia Berjak, Jill M. Farrant, and Norman W. Pammenter -- The glassy state in dry seeds and pollen / Olivier Leprince and Julia Buitink -- DNA structure and seed desiccation tolerance / Ivan Broubriak, Shirley McCready, and Daphne J. Osborne --Structural dynamics and desiccation damage in plant reproductive organs / Christina Walters and Karen L. Koster -- XvSap1, a desiccation tolerance associated gene with potential for crop improvement / Revel lyer ... [et al.].

Plant desiccation tolerance is of great basic and applied scientific

Sommario/riassunto

interest. Understanding plant responses and adaptations to severe desiccation is key to applying desiccation tolerance research to the improvement of economically important crops. Plant Desiccation Tolerance brings together a field of international researchers to provide a current review of the advances in plant desiccation tolerance research. The book is broken up into three sections: Vegetative Desiccation Tolerance; Desiccation Tolerance of Pollen, Spores, and Seeds; and Applications of Desiccation Tolerance Researc