1. Record Nr. UNINA9910818310703321

Autore	Garbot Dave
Titolo	The big book of cartooning : an adventurous journey into the amazing & awesome world of cartooning! / / illustrated and written by Dave Garbot
Pubbl/distr/stampa	Lake Forest, CA : , : Walter Foster Jr., an imprint of Quarto Publishing Group USA Inc., , [2016] ©2016
ISBN	1-63322-315-9
Descrizione fisica	1 online resource (131 pages)
Disciplina	741.51
Soggetti	Cartoon characters Drawing - Technique
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910298314203321

Titolo	The Biology of Reaction Wood / / edited by Barry Gardiner, John Barnett, Pekka Saranpää, Joseph Gril
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-10814-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (281 p.)
Collana	Springer Series in Wood Science, , 1431-8563
Disciplina	582.16
Soggetti	Forest products Forests and forestry Plant physiology Plant anatomy Plants - Development Trees Wood Science & Technology Forestry Plant Physiology Plant Anatomy/Development Tree Biology
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.
Nota di contenuto	Introduction -- Morphology, Anatomy and Ultrastructure of Reaction Wood -- Cell Wall Polymers in Reaction Wood -- The Molecular Mechanisms of Reaction Wood Induction -- Biomechanical Action and Biological Functions -- Physical and Mechanical Properties of Reaction Wood -- Detection and Grading of Compression Wood -- Effects of Reaction Wood on the Performance of Wood and Wood-based Products -- Commercial Implications of Reaction Wood and the Influence of Forest Management.
Sommario/riassunto	The book is an essential reference source on reaction wood for wood scientists and technologists, plant biologists, silviculturists, forest ecologists, and anyone involved in the growing of trees and the

processing of wood. It brings together our current understanding of all aspects of reaction wood, and is the first book to compare and discuss both compression wood and tension wood. Trees produce reaction wood to maintain the vertical orientation of their stems and the optimum angle of each branch. They achieve this by laying down fibre cell walls in which differences in physical and chemical structure from those of normal fibres are expressed as differential stresses across the stem or branch. This process, while of obvious value for the survival of the tree, causes serious problems for the utilisation of timber. Timber derived from trees containing significant amounts of reaction wood is subject to dimensional instability on drying, causing distortion and splitting. It is also difficult to work as timber, and for the pulp and paper industry the cost of removing the increased amount of lignin in compression wood is substantial. This has both practical and economic consequences for industry. Understanding the factors controlling reaction wood formation and its effect on wood structure is therefore fundamental to our understanding of the adaptation of trees to their environment and to the sustainable use of wood. The topics covered include: -Morphology, anatomy and ultrastructure of reaction wood - Cell-wall polymers in reaction wood and their biosynthesis -Changes in tree proteomes during reaction wood formation <-The biomechanical action and biological functions of reaction wood - Physical and mechanical properties of reaction wood from the scale of cell walls to planks -The detection and characterisation of compression wood - Effects of reaction wood on the performance of wood and wood-based products - Commercial implications of reaction wood and the influence of forest management on its formation.