



## Homogenization protocol for Dry Black Seeds using Bullet Blender

### Materials:

Samples: 35 mg of crushed dry black seeds (Smash the samples with a hammer prior to weighing)

Bead lysis kit: 1.5 mL RINO/Eppendorf Lysis Kit (SKU: NAVYR1/NAVYR5 or NAVYE1/NAVYE5)

Buffer volume: 300 to 600  $\mu$ L of buffer

### Method - Homogenization:

1. Determine the sample size, buffer (depends on the downstream application), buffer volume and the bead lysis kit. **Note:** Choose the correct [lysis kit](#) for optimal homogenization.
2. Cut the sample and place into the buffer-filled tubes (Figure 1).
3. Close the tubes tightly and place into the Bullet Blender. **Note:** Confirm the compatibility of the [contact plate](#) with the tubes (RINO/EPPENDORF) used.
4. Set the speed and time on the Bullet Blender (Table 1). Press "Start", and wait for the run to complete.

Bullet Blender Model	Settings
BB24-AU or BT24M	Speed 10; Time 5 - Dry --> Speed 12; Time 5 - Wet

5. Remove the tubes and visually inspect the samples to confirm complete homogenization (Figure 2).  
**Note:** Foaming in the sample tubes may be observed after homogenization.
6. If homogenization is satisfactory, proceed with the downstream steps.

Homogenization verification

