BOTANICAL MATERIALS
(including micro-remains & palaeoenvironmental remains)

GLOSSARY

Botanical materials: plant materials (e.g. fruits, seeds, flowers, leaves, stems, pollen, wood and roots).

Micro-remains and paleoenvironmental material: small items recovered from sieving of bulk samples from archaeological excavations. This may include micro-fauna and faunal paleoenvironmental remains.

STORAGE

◆ Botanical materials are vulnerable to decay by micro-organisms such as bacteria, algae and fungi, but good storage can help minimise the rate of deterioration.
◆ Store in airtight container with padding to avoid vibration. Robust materials (e.g. seeds) can be bagged.
◆ Avoid stacking fragile botanical materials on top of each other. Make sure that 2D materials lie on a flat padded surface.
◆ Never use silica gel.

LABELLING AND MARKING

◆ Undertake a documentation check to ensure that the information is correct before remains are marked.
◆ Ensure that marking is clear and legible.
◆ Label bags or boxes, not the botanical materials themselves.

ENVIRONMENTAL DATA

The general rule to maintain botanical materials is to keep them chilled and dark, as close as possible to conditions in the ground.

◆ Temperature: below 10°C.
◆ Humidity: 45-55% (over 65% RH is high risk for mould).
◆ Illuminance: 300 lux maximum.
◆ UV Radiation: 0–10 microwatts per lumen ideal. 75 microwatts per lumen maximum.

INDICATORS OF DECAY

◆ Disintegration.
◆ Mould.
◆ Pests (e.g. beetles, rodents).
WHERE YOU WILL COME ACROSS BOTANICAL MATERIALS

- In archaeological excavation archives.
- Samples from individual objects for identification and dating.

HANDLING

Botanical materials are especially at risk from breakage and contamination. Handle and move samples inside boxes or bags.

- Use nitrile gloves.

LOOK OUT FOR

Paleoenvironmental samples should be processed before deposition. Accepting or storing unprocessed bulk samples long-term is not recommended. Make sure each botanical sample has been given a unique identifier before deposition. Knowing where the samples are published is beneficial.

HEALTH AND SAFETY

- Botanical materials can be contaminated with mould or with chemicals from the excavation site (e.g. toxic metal salts, cess-pit material).
- Wear an appropriate facemask if mould is a risk.
- Use gloves, and avoid opening bags and boxes.

Wet macroscopic plant remains © Bristol Culture
BOTANICAL MATERIALS
(including micro-remains & palaeoenvironmental remains)

SOURCES OF FURTHER INFORMATION


Chartered Institute for Archaeologists (CIfA) (2019) *Toolkit for Selecting Archaeological Archives*.
