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Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/2667 Title: Insight into microbial mannosidases: a review Authors: Chauhan, P.S. (/jspui/browse?type=author&value=Chauhan%2C+P.S.) Keywords: microbial mannosidase glycoside hydrolase hemicellulose Issue Date: Publisher: Taylor and Francis Online Citation: Critical Reviews in Biotechnology, 37(2) Abstract: Mannan is the major constituent of hemicelluloses in softwoods. Mannan hydrolyzing enzymes cleave the 1,4-β-mannopyranosyl linkages of the hetero-1,4-β-d-mannans to yield mannose. β-Mannosidases are mandatory for the complete depolymerization of mannan, these are exo-acting enzymes, which acts on non-reducing end of mannooligomers and on mannobiose removing mannose residues. Some plants and actinomycetes produce mannosidases but mainly these enzymes are produced by bacteria and fungi. The majority of microorganisms produce these enzymes extracellularly and their activity is in a wide range of pH and temperature. They have found potential applications in bioethanol production, synthesis of alkyl glycosides and, as pharmaceutical agents. Comprehensive information will be helpful for the effective understanding and application of these enzymes. This manuscript is an exhaustive review of microbial mannosidases reported to date. All the aspects such as sources, production conditions, characterization, cloning and biotechnological applications are considered. Description: Only IISERM authors are available in the record. URI: https://www.tandfonline.com/doi/abs/10.3109/07388551.2015.1128878 (https://www.tandfonline.com/doi/abs/10.3109/07388551.2015.1128878) http://hdl.handle.net/123456789/2667 (http://hdl.handle.net/123456789/2667) Appears in Research Articles (/jspui/handle/123456789/9)

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