# 18<sup>TH</sup> CONFERENCE OF THE INTERNATIONAL WORKGROUP FOR PALAEOETHNOBOTANY

# Lecce, 3rd - 8th June 2019



# **PROGRAM AND ABSTRACTS**







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# **PROGRAM AND ABSTRACTS**



Università del Salento 2019

## **ORGANIZATION OF**

University of Salento Laboratory of Archaeobotany and Palaeoecology





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Hanseatic League. In medieval Turku, usage of melegueta pepper indicated high status of the inhabitants. More than 80 plant taxa were identified from the latrine and the yard, and from the latrine most part of the taxa is imported, while the material from the yard is mainly of local origin.

Key-words: Aframomum melegueta, pepper, medieval, Finland

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## EARLIEST EVIDENCE OF CITRUS FRUIT IN THE IBERIAN PENINSULA

Jacob Morales<sup>1</sup>, Guillem Pérez-Jordà<sup>2</sup>, Jorge A. Eiroa<sup>3</sup>, María de Fátima Palma<sup>4</sup>, Leonor Peña-Chocarro<sup>2</sup>

1. Departamento de Ciencias Históricas, University of Las Palmas de Gran Canaria, Spain.

2. Instituto de Historia, Spanish National Research Council (CSIC), Spain.

3. Departamento de Prehistoria, Arqueología, Historia Antigua, Historia Medieval y Ciencias y Técnicas Historiográficas, University of Murcia, Spain.

4. Departamento de Historia Medieval y Ciencias y técnicas historiográficas, University of Granada, Spain.

The cultivation of *Citrus* fruit in the Mediterranean basin is recorded since Classical times. Several Roman sites in Egypt and Italy offer evidence of seed and pollen remains of *Citrus* species. Yet, to date, archaeological evidence of *Citrus* species is nowhere to be found in sites of the Western Mediterranean. Historical texts suggest that they were introduced in the region in the Middle Ages by new populations linked to the Islamic occupation of the Iberian Peninsula. There is, nonetheless, no material record of its cultivation in this period.

The paper presents the results of new archaeobotanical analyses carried out at several Islamic sites in the Iberian Peninsula, notably the sites of Lorca (Spain) and Mértola (Portugal). Both yielded a large number of well-preserved seeds and fruits in a carbonised and mineralised state. Fruit remains are particularly abundant, especially in the context of latrines, where more than 60,000 seeds were identified. Among them are several *Citrus* seeds, the first cases in the Iberian Peninsula unearthed in levels spanning the 9th to the 11th century AD. This evidence confirms the written sources that indicate that *Citrus* fruits were introduced in this region by the Arabs in medieval times.

Key-words: Al-Andalus, Medieval, Islamic, Agriculture, Citrus

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## ARCHAEOBOTANY AT MOTYA (ITALY)

Claudia Moricca, Lorenzo Nigro, Laura Sadori

Sapienza University, Rome, Italy.

The archaeobotanical analyses carried out at the archaeological site of Motya (Sicily, Italy), a small island found in the Marsala Lagoon, in Western Sicily (Italy), are presented. Although the Phoenician-Punic period (late 8th century BC – 397 BC) represents the main occupational phase of the archaeological settlement, the island was occupied by indigenous populations since the 17th century BC and continued to be inhabited after the Siege of Motya (397/6 BC). The multidisciplinary study, which includes anthracology and carpology, aims at reconstructing the diet, land use

and exploitation of natural resources on the island. Analyses focus mostly on the western slopes of the Acropolis, where a big disposal pit, dated from the end of 8th to the 6th century BC, was identified. Preliminary analyses reveal a vast assemblage of cereals (including Hordeum vulgare, Triticum monococcum, T. dicoccum and T. aestivum/durum), pulses (Cicer arietinum, Lathyrus sp., Pisum sativum, Vicia faba and V. ervilia) and fruits. These include Vitis vinifera, represented both by seeds and pedicels, and Punica granatum, whose spread to the Western Mediterranean is attributed to Phoenicians. Also weeds (Agropyron repens, Lolium perenne, Poa sp. and others) were found. In terms of charcoals, the most represented species are Olea europaea and Quercus ilex. This study, along with palynological analyses, should give a complete overview of the plant cultivation and plant use of the Phoenicians at Motya.

