

1. Record Nr.	UNINA9910820746203321
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Titolo	Plant physiology / / A. Malcolm Campbell and Christopher J. Paradise
Pubbl/distr/stampa	New York, NY : , : Momentum Press, , [2016] ©2016
ISBN	1-944749-12-8
Descrizione fisica	1 online resource (40 pages) : illustrations
Collana	Biology collection
Disciplina	581.1014
Soggetti	Plant physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Plants respond to changes on many different time scales -- Homeostasis by gene regulation -- Homeostasis by genome duplication -- Watching genome duplication in real time -- 2. Changes in two leaf cells affect an entire plant -- 3. Venus flytraps move quickly to trap prey -- Ethical, legal, social implications: correcting misconceptions is difficult -- Conclusion -- Glossary -- Index.
Sommario/riassunto	This book examines three ways plants respond to their changing environment. The first example can be found in all plants. Despite the extreme changes in weather, plants have to stay where they are and respond to whatever nature produces. Plants have the capacity to respond quickly and yet they can evolve in a single generation. The second example addresses how an individual leaf has to respond rapidly and repeatedly to maintain the proper balance of carbon dioxide (CO ₂) and water so that it can photosynthesize but not dry out. This delicate balance is governed by a pair of cells that regulate the size of openings on leaves. The final chapter examines a unique example of a leaf that can move fast enough to trap insects and digest them. This book presents data that led to our understanding of how plants function on different time scales.