

All (r)evolutions take time: resilience, transition and food sovereignty through plant-based products from long-term perspectives

Organizadores:

Andrés Teira-Brión - School of Archaeology, University of Oxford

Marian Berihuete-Azorín - Institut Català de Paleoecologia Humana i Evolució Social – IPHES

Luís Seabra - BIOPOLIS Program in Genomics, Biodiversity and Land Planning

João Tereso - BIOPOLIS Program in Genomics, Biodiversity and Land Planning; Centre of Interdisciplinary Studies, University of Coimbra

Ana Isabel Ribeiro - University of Coimbra - Faculty of Arts and Humanities, Centre of Interdisciplinary Studies

Inês Gomes - Instituto de História Contemporânea, Faculdade de Ciências Sociais e Humanas da Universidade NOVA de Lisboa / IN2PAST — Laboratório Associado para a Investigação e Inovação em Património, Artes, Sustentabilidade e Território

Moderador: Luís Seabra & Andrés Teira-Brión

From past to present – linking contemporary and ancient crop histories in north east Africa

Philippa Ryan (p.ryan@kew.org) Royal Botanic Gardens, Kew, UK

Integrating ethnobotanical, archival and archaeological evidence can provide deep time perspectives on local and regional crop histories. Today, many agricultural practices are rapidly changing across NE Africa including species or landrace displacement by modern agronomic varieties, and this builds on prior changes during colonial timeframes. This paper will discuss changes to traditional practices and crops in recent decades, focusing on northern Sudan. Several of today's minor crops (often termed forgotten or orphan crops) were major subsistence crops in both the recent and ancient past. These local crops are more arid tolerant and low input than the modern commercial crops. The associated traditional knowledge about their cultivation and processing for food are also endangered and important for future resilience. The value of expanding historical approaches with ethnobotany will be discussed, for example developing ethnobotanically orientated oral histories and methods for interrogating archives. Additionally, the potential of such methods will be briefly contrasted between Sudan and Ethiopia - through highlighting how variations between data sources, modern development histories and persisting crop diversity and traditional practices will influence both the scope and methodological approaches for examining long term crop histories.

ethnobotany; forgotten crops; archaeobotany; resilience

Forgotten plants as encapsulated scenographies of peasant resistance and moral economy in Atlantic Iberia

Andrés Teira-Brión (andres.teirabrion@arch.ox.ac.uk) University of Oxford, United Kingdom

Wheat, wine, maize, rice, cotton, and many other crops have epitomised distinct agricultural economies at different times and regions of the world. All of them coincide in the investment of a great deal of energy and labour to maintain high levels of agricultural surpluses, also expressed in very diverse material forms. Hence, development or intensification of farming structures is commonly utilised as an indicator of agricultural complexity, conversely, the absence of these would imply simpler social synergies.

However, beyond the market economy, some plant species were also essential for sculpting the social scenography of past communities, by driving other subsistence alternatives in peasant economies. This presentation seeks to find glimpses of practices through plants which, even played an essential role in the agriculture of Atlantic Iberia, today remain almost in oblivion. Species such as millet, gorse, or the management of wild species favoured greater flexibility in obtaining food, reducing uncertainty in the production of surpluses, and opening a window towards the exploitation of diverse landscapes, while strengthening forms of moral economies based on reciprocity.

Ancient agrosystems; Farming synergies; Productive landscapes

A current experience in a self-irrigating vertical garden in a Brazilian public school and the use of PANC Non-Conventional Food Plants / Edible Flowers

Isabella de Araujo Goellner (isabella.goellner@gmail.com) Instituto Federal de Brasília, Secretaria de Educação do Distrito Federal e Universidade de Brasília, Brasil

Traditional knowledge can contribute to sustainability and food sovereignty through PANC (Non-Conventional Food Plants). However, its use is permeated by myths and stereotypes. First, the term conventional is ambiguous, as what is conventional in one region may not be conventional in another. The use of edible flowers is a clear example of this, as some flowers that are not conventionally consumed in one region of Brazil can be consumed in other regions. And so, to research, work, and break stereotypes about edible flowers, an edible flower garden was developed, in 2022, in a public school in Brazil.