Key-words: Phoenicians, Sicily, carpology, anthracology, palynology

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### WOODEN PESTLES FOR RICE PROCESSING IN EAST ASIA

Yumiko Murakami

#### The Kyoto University Museum, Kyoto, Japan.

So many wooden artifacts, dating from the early Neolithic to Han period had been excavated in South China, Korea and Japan. Wooden tools had been used in various subsistence activities including food processing. In East Asia, wet-rice cultivation started in the Yangtze River Valley and then spread gradually to surrounding area with many tools as well as pestles and mortars. In this article, the author shows various changes in shape, size, conversion of timber and usage of pestles that occurred in diffusion of wet-rice cultivation to the east. In the Middle Yangtze River Valley, a small pestle which is 22cm long was found in Bashidang site. It was single-head pestle (using only one edge) with edge wear marks. When this short pestle was used, user sit on the ground. And in the Lower Yangtze River Valley, much longer pestles (about 90cm long) were used in Hemudu cultre sites (Hemudu site, Tianluoshan site). They were also single-head pestles but used by standing users. As mortars, stone or hardened ground was used probably. Afterwards, this type of pestles were assumed to change into two types: double-head pestles (using both edges) and pestles worked by treading. The former type of pestles were excavated from Bronze Age sites in South Korea. They are more than 120cm long and have drum-shaped protrusion at the middle of pestles. This type of pestles were brought to Japan at the beginning of Yayoi Period with many wooden tools (hoes, wet paddy smoothers, weaving tools and so on).

Key-words: pestles and mortars, wet-rice cultivation, spread eastwards and changes

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### AGRARIAN PRACTICES AND CHANGES BY INVESTIGATING WEED FLORA IN NORTH-WESTERN FRANCE FROM THE BRONZE AGE TO THE IRON AGE

Elsa Neveu<sup>1</sup>, Véronique Zech-Matterne<sup>2</sup>, Cécile Brun<sup>1</sup>, Francois Toulemonde<sup>2</sup>, Francois Durand<sup>1</sup>

1. University of Nantes, France.

2. AASPE, MNHN, CNRS, Sorbonne-Universités, Paris, France.

The lack of archaeobotanical datas in North-Western France was highlighted by several papers and national studies conducted by the National Institut of Preventive Archaeology. Most of the first

MORICCA CLAUDIA Sapienza University, Rome, Italy. claudia.moricca@uniroma1.it

#### MOSKAL-DEL HOYO MAGDALENA

W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland. m.moskal@botany.pl

#### MOSULISHVILI MARINE

Institute of Ecology, Ilia State University, 3/5 Cholokashvili Avenue, Tbilisi 0162, Georgia. Georgian National Museum. 3 Purtseladze str., Tbilisi 0105, Georgia. marine\_mosulishvili@iliauni.edu.ge

MOTTA LAURA Kelsey Museum of Archaeology, University of Michigan, USA lmotta@umich.edu

MOTUZAITĖ-MATUZEVIČIŪTĖ GIEDRĖ Bioarchaeology Centre, Vilnius University, Lithuania. Lithuanian History Institute, Lithuania. giedre.motuzaite@gmail.com

MUELLER-BIENIEK ALDONA W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, 31-512 Kraków, Poland. a.mueller@botany.pl

MURAKAMI YUMIKO The Kyoto University Museum, Kyoto, Japan. murakami.yumiko.3n@kyoto-u.ac.jp

NADEL DANI The Zinman Institute of Archaeology, University of Haifa, Israel. dnadel@research.haifa.ac.il

NASONOVA ELEONORA Tyumen Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Tyumen, Russia. eleonora\_nasonova@mail.ru

NASU HIROO Department of Biosphere-Geosphere Science, Okayama University of Science, Japan. nasuhiroo@gmail.com

NEEF REINDER German Archaeological Institute (DAI), Scientific Department of the Head Office, Berlin, Germany. reinder.neef@dainst.de