

Use industrial residues for the development of novel commercial products

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One of the most concerning problems of industrial companies is to discard the high amount of chemical and biological residues dejected during the production of a specific yield. It is estimated that in Brazil, every year, hundreds of tons of biological and chemical wastes from diverse industrial companies are released in nature. Nevertheless, the study on the availability of these residues as new sources of commercially important molecules is not well known. Therefore, in order to contribute for the sustainability of agro industrial systems, in this report, we describe the analysis of two residues obtained from the process of a fertilizer production made of potato. Each residue, which generates tons of discarded compounds every month, was selected from a different step of the fertilizer production. The residues passed through some purification processes and the isolated molecules were further evaluated. The purified molecules have demonstrated stability under high temperature during different period of time. When analyzed in details, they displayed biochemical characteristics of carbohydrate molecules utilized on the development of commercial products. Hence, the results showed that dejected residues not only can be reused, but also can provide many other important products, such as compounds with pharmaceutical and cosmetic purposes, as well as molecules with high immunogenic potential.

Biography

Patricia Pelegrini has completed her Ph.D. at the age of 27 years from Catholic University of Brasilia and postdoctoral studies from three different Institutions: The International Centre for Genetic Engineering and Biotechnology-ICGEB, at New Delhi-India; the Institut de Recherche pour le Développement-IRD, at Montpellier -France and Embrapa-Genetic Resources and Biotechnology, at Brasilia-Brazil. She is the Director of Projects and Technologies of BioLife Brazil Ltda as well as a collaborator at Embrapa-Cenargen, contributing for the development of researches on Biotechnology field.

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