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Production and evaluation of the starch and fiber from young bamboo culm for food and biotechnological applications

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Bamboo is a perennial crop that grows rapidly, without the need of replanting, does not require pesticides, is a high-yield renewable resource, cheap and abundant across the globe. In our staff, we verify that the starch and fibers present in the young bamboo culms can bring benefits to the food and biotechnological industries, which is in growing demand of eco-friendly ingredients obtained from renewable sources. Besides, increasing fiber consumption is widely reported in the current literature as a beneficial effect for the population. Thus, the purpose of this lecture is to demonstrate the state of the art in research and development of flour, starch and fiber of young bamboo culm. We will show our results about the potential production and commercialization capacity of bamboo for industries, specify its physical-chemical and technological characteristics for many applications, and, in the end, explain the scientific challenges which we already overcame and the future perspectives for young bamboo culm.

Biography

Maria Teresa Pedrosa Silva Clerici graduate in Biochemistry Pharmacy from the Federal University of Ouro Preto (1988), Master in Science and Technology of the Food from the Federal University of Lavras (1991) and a Doctorate in Science and Technology of the Food from the University of Campinas (1997). Nowadays, is an MS-3.1 Professor at the University of Campinas (UNICAMP- Brazil). Has to experience in Science and Technology of Food, focusing on Science and Technology of cereals, roots and tubers and acting on the subjects of baking, pasta, roots, tubers, thermoplastic extrusion, starches, fibers and researching new ingredients.

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