Record Nr. UNINA9910816662603321 Autore Kubicek C. P (Christian P.) Titolo Fungi and lignocellulosic biomass / / by Christian P. Kubicek; with figures by Irina S. Druzhinina and Lea Atanasova Ames, Iowa, : Wiley-Blackwell, 2013 Pubbl/distr/stampa **ISBN** 1-280-87491-0 9786613716224 1-118-41448-9 1-118-41451-9 1-118-41450-0 Edizione [1st ed.] Descrizione fisica 1 online resource (305 p.) Biomass and biofuels series Collana Disciplina 662/.88 Soggetti Lignocellulose - Biodegradation Fungi - Biotechnology Biomass energy 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 The plant biomass -- The actors: plant biomass degradation by fungi -- The tools, part 1: enzymology of cellulose degradation -- The tools, part 2: enzymology of hemicellulose degradation -- The tools, part 3: enzymology of lignin degradation -- Catabolic pathways of soluble degradation products from plant biomass -- Regulation of formation plant biomass-degrading enzymes in fungi -- The fungal secretory pathways and their relation to lignocellulose degradation --Production of cellulases and hemicellulases by fungi -- Production of fermentable sugars from lignocelluloses -- Lignocellulose biorefinery. Harnessing fungi's enzymatic ability to break down lignocellulolytic Sommario/riassunto biomass to produce ethanol more efficiently and cost-effectively has become a significant research and industrial interest. Fungi and Lignocellulosic Biomass provides readers with a broad range of information on the uses and untapped potential of fungi in the production of bio-based fuels. With information on the molecular biological and genomic aspects of fungal degradation of plant cell walls

to the industrial production and application of key fungal enzymes,

chapters in the book cover topics such as enzymol