WASTE-to-VALUE food innovation

Aarhus University and Embrapa Brazil join research forces

When you hear Brazil, you might think of the rainforest, soy bean production, or coconut palm at the beach. That is also what the four AU researchers who visited Rio de Janeiro in November talked about with their colleagues from Embrapa, the Brazilian Agricultural Research Corporation. However, maybe from a different perspective than you have in mind right now.

The biodiversity of the Amazonian rainforest produces many fruits, and many of these are only used partly and locally. However, they have ingredients and characteristics that make them very interesting for new food innovations of export quality as well. In the best of cases, this can support a sustainable management of the diverse natural resources. Soy bean production is under criticism in Europe in its role as import feed for livestock production, and some consumers seek alternatives for soy due to concerns about GMO use or allergies. However, soy protein is also an efficient crop and nutritionally favourable protein source. Coconut water has become fashionable as a drink in Denmark, and it is even more common in Brazil, where one can also drink out of green coconuts freshly cut at the beach kiosk. When manufacturing bottled coconut water, the coconut is a waste product. However, this waste can be made into value by processing the coconut flesh into new foods, as for example a coconut sorbet.

The visit that Jessica Aschemann-Witzel, Ulla Kidmose, Marianne Hammershøj, and Marija Banovic paid to Brazil is part of the project 'Waste-to-value ideas for a sustainable food system: from product to market' at the Department of Management, which consists of a close collaboration of the MAPP Centre and AU FOOD researchers under the umbrella of iFOOD (Interdisciplinary Centre for Innovative Food Research). It is funded by the Danish Agency for Science and Higher Education as an International Network Programme project, running from 2019-2020, and consists of a partnership between Aarhus University and Embrapa - Agroindústria de Alimentos (Embrapa Food Agroindustry) in Rio de Janeiro/RJ, Brazil.

The bi-national collaboration aims to contribute to achieving the UN sustainable development goals through an improvement of technologies and a 'greening' and circularisation of systems, reducing agricultural emissions. It focuses on a sustainable, circular bio-economy by employing waste-to-value ideas to the food chain – in particular using by-products and alternative proteins (mainly plant-based) – resulting in high quality, consumer-targeted and accepted foods that contribute to scaling up sustainable dietary transition in global food demand.

Further information: https://mgmt.au.dk/research/marketing/mapp/projects/waste-to-value/