The vertical garden that uses self-watering pots (a technology that is little known in public institutions in Brazil) was undoubtedly an innovation challenge in public service. Innovating in public schools in Brazil permeates several issues such as inducers and barriers. The garden project went through several induction factors such as the team's knowledge and creativity, friendship, networking, functional autonomy, and availability of financial resources, among others. However, the project also faced barriers such as resistance to innovation and risk aversion.

The development of a vertical garden of edible flowers / Non-Conventional Food Plants can contribute and bring new insights to innovation in the public sector, sustainability, and expansion of food knowledge.

edible flowers; vertical garden; public innovation; PANC; Non-Conventional Food Plants

Agriculture in perspective: the case of rye in the Iberian Peninsula

Luís Seabra (lc_pacos@hotmail.com) Department of Biology, Faculty of Sciences, University of Porto. CIBIO, Research Center In Biodiversity and Genetic Resources, InBIO Associate Laboratory, Campus de Vairão, University of Porto. BIOPOLIS Program in Genomics,

Biodiversity and Land Planning, CIBIO, Campus de Vairão, Portugal; João Pedro Tereso (jptereso@gmail.com) CIBIO, Research Center In Biodiversity and Genetic Resources, InBIO Associate Laboratory, Campus de Vairão, University of Porto. BIOPOLIS Program in Genomics, Biodiversity and Land Planning, CIBIO, Campus de Vairão. Centre of Interdisciplinary Studies of Coimbra. Centre for Archaeology, UNIARQ, School of Arts and Humanities, University of Lisbon. MHNC-UP - Natural History and Science Museum of the University of Porto, Portugal

Rye (*Secale cereale*) has been a relevant food source since at least Late Antiquity in the Iberian Peninsula. Current archaeobotanical evidence suggests it expanded in the peninsula during this period, being found in several archaeological sites from different Iberian areas, including in large amounts and in association with storage contexts, as observed in Northwest Iberia. Such dispersion probably relied on several factors, such as the environmental, economic, or cultural conditions at that time.

Rye was widely disseminated and acquired a crucial value in the Medieval period, being macroremains found all over Iberia and in areas with different cultural backgrounds (Christian/Islamic). An idea that is also attested by the available written documentation. Until the 20th century, rye continued to be a relevant crop for agricultural communities, particularly in northwestern areas. Thus, in this talk, we will explore the role of this cereal throughout time, combining different sources and aiming to expose the reasons behind its utmost importance in many periods of our history, but also comprehend events of decline related to this cereal, as recently observed in Northern Portugal, and how those impact society nowadays.

Rye; Archaeobotany; Written sources; Iberian Peninsula; Northwest Iberia

Flows of Cheapness: From Farm to Fork and Back Again

Pedro Mendonça (pdrmend@gmail.com) Centro de Ecologia Funcional - Universidade de Coimbra, Portugal; Fátima Alves (fatimaa@uab.pt) Centro de Ecologia Funcional, Universidade de Coimbra; Universidade Aberta, Portugal

This article seeks to determine the role of EU's Farm to Fork (F2F) initiative in the unfolding ecological crisis. F2F is examined as a practical argument with Fairclough and Fairclough (2012) critical discourse analysis methodology. Analysis of its premises reveals the inadequacy of both how the ecological crisis is problematized/framed and its ill conceived formulation of food affordability and farmer income. An alternative problematization of the ecological crisis and food production is put forth based on Jason Moore's environmental history of world-ecology school and its concept of cheap food. F2F goals are then re-described under world-ecological terms and its practical effects illustrated with two applications of F2F logic: 1) the H2020 EcoStack research project, and 2) the plans for Andalusia's organic agriculture transition.

farm to fork; cheapness; socio-ecological crises