
LIQUOR

Investigation and conservation of botanical wet collections

OBJECTIVES

The specimens in fluid, also called wet collections, are an integral part of the natural history heritage as well as science museums and universities collections.

This research, which follows the FLUIDIS project ([FLUIDIS](#)), is focused on the conservation of botanical wet collections. It includes a systematic study of plant collections in fluid considering their importance for research purposes and therefore the need to maintain certain parts (DNA, cellular structure, ...) and the main degradation phenomena encountered in wet collections' specimens, taking into account all the composing parts of the artefact.

The final objective will be to propose new protocols for the conservation of plants in fluid, defined and adapted according to the cultural and research values identified.

PROGRAM

The methodology used to achieve the objective of the project will be based on two combined approaches :

- Documentation, including literature survey, bibliographic research and questionnaires aiming at collecting information about the use of wet botanical collections for research purposes;
- Experimentation, including the preparation of mock-up samples and their study with a multi-technique approach in order to answer to specific conservation questions for the different parts composing the artefact (specimen, choice of preservation fluid, choice of the sealant, ...).

The combination of these two approaches will allow to choose the best conservation solution for the contemporary preservation of different cultural values of the artefact, including aesthetic and research values.

RESULTS

This project is expected to improve the knowledge on several variables affecting the conservation of botanical wet collections. A review of preservation fluid will be performed, aiming at highlighting the advantages of non-toxic products to use as substitute of the noxious ones, without losing conservation performances. A systematic study of sealants will be carried out, in order to detect the most suitable ones in term of airtightness and reversibility.

At the end of the project, the definition of a protocol for plants' wet collections will be established. This protocol will include a decision-tree allowing to select the best combination preservation fluid/specimen for the conservation of specific cultural values, with a particular interest for the research value.



Fig. : sample of beetroot conserved in rum, simulating in-field botanical collection campaigns

FUNDING

HES-SO, Réseau de Compétences Design et Arts visuels

PROJECT LEADER

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PARTNERS

Botanical Museum of the University of Zurich and University of Neuchâtel

LINK TO THE BLOG

<http://projets.he-arc.ch/liquor/>

DURATION

18 months

1.02.2021 – 31.08.2022