

Environmental pollution control by utilization of industrial waste

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A bundant amount of waste materials are produced by agricultural and fruit processing industries, which pose considerable disposal problems and ultimately leads to pollution. Vast varieties of microorganisms are present in the environment which can be exploited for the utilization of waste material. For example in the processing of citrus fruits, a large proportion of the produce goes waste in the form of peel, pulp and seeds. Citrus peel is rich in carbohydrate, protein and pectin. Pectin, a major component of citrus peel, is a polymer of galacturonic acid residues connected by α -1, 4 glycosidic linkages. Pectin is hydrolysed by pectinase enzymes produced extracellularly by microflora available in our natural environment. With the help of these pectinase enzyme, microorganisms can convert citrus wastes into sugars which can be used for food and value added products. These microorganisms can also be exploited for production of pectinase which is an industrially important enzyme and have potential applications in fruit, paper, textile, coffee and tea fermentation industries. In order to isolate a potential pectinase producer we are screening the microbial biodiversity.

Biography

Vibha bhardwaj is a research scholar in microbiology from Kurukshetra University Haryana, India. She is the member of Indian Women Scientist Association, National Environmentalists Association, Sustainable Development and Environment Protection. She has published 10 papers in reputed journals and also chapters in International books. She got Mahila Gaurav Puraskar {Women's pride Award} from Government of India. She has presented papers in International conferences and got prizes. She had worked in Forensic Department, Hospitals & Pharmaceuticals

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