

Looking for the cultivated seeds memory. Methodologies for analysing long term changes in agriculture, food and agrobiodiversity

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¿Todo el trigo era el mismo trigo en la Castilla del Antiguo Régimen?

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En las fuentes modernas de producción agraria: diezmos, contratos de renta, ventas de propiedades, catastros, etc. nos encontramos asiduamente con especificaciones de trigo y mixturas. De este modo, encontramos referencias a su variedad: áлага, blanquillo, marroquín, trigo rubión, etc. Pero también referencias a su calidad buen, endeble, etc. Obviamente estas denominaciones conllevarían, especialmente en años normales, precios diversos, ¿Entonces porque siempre nos encontramos y empleamos series de precios sin diferenciar? ¿Estamos contabilizando mal el valor de la producción cerealista? Mi investigación se centra entraría en la producción y el precio de estos cereales en Castilla (Burgos, Valladolid, Salamanca y Toledo), fundamentalmente para el siglo XVIII con datos procedentes de archivos diocesanos, catedralicios y documentación real (Archivo de Simancas y Archivo Histórico Nacional).

A mi modo de ver, estamos desconsiderando la producción agraria y la capacidad de las sociedades rurales de adaptar la simiente a la calidad de la tierra cuando no consideramos este hecho. Al hilo de esto, ¿cómo es posible a mediados del siglo XVIII que la Junta de Abastos de Madrid rechazase el aprovisionamiento de trigo áлага de Burgos prefiriendo traerlo de fuera de la Península? ¿Es un caso de especulación o es un caso de insuficiencia técnica? Fundamentalmente fue lo último.

Trigo; Producción agraria; Castilla; Edad Moderna; Precios

Sementes do Saber. Qual o contributo dos emblemas de Camerarius para a história da botânica no século XVI?

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Respondendo ao desafio de encontrar fontes complementares para conhecer as plantas cultivadas em diferentes regiões da Europa ao longo do século XVI, propõe-se uma abordagem interdisciplinar focada na informação transmitida pelos livros de emblemas.

Esta tipologia alcançou um enorme sucesso na Época Moderna, na senda dos Emblemata (1531) de Andrea Alciato. Os livros de emblemas sincronizam os conhecimentos humanísticos com a cultura antiga, a tradição hieroglífica, os herbários e os bestiários medievais. Expriemem, portanto,

uma leitura simbólica do universo, através de composições que combinam textos poéticos e imagens gravadas. Entre as centenas de publicações desse tipo, importa destacar o contributo de Joachim Camerarius (1534-1598), humanista e botânico alemão, autor do guia Hortus medicus et philosophicus (1588). Em 1590, publicou Symbolorum et Emblematum ex re herbaria centuria, a que se seguiram três volumes dedicados aos animais. Cada emblema inclui um mote, uma moldura circular com gravura, um dístico poético e um comentário em latim. Trata-se, portanto, de uma obra que combina iconografia, poesia e o discurso científico da história natural. O que nos diz sobre o tipo de plantas comestíveis cultivadas na época? E quais as árvores de fruto referidas? Quais as técnicas de cultivo mencionadas? E como foram representados os processos de reprodução através de sementes?

história da botânica; iconografia; emblemas; humanismo

Undoing the path travelled, returning to the origin of biological discoveries

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Georeferencing historical records play a critical role in identifying and locating the points of origin or the geographical provenance of historical specimens. This is essential to clarify how specimens were collected and how central metropolitan institutions used them. In addition, by combining historical data with current biological knowledge, it is possible to gain insights of how the genetic diversity has changed throughout the domestication process and develop effective bioprospecting campaigns.

Digitization of biological collections has made historical records more accessible, offering valuable insights into the first records of many cultivated and medicinal species. By analyzing the spatial and geographic data associated with these records, it is possible to pinpoint their place of origin with greater accuracy, reducing uncertainty and increasing the efficiency of bioprospecting efforts. The identification of points of origin is particularly important in the case of species affected by climate change. This can provide essential traits for adaptation and resistance to environmental changes, ensuring the long-term survival of these species and their uses.

