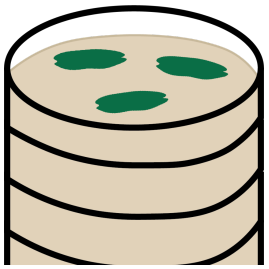
Sep 24, 2019

Marchantia genotyping (quick and dirty genomic DNA extraction)



DOI
dx.doi.org/10.17504/protocols.io.4wagxae

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OPEN ACCESS

DOI: dx.doi.org/10.17504/protocols.io.4wagxae

Protocol Citation: Eftychis Frangedakis, Marta Marta Tomaselli, Marius Rebmann, Susana Sauret-Gueto 2019. Marchantia genotyping (quick and dirty genomic DNA extraction). **protocols.io https://dx.doi.org/10.17504/protocols.io.4wagxae**

Protocol status: Working
We use this protocol and it's working

Created: June 28, 2019

Last Modified: September 24, 2019

Protocol Integer ID: 25250

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

MATERIALS

KOD Hot Start DNA Polymerase **Merck MilliporeSigma (Sigma-Aldrich)** **Catalog #**71086-3

1 Take small pieces (3×3 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.

Note

We found KOD to be more reliable amplyfing 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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