

1. Record Nr.	UNINA9910794826603321
Autore	Biggs Norman
Titolo	Le Compte y Est ! : Une Histoire des Mathématiques, des Mesures et de la Monnaie // Norman Biggs ; Traduction, Gerard Tronel
Pubbl/distr/stampa	Les Ulis, [France] : , : EDP Sciences, , 2017
ISBN	2-7598-2028-9
Descrizione fisica	1 online resource (288 pages) : illustrations, graphs
Collana	Bulles de Sciences
Disciplina	510.9
Soggetti	Mathematics - History Measurement - History
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Frontmatter -- SOMMAIRE -- Préface -- 1. L'histoire non écrite -- 2. L'aube de la civilisation -- 3. De la taxe et du commerce aux théorèmes -- 4. L'âge des algorithmes -- 5. La fin du Moyen Âge -- 6. Un nouveau monde en mathématiques -- 7. L'ascension des mathématiques -- 8. Saisir sa chance -- 9. Modéliser et mesurer -- 10. Mathématiques et monnaie à l'ère de l'information -- 11. Les mathématiques peuvent-elles assurer notre sécurité? -- Index
Sommario/riassunto	Les mathématiques et ses règles, à la différence des sciences, n'ont pas émergé suite à des observations mais ont été créées de toutes pièces par l'Homme afin de répondre à ses besoins. Ce livre présente une histoire des mathématiques qui ne ressemble pas à celles habituelles. Au lieu d'une séquence chronologique des événements, présentée avec le recul mathématique, l'auteur adopte un point de vue global dans le contexte de l'époque, abordant les sujets de façon thématique. En utilisant de nouvelles découvertes d'artefacts et de documents, Norman Biggs révèle le pouvoir et la beauté des concepts mathématiques qui souvent démentent leurs origines utilitaires. Aucun autre livre ne raconte l'histoire des mathématiques, des mesures et de l'argent comme cela. Quelles sont les origines du calcul aux temps anciens et médiévaux ? Comment les mathématiques ont-elles fourni des réponses qui sont correctes et que cela signifie ? Quel est l'impact du commerce et l'utilisation de l'argent sur le développement d'algorithmes mathématiques ? Comment les utiliser pour les

communications sécurisées ? Comment l'argent et l'information sont-ils liés dans notre monde électronique ? Plongez-vous dans cette histoire fascinante destinée à tout lecteur intéressé par les fondements mathématiques du monde dans lequel nous vivons.

2. Record Nr.	UNINA9910437607403321
Titolo	Plastid development in leaves during growth and senescence // edited by Basanti Biswal, Karin Krupinska, and Udaya C. Biawal
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	94-007-5724-7
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (707 p.)
Collana	Advances in photosynthesis and respiration ; ; v. 36
Altri autori (Persone)	BiswalBasanti KrupinskaK (Karin) BiswalUdaya C
Disciplina	575.57
Soggetti	Chloroplasts Leaves - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- Part I: General Aspects of Chloroplast Development -- 1. The Dynamic Role of Chloroplasts in Integrating Plant Growth and Development; Karin Krupinska et al -- 2. Chloroplast Development: Time, Dissipative Structure and Fluctuations; Mukesh K. Raval et al -- Part II: Chloroplast Biogenesis During Leaf Development -- 3. Etioplasts and their Significance in Chloroplast Biogenesis; Katalin Solymosi, Henrik Aronsson -- 4. The Biogenesis of the Thylakoid Membrane – Photosystem II, a Case Study; Karin Meierhoff, Peter Westhoff -- 5. Organization and Assembly of Photosystem I; Yukako Hihara, Kintake Sonoike -- 6. Rubisco Assembly - a Research Memoir; Harry Roy -- 7. Glycerolipid Biosynthesis and Chloroplast Biogenesis; Maryse Block et al -- 8. Chloroplasts Contact with the Endoplasmatic Reticulum and Lipid Trafficking; Mats X. Andersson -- 9. Stromule Formation; John C. Gray -- Part III: The Plastid Genome and its Expression during Chloroplast Development -- 10. Dynamic Features of the Plastid Genome and its

