Biodiversity for Food and Nutrition Project in Brazil – Building capacities for food composition analysis and setting up of an online Biodiversity Nutritional Composition Database

Daniela Moura de Oliveira Beltrame, Deborah H. Markowicz Bastos, Camila Neves Soares Oliveira, Lidio Coradin, Danny Hunter.

Background

Brazil is home to the world's greatest biodiversity, representing around 15 to 20% of the total number of species on Earth. Much of it is edible and nutritious, yet neglected or underutilized. Nutritional data about native edible species are scarce and, to date, there is not a comprehensive online food composition database in Brazil. Aiming to increase the knowledge base about Brazilian biodiversity and provide evidence for the inclusion of native species on public policies related to Food and Nutrition Security, the Biodiversity for Nutrition (BFN) Project is conducting nutritional analysis of 70 edible plant species, previously identified by the "Plants for the Future" initiative, an ongoing project of the Brazilian Ministry of the Environment intended to identify and document native species with economic potential.

Programme implementation

BFN is working in a decentralized way and to develop capacities in different Brazilian regions, facilitating the setting up of "Regional Centres for Food Composition Data". To this end, partnership with four Federal Universities was established and six Master students and one Senior Researcher selected to carry out compilation of nutritional data already available in scientific literature, documents and reports, using the methodology developed by FAO/INFOODS.

In order to engage Professors from the Universities, an introductory workshop about the FAO/INFOODS methodology was organized in Brasilia in 2013, and, after the partnerships were established, two more were held in São Paulo (Southeast region) and Fortaleza (Northeast region) in 2014, for audiences that included students, their supervisors and other researchers interested on food composition and data compilation. All participants were asked to complete the "FAO/INFOODS e-learning Course on Food Composition Data". By June 2015, data for 48 of the prioritized species and 21 additional species were compiled.

As a second step of the nutritional characterization of the selected species, laboratory composition analyses is being carried out, also in partnership with Federal Universities and the National Institute for Amazonian Research (INPA). The analytical methodologies were selected based on guidelines and materials available from FAO/INFOODS.

Success

The nutritional data generated by the BFN Project will be available online for researchers, nutritionists, students, policy makers and the general public, at the Biodiversity Nutritional Composition Database, currently being developed by UNEP-WCMC as part of the Information System on Brazilian Biodiversity

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(SiBBr), through an agreement established between BFN and the Ministry of Science, Technology and Innovation (MCTI), which is coordinating the SiBBr initiative.

The students and University Professors working in partnership with the BFN Project act as multipliers, disseminating the knowledge not only about FAO/INFOODS methodology and guidelines, but also on the importance of biodiversity for food and nutrition. With the nutritional database, BFN will provide evidence for the inclusion of nutritious native species in public policies, programs and initiatives focused on food and nutritional security, promotion of healthy and diversified diets and those linking biodiversity conservation to income generation.

Source
Biodiversity Nutritional Composition Database

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