Date 02/05/2010

Protocol for Leek Leaf Homogenization in the Bullet Blender™

The protocol described in this document is for the use of the Bullet Blender™ for the homogenization of leek (*Allium ampeloprasum*) leaves. This protocol does not specify a particular buffer - you may choose which is most appropriate for your downstream application (nucleic acid isolation, protein extraction, etc.).

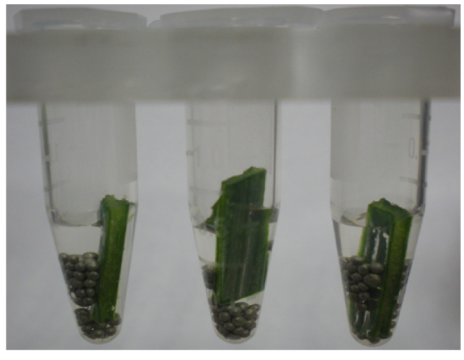
Materials Required: leek leaf, Bullet Blender™, homogenization buffer, pipettor, microcentrifuge tubes, and 0.9-2.0mm stainless steel bead blend (part number SSB14B)

Instructions

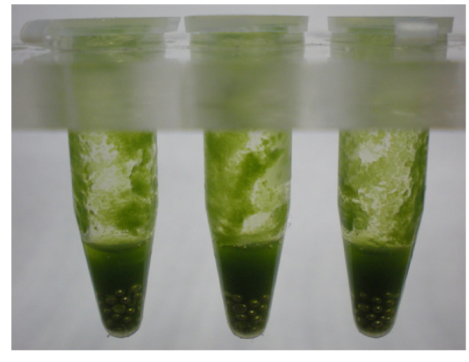
1. Cut leaf into long, thin slices of 200mg or less and place each slice into a microcentrifuge tube.
2. Add a mass of the stainless steel bead blend equal to 4x the mass of leaf. As an approximation, the beads should occupy about ½ the volume of the leaf.
3. Add 2 volumes of buffer to the tube for every mass of sample (ex. for 100 mg leek, add 200µL buffer)
4. Close the microcentrifuge tubes and place them into the Bullet Blender™.
5. Set controls for **SPEED 9** and **TIME 4** minutes. Press **Start**.
6. After the run, remove tubes from the instrument.
7. Visually inspect samples. If homogenization is unsatisfactory, run for another two minutes at speed 10.
8. Proceed with your downstream application.

SAFETY NOTE!!!

When using a centrifuge to separate your homogenate from the debris and beads, make sure your tubes are balanced.



Before



After

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