Transcriptional Control in Plastid Development; Kengo Kanamaru, Mamoru Sugita -- 11. Development-Dependent Changes in the Amount and Structural Organization of Plastid DNA; Karsten Liere, Thomas Börner -- 12. The Ins and Outs of Chloroplast Protein Transport; Qihua Ling et al -- Part IV: Leaf Senescence and Chloroplast Dismantling -- 13. Defining Senescence and Death in Photosynthetic Tissues; Larry D. Nooden -- 14. Ultrastructural Analyses of Senescence Associated Dismantling of Chloroplasts Revisited; Maria Mulisch, Karin Krupinska -- 15. Plastoglobuli, Thylakoids, Chloroplast Structure and Development of Plastids; Hartmut K. Lichtenthaler -- 16. The Pathway of Chlorophyll Degradation: Catabolites, Enzymes and Pathway Regulation; Stefan Hörtensteiner -- 17. Regulation of Leaf Senescence: Role of Reactive Oxygen Species; Renu Khanna-Chopra et al -- 18. Chloroplast Protein Degradation: Involvement of Senescence Associated Vacuoles; M. Lorenza Costa et al -- 19. Autophagy of Chloroplasts During Leaf Senescence; Shinya Wada, Hiroyuki Ishida -- 20. Plastid Protein Degradation During Leaf Development and Senescence: Role of Proteases and Chaperones; Yusuke Kato, Wataru Sakamoto -- Part V. Organellar Control of Development -- 21. Cross-Talk of Mitochondria and Chloroplasts; Michela Zottini -- 22. Plastidial Signaling During the Plant Life Cycle; Thomas Pfannschmidt, Sergi Munné-Bosch -- 23. Chloroplast Control of Leaf Senescence; Bartalome Sabater, Mercedes Martín -- 24. The Role of Trehalose Metabolism in Photosynthetic Development and Leaf Senescence; Astrid Wingler, Matthew Paul -- Part VI. Environmental Signals and Chloroplast Development -- 25. Photoregulation of Chloroplast Development: Retrograde Signaling; Naini Burman, Jitendra P. Khurana -- 26. Regreening of Yellow Leaves; Hrvoje Fulgosi et al -- 27. Modulation of Chlorophyll Biosynthesis by Environmental Cues; Baishnab C. Tripathy, Vijay Dalal -- 28. Response of Developing, Mature and Senescing Chloroplasts to Environmental Stress; Padmanava Joshi et al -- Index.

Sommario/riassunto

The major function of chloroplasts in green plants and algae is oxygenic photosynthesis. Further, chloroplasts manufacture essential metabolites and phytohormones. Because of the extensive interconnection with cellular metabolic and regulatory networks, development of the organelle and the organism are coordinately regulated. Conversion of proplastids to chloroplasts is associated with the development of the entire organism, and dismantling of chloroplasts during the chloroplast-to-gerontoplast transition is coupled to senescence, the terminal phase of development. The availability of genomic tools of model plants, especially those of *Arabidopsis*, have allowed us to understand many complex problems associated with organelle biogenesis and senescence. Twenty-eight chapters in this book provide updated information on chloroplast development. The dynamic nature of plastid genome expression, regulation, and stability during development have been critically reviewed. In addition, authors describe how the development of emerging techniques and tools of bioinformatics, as well as rapid progress in plant molecular biology, have significantly expanded our knowledge in the area of biogenesis of the chloroplast. The book reviews the current literature on the coordinated synthesis of lipids, pigments and proteins, trafficking of the essential components, the assembly and the regulation of the protein complexes in the thylakoids as well as of the CO₂-fixing enzyme Rubisco. The book provides information on genetically programmed leaf senescence and regulated disassembly of the organellar complexes during chloroplast to gerontoplast transformation. The book also deals with the response of the developing chloroplast to environmental signals through

modifications and adaptation. This book was designed for those interested in plastid biology, plant development and photosynthesis, but will also be of general interest to plant biologists. dy>
