



BOOK REVIEW

Wood production, wood technology, and biotechnological impacts. U. Kües (Ed.). 2007. Universitätsverlag, Göttingen, Germany. 635 pp., illus. ISBN 978-3-940344-11-3.

Modern biotechnology is having increasing impact on research and development associated to microorganisms, plants, animals, human health, and the environment, as well as on many socioeconomic issues. In the case of the wood industry, emerging biotechnological applications are fundamental to develop new products and sustainable processes. This interesting book contains a compilation of 24 chapters dealing with diverse aspects of wood production, supply, analyses, transformation, preservation, and protection, as well as many potential applications derived from modern biotechnology. Chapters are divided into six main sections, being the first part an introductory outline. In the Part II, there is an overview of the world's wood supply, the wood production in the tropics, forest plantations and the Kyoto Protocol, the carbon binding potential of forest ecosystems, wood as a renewable energy source, and transgenic trees. The Part III shows the molecular tools available to identify the origin of wood, the molecular methods for detection of fungi in wood, the chemical imaging of wood by Fourier Transform Infrared Microscopy, potential techniques for assessing wood quality on the basis of volatile organic compounds, and bioindicators in applications of the wood industry. The Part IV describes wood preservatives, and biological wood protection. The Part V covers panel boards and conventional adhesives, natural binders, biotechnological applications of enzymes involved in wood degradation, enzymatically modified wood for panel board production, the production of enzymes for the wood industry, and the recycling of wood waste materials. The part VI is focused on other commodities obtained from wood, such as fodder for ruminants, and the production of edible mushrooms, peat substitutes, and pot plant containers. The book shows a comprehensive perspective of the basic and applied research work developed at the Institute of Forest Botany, and the Faculty of Forest Sciences and Forest Ecology from the Georg-August-University Göttingen in Germany. It also represents the establishment and development of the academic chair for Molecular Wood Biotechnology, awarded to that University by the Deutsche Bundesstiftung Umwelt (DBU) in 1999. Although further impact on biotechnological applications for the wood industry as a whole is expected from such a complete academic framework at the Georg-August-University Göttingen, this is already a thoroughly enjoyable and useful book for students and scholars, as well as for any library worldwide covering aspects on wood science and biotechnology.

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