LSOP Title	DNA extraction (quick and dirty)
LSOP No.	LSOP08
Version	1.1
Location	UQ Node/Centre-wide
Policy/Procedure Link	*UQ- Equipment* *UQ -waste* *OGTR*
Risk Assessments	
Approved by	*Francois Barbier*
Date Approved	14/09/2021
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Next Review Date	03/06/2026
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1.0 Scope

This protocol outlines the procedures for completing DNA extraction on leaf tissue.

2.0 Definitions

RT – Room Temperature

PCR – Polymerase Chain Reaction

TRIS – Trisaminomethane

NaCl – Sodium Chloride

EDTA – Ethylenediaminetetraacetic acid

SDS - Sodium Dodecyl Sulfate

NB: can also be known as SLS or Sodium Laurel Sulfate

3.0 Materials and Equipment

1. Plant tissue
2. Extraction Buffer (see appendix)
3. Centrifuge

4. Isopropanol

5. Ethanol
6. Water
7. Eppendorf tubes
8. Pipette (& Pipette Tips)

4.0 Prescribed Actions

1. Harvest 1 leaf per plant

   NB: can be stored in -20°C for months

2. Add 200 µL of Extraction Buffer (see appendix) to your sample and grind (e.g. using a tip or tooth pick)
3. Spin at 10 min at full-speed and RT

4. Take 150 µL of the supernatant and mix with 150 µL isopropanol
5. Incubate for 10 min at RT

   NB: here you can also take a break and put samples in the fridge

6. Spin 10 min at full-speed and RT

7. Discard supernatant and wash with 70% ethanol (v/v)
8. Dry pellet and resuspend in 80 µL water
9. Take 2 µL for a PCR reaction (you may have to dilute if the sample is too concentrated)

5.0 Appendix

<u>Extraction Buffer (EB):</u>

200 mM TRIS (pH 7.5)

250 mM NaCl

25 mM EDTA (pH 8.0)

0.5% SDS