

Roots, tubers and bananas starches and flours production and uses

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Tropical roots, tubers, and musaceous are plants yielding roots, tubers, rhizomes, and fruit cluster that have been mainly used for human food, animal feed, manufacturing starches, alcohol and beverages. In spite, that all of them are potential sources for flour, and starch that have not yet been exploited; only a few of them are utilized. It is due that they are highly perishable, difficult to store and to handle and transporting to distant markets. Indeed, it has been estimated an average of 30 % loss during storage, and that this portion could resolve starvation problems in non-developed countries. Consequently, converting these crops into flours may be important process that would contribute to minimizing its losses, and also to allow commercial food industry to store them throughout the year. Despite the high occurrence of these starchy and floury crops in the tropical area, the starch production in the world is confined to few crops, and most of the modified starches that have been using in the food industry of underdeveloped countries are imported from developed countries. Certainly, the wheat, also imported by the underdeveloped countries, is the unique source for flours. Due that commercial processes are being developed, often based on traditional operations, to bring processed commodities to a worldwide market, in this speech it will considered the production of flour (dry milling) and starches (wet milling) from these crops at a pilot level, and it application in the food development, for its potential scale to industrial level.

Biography

Elevina E. Pérez Sira is Bachelor of Biology at University Central of Venezuela, and Magister *Scientiarum* of Food Science and Nutrition at the University of Wisconsin-Stout, and has completed her Ph.D from the Universidad Central de Venezuela. She has published more than 65 papers in reputed journals; during 28 years have been Faculty Full Professor, Head of Projects, Research Project, and Papers Referee, Board Member of the University Committee, Head of the Food Science and Technology Post-graduate Program, and have supervised and advised more than 61 thesis of bachelors, Masters, and doctorates at the Universidad Central de Venezuela.

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