NEXTADVANCE

Protocol for Blueberry Homogenization in the Bullet Blender®

The protocol described in this document is for the use of the Bullet Blender® for the homogenization of blueberry (flesh, seeds and skin from the genus *Vaccinium* L.). 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.).

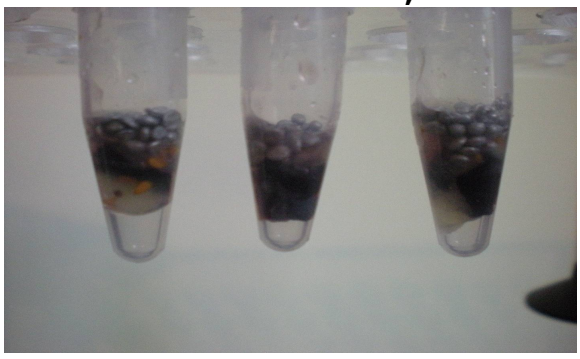
Materials Required: blueberry, saline, aspirator, Bullet Blender®, homogenization buffer, pipettor, microcentrifuge tubes, 0.9-2.0mm stainless steel bead blend (part number SSB14B)

Instructions

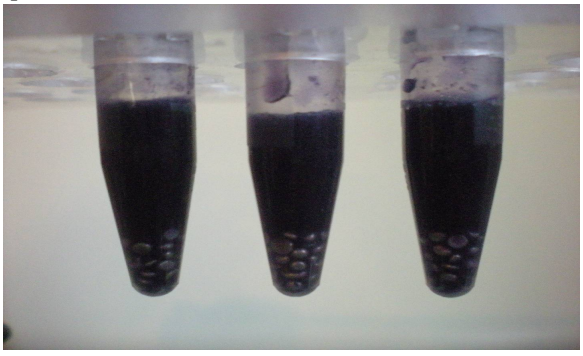
1. **OPTIONAL:** Wash blueberry 3x with ~1mL PBS. Aspirate. **NOTE:** This step removes some external contaminants and debris.
2. Section blueberry into quarters. Place quarter (100-200mg) into a microcentrifuge tube. Size may vary depending on species.
3. Add a volume of stainless steel bead blend equal to the mass of fruit. **NOTE:** 100mg ≅ 100µL.
4. Add 0.2ml to 0.6ml buffer, i.e. 2 volumes of buffer to the tube for every mass of sample.
5. Close the microcentrifuge tubes.
6. Place tubes into the Bullet Blender®.
7. Set controls for **SPEED 8** and **TIME 3** minutes. Press **Start**.
8. After the run, remove tubes from the instrument.
9. Visually inspect samples. If homogenization is unsatisfactory, run for another three minutes at the **SPEED 10.**
10. Remove sample tubes from the Bullet Blender® and 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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