



INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION

"KEY ELEMENTS FOR A SUSTAINABLE WORLD: ENERGY, WATER AND CLIMATE CHANGE"

Comparative Study with Emphasis on Emergy Environmental Sustainability of Food with Nutritional Similarity

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Abstract

Well known and traditional foods such as potatoes, tomatoes, cabbage and beans have important place in the world's alimentation. Options for not so well known foods in the West, but rather consumed in Asian countries such as bamboo shoots, offer nutritional value comparable to many of these traditional aliments. In this sense, aspects of environmental sustainability of these aliments were evaluated and compared. Among them, bamboo shoots are more sustainable. When the study considers the production efficiency, the potato is the better option. The main nutrients of each aliment according to the emergy per unit invested were also evaluated to find more sustainable options for obtaining a specific nutrient from these aliments.

Keywords: bamboo shoot; ternary diagram; emergy; sustainability.
