Instrument Procedure: Bulk Density

Description

Biomass bulk density is defined as the mass of biomass (m) divided by the volume (V) that they occupy. For testing the bulk density, a 5.5L bucket and an electronic scale is used.

Procedure