



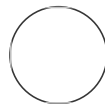
JAN 23, 2023

DTOL Taxon-specific Standard Operating Procedures for the Plant Working Group

 Forked from [DTOL Taxon-specific Standard Operating Procedure for the Terrestrial and Freshwater Arthropods Working Group](#)

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ABSTRACT

This Standard Operating Procedure (SOP) collection contains guidance on how to process the various plant taxa within the scope of the Darwin Tree of Life (DTOL) project. The guidance specifically refers to the tissue samples needed for DNA barcoding (which takes place at the Royal Botanic Garden Edinburgh (RBGE)) and outlines the flash frozen plant tissues required for whole genome sequencing (WGS), which takes place at the Wellcome Sanger Institute. Every specimen is submitted for DNA barcoding first before potentially being sent to the Wellcome Sanger Institute.

OPEN ACCESS

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<https://protocols.io/view/dtol-taxon-specific-standard-operating-procedures-ckvfuw3n>

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GUIDELINES

Use: These guides outline how to collect and prepare specimens for DNA barcoding, genome sequencing, and specimen vouchering when relevant. Different taxa may require different sampling, preparation, photography, storage techniques and processes.

Please see the Sanger Sample Submission SOP (link below) for general details on physical handling of specimens, including cold chain use, and collation of metadata for sample submission to Sanger.

Future plans for these SOPs: These SOPs will be reviewed on an ad hoc basis by the Plant Working Group to incorporate feedback from the community.

Raising issues: We are still developing best practice and elements of these SOPs are subject to change. If you would like to share any advice, comments, techniques or lessons learned, please add comments to the protocol or email edtlnumbers@rbge.org.uk.

Links to SOPs relating to this document:

- Sanger [Sample Submission SOP v2.2](#)
- Sanger [Sample Metadata Recording SOP v2.0](#)

Document History [add below]

| A | B | C | D |
|-----|-------------|----------------------|-------------------------------------|
| | <i>Date</i> | <i>Major changes</i> | <i>Contributors</i> |
| 1.0 | 2022-12-22 | | Laura L Forrest, Michelle L Hart |

Acknowledgements: RBGE DTOL staff have been involved in looking over and revising these SOPs.

FILES

Protocol



NAME



🔖 Collections Standard Operating Protocol, Plant group: Bryophytes

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🔖 Collections Standard Operating Protocol, Plant group: Vascular Plants

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🔖 DNA Barcoding Standard Operating Protocol, Plants and Lichens at RBGE, Sample Data

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🔖 DNA Barcoding Standard Operating Protocol, Plants and Lichens at RBGE, Lab methods: DNA extraction

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🔖 DNA Barcoding Standard Operating Protocol, Plants and Lichens at RBGE, Lab methods: PCR and Sequencing

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🚩 DNA Barcoding Standard Operating Protocol, Plants and Lichens at RBGE, Sanger Sequence Data

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