



Sep 24, 2019

Marchantia genotyping (quick and dirty genomic DNA extraction)

Eftychis Frangedakis¹, marta tomaselli², Marius Rebmann³, Susana Sauret-Gueto³

¹University of Cambridge, Plant Sciences , OpenPlant, ²University of Cambridge, Open Plant, ³Plant Sciences, University of Cambridge, OpenPlant

1 Works for me dx.doi.org/10.17504/protocols.io.4wagxae

OpenPlant Project

 Eftychis Frangedakis
University of Cambridge, Plant Sciences , OpenPlant 

ABSTRACT

This protocol allows for quick and dirty genomic DNA extraction. It can easily be used for genotyping with PCR. The quality of the genomic DNA extracted is not suitable for any other application.

MATERIALS

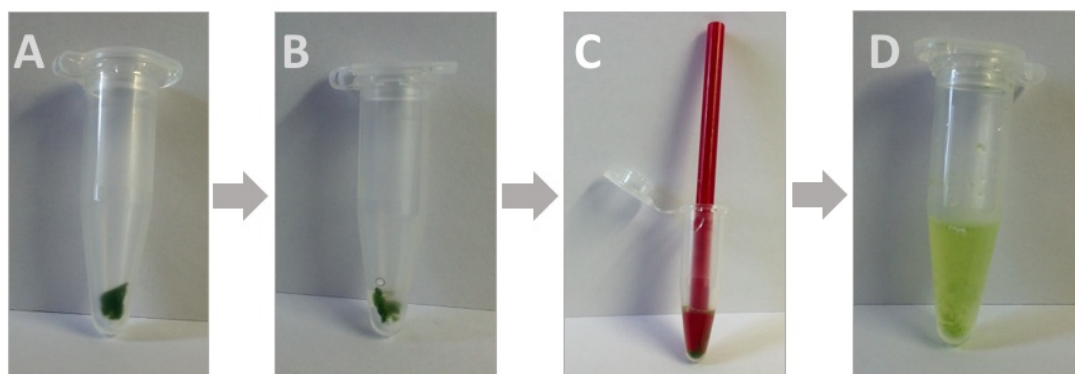
NAME 	CATALOG # 	VENDOR 
KOD Hot Start DNA Polymerase	71086-3	Millipore Sigma

- 1 Take small pieces (3x3 mm) of thalli from individual plants and place in a 1.5 mL Eppendorf tube (A in Figure).
- 2 Add 100 µl genotyping buffer (B in Figure).
- 3 Crush with an autoclaved micro-pestle (C in Figure).
- 4 Place the tube(s) at 80 °C for 10 min.
- 5 Add 380 µL of sterile water to each tube (D in Figure).
- 6 Use 5 µl aliquot of the extract as a template for PCR using preferably the KOD Hot start polymerase.



We found KOD to be more reliable amplifying fragments from a crude genomic DNA extract such as the one used here.

- 7 Check PCR products on a 1.5% (w/v) agarose gel.



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