Record Nr. UNINA9910464588803321 Genetics, genomics and breeding of poplar / / editors, Chandrashekhar **Titolo** P. Joshi, Stephen P. DiFazio, Chittaranjan Kole Pubbl/distr/stampa Enfield, N.H.:,: Science Publishers Boca Raton, Fla.:,: Marketed and distributed by CRC Press,, 2011 **ISBN** 0-429-06218-4 1-4398-6917-0 Edizione [First edition.] Descrizione fisica 1 online resource (396 p.) Genetics, Genomics and Breeding of Crop Plants Collana Altri autori (Persone) JoshiChandrashekhar P DiFazioStephen P KoleChittaranjan Disciplina 634.9723 Soggetti Poplar - Genetics Poplar - Genome mapping Poplar - Breeding Electronic books. 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 at the end of each chapters. Nota di contenuto Front Cover; Dedication; Preface to the Series; Preface to the Volume; Contents; List of Contributors; Abbreviations; 1. Populus: A Premier Pioneer System for Plant Genomics; 2. Populus Genomic Resources; 3. Haplotype Analysis of Complex Traits in Outcrossing Tree Species: Allele Discovery of Quantitative Trait Loci; 4. The Populus Genome Sequence; 5. Poplar Genome Microarrays; 6. Poplar Proteomics: Update and Future Challenges: 7. Metabolomics in Poplar: 8. Transcription Factors in Poplar Growth and Development 9. Auxin Signaling and Response Mechanisms and Roles in Plant Growth and Development10. Genetic Control of the Annual Growth Cycle in Woody Plants; 11. Regulation of Flowering Time in Poplar; 12. Phenylpropanoid and Phenolic Metabolism in Populus: Gene Family Structure and Comparative and Functional Genomics: 13. Ecogenomics of Mycorrhizal Interactions Mediated by the Aspen Genome under

Elevated Ozone and Carbon Dioxide#; Back Cover

<P>Written by researchers representing six countries and 28

Sommario/riassunto

institutions, this book highlights the development of the genus <EM>Populus</EM> as a model organism for tree genomics. Reflecting an impressive depth of coverage, the contributors' thorough reviews and analyses of <EM>Populus </EM>genomics provide insight into future discoveries about the basic biology of this fascinating genus and paves the way for applied breeding and genetic improvement of poplars.</P>