Georeferencing; Bioprospecting; Historical records

What's in a seed? Standard and novel approaches to the study of fruits and seeds in the context of the third scientific revolution in Archaeology

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The idea that archaeology is going through its third scientific revolution has been suggested, based mostly on the impact of aDNA and strontium isotopes in the study of human mobility, heredity and related subjects. However, changes in archaeological investigation with relevant impacts in the interpretation of past events and the characterization of ancient human societies can be seen in different disciplines and focusing other organic and even inorganic archaeological materials.

Carpological studies have gained much with the new advances in isotopic analyses and aDNA but standard low-tech analyses are still the core of archaeobotanical investigation. This presentation will make a synthesis of different approaches to archaeological fruits and seeds, particularly charred assemblages, such as Ethnoarchaeology, (Functional) Ecology, isotopes, Experimental Archaeology and geometric morphometrics. Still, it will stress the need to (1) continue investing in standard morphology-based approaches to identify and characterize fruits and seeds, (2) improve archaeological field work, since without plant remains properly recovered there is no revolutionary (nor good) science; and (3) bridge the gap between researchers of different fields within the natural and social sciences in order to expand our capacity to interpret the growing array of data.

Archaeobotany; Fruits and seeds; Interdisciplinarity

¿Y para qué sirve el arte? Obras artísticas como fuente para reconstruir la historia de las plantas americanas en Europa (siglos XVI-XVIII)

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La llegada y aclimatación de cultivos procedentes de América tuvo un enorme impacto en la alimentación de los europeos desde comienzos del siglo XVI. Prueba de ello son los numerosos estudios dedicados al desarrollo y efectos de este fenómeno, abordados desde distintos puntos de vista y para los cuales se han empleado fuentes muy variadas, tales como libros de cuentas, obras botánicas o recetarios. Sin embargo, otras fuentes no han sido suficientemente utilizadas a la hora de analizar un fenómeno tan complejo como el de la introducción y desarrollo de cultivos ajenos a una geografía y a una cultura acaecido entre los siglos XVI y XVIII. Una de esas fuentes es el arte, que representa no solo un valioso testimonio gráfico, sino que también puede servir de base para conocer los usos, consideración social y evolución de estos cultivos en Europa. El objetivo de esta comunicación es por tanto presentar a través de un fenómeno concreto las posibilidades del arte como fuente para la historia de la agricultura y sus principales aportaciones, pero también reflexionar sobre sus condicionamientos y limitaciones.

Historia del Arte; Historia Moderna; Europa; América; Agricultura

Rescue cultivated seeds heritage. Methodologies and problems in long-term analyses

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The cultivated seeds express the complex exchanges that, linking nature and culture, have historically been vital for human communities. This is why cultivated seeds are capable of enunciating human action through space and also in time, which justifies their study in the long run. But how to identify seeds that were being grown locally before the 20th century? This paper discusses the methodological approaches implemented within the scope of the ReSEED project,

to identify the species and varieties of food seeds cultivated in different regions of the Iberian Peninsula between the 15th and the 20th centuries. The project aims to identify the impacts of new seeds on Iberian regional agricultural and food systems, which began to be brought from other continents in the 15th century. Research has privileged the exploration of handwritten and printed documents likely to contribute to understanding the diversity of these impacts on the use of local agricultural resources, food practices, market dynamics, etc. It appears that the information available in historical written sources is fragmented, dispersed, and often indirect. Thus, to rescue the heritage of seeds cultivated in the Iberian Peninsula, it is necessary to build specific methodologies for collecting and analysing data, allowing the cross-referencing of the various direct and indirect information. It is argued that empirically deepening research on seeds cultivated in the past helps to clarify questions raised from different sciences, including agrobiodiversity dynamics, income, and social mobility, changes in markets and consumption habits, innovation in agriculture, and economic growth.

Cultivated seeds; Seed heritage; Historical sources, Iberian Peninsula; Long-term analyses