



PROJECT ACRONYM AND TITLE: COMAL - Cuisine(s) of the Ancient Maya across the Lowlands: Reconstructing Plant Diets through Innovative Molecular and Imaging Approaches

FUNDING PROGRAMME: HORIZON EUROPE

CALL: HORIZON-MSCA-2022-PF-01 (MSCA Postdoctoral Fellowships 2022)

KEYWORDS: *Archaeobotany; Ancient Maya; Reconstructing plant diets; advanced physico-chemical characterisation of archaeological residues*

HOST DEPARTMENT: Department of Environmental Sciences, Informatics and Statistics

SCIENTIFIC RESPONSIBLE: Antonio Marcomini

FELLOW: Clarissa Cagnato

Project total costs	Overall funding assigned to UNIVE
€ 172.750,08	€ 172.750,08

ABSTRACT:

COMAL aims at using an analytical approach never applied before on archaeological materials from Central America to bring to light the plants that were consumed and the different ways they were processed by the ancient Maya that inhabited the tropical forests of the Maya Lowlands in what is now Mexico and Guatemala. The investigated periods are the Classic and Terminal Classic periods (AD 250-900). Accordingly, two types of archaeological remains will be considered: amorphous carbonized objects (ACO) and (bio)molecules. ACO's are visible to the naked eye and are usually investigated with different microscopies, while to characterize the (bio)molecules, a range of spectroscopic and spectrometric techniques will be applied at Ca' Foscari University of Venice to both archaeological residues and proxies derived from raw (unmodified) modern plants and plants processed under laboratory conditions (experimental archeology). Further analyses by means of micro-computed tomography (micro-CT) will be performed during the secondment at the Elettra Synchrotron in Trieste, aiming at revealing the internal structure of ACOs through a non-destructive examination. The applicant, an experienced scholar in both the recovery and identification of macro- and microbotanical remains and starch grains, will enhance her competences by learning cutting-edge techniques seldom employed in the field of archaeology, and in turn bridging the STEM and Humanities, a highly relevant issue at Ca' Foscari. Likewise, COMAL will increase the knowledge on Maya culinary preferences, including the direct descendants of the ancient Maya living today in Guatemala and Mexico, by bringing information on their dietary heritage and traditions. At a broader level, the project will also shed light on ancient diets. COMAL will expand the applicant's experience, professional networks, positioning her as a skilled and capable independent scholar

Planned Start date	Planned End date
01/09/2023	31/08/2025

PARTNERSHIP

1. Ca' Foscari University of Venice	Italy	Beneficiary
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