

1. Record Nr.	UNINA9910437841903321
Autore	Greilhuber Johann
Titolo	Plant genome diversity [[electronic resource]] . Volume 2 : physical structure, behaviour and evolution of plant genomes // Johann Greilhuber, Jaroslav Dolezel, Jonathan F. Wendel, editors
Pubbl/distr/stampa	Vienna, : Springer, 2013
ISBN	1-283-84959-3 3-7091-1160-9
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (359 p.)
Altri autori (Persone)	DolezelJaroslav WendelJonathan F
Disciplina	572.8 572.8/62 572.862
Soggetti	Plant genomes Plant breeding
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	1. Angiosperm phylogeny: a framework for studies of genome evolution (P. S. Soltis, D. E. Soltis) -- 2. The plant nucleus at war and peace - genome organisation in the interphase nucleus (R. N. Jones, T. Langdon) -- 3. The organisation of genomic DNA in mitotic chromosomes: a novel view (H. Takata, S. Matsunaga, K. Maeshima) -- 4. Structural organisation of the plant nucleus: nuclear envelope, pore complexes and nucleoskeleton (E. Kiseleva, J. Fiserova, M. W. Goldberg).- 5. The plant nucleolus (P. Shaw) -- 6. Cell Cycle Modules in Plants for Entry Into Proliferation and for Mitosis (Z. Magyar, M. Ito, P. Binarová, B. Mohamed, L. Bogre).-7. Endopolyploidy in plants (J. Maluszynska, B. Kolano, H. Sas-Nowosielska) -- 8. Meiosis: recombination and the control of cell division (E. Jenczewski, R. Mercier, N. Macaisne, C. Mézard) -- 9. Mechanisms of chromosome rearrangements (M. A. Lysak, I. Schubert) -- 10. Biology and evolution of B chromosomes (A. Houben, A. M. B. Moghaddam, S. Klemme) -- 11. Chromosomes and Sex Differentiation (B. Janousek, R. Hobza, B. Vyskot) -- 12. Holocentric chromosomes (P. Bures, F. Zedek, M.

Marková) -- 13. Karyotype diversity and evolutionary trends in angiosperms (H. Weiss-Schneeweiss, G. M. Schneeweiss) -- 14. Karyotype variation and evolution in gymnosperms (B. G. Murray) -- 15. Karyotype and Genome Evolution in Pteridophytes (M. S. Barker) -- 16. The incidence of polyploidy in natural plant populations: major patterns and evolutionary processes (B. C. Husband, S. J. Baldwin, J. Suda) -- 17. Significance and biological consequences of polyploidization in land plant evolution (J. A. Fawcett, Y. van de Peer, S. Maere) -- 18. Evolutionary importance of generative polyploidy for genome evolution of haploid-dominant land plants (S. A. Rensing, A. K. Beike, D. Lang) -- 19. Genome size diversity and evolution in land plants (I. J. Leitch, A. R. Leitch) -- 20. Genome size and the phenotype (J. Greilhuber, I. J. Leitch).

Sommario/riassunto

This second of two volumes on Plant Genome Diversity provides, in 20 chapters, insights into the structural evolution of plant genomes with all its variations. Starting with an outline of plant phylogeny and its reconstruction, the second part of the volume describes the architecture and dynamics of the plant cell nucleus, the third examines the evolution and diversity of the karyotype in various lineages, including angiosperms, gymnosperms and monilophytes. The fourth part presents the mechanisms of polyploidization and its biological consequences and significance for land plant evolution. The fifth part deals with genome size evolution and its biological significance. Together with Volume I, this comprehensive book on the plant genome is intended for students and professionals in all fields of plant science, offering as it does a convenient entry into a burgeoning literature in a fast-moving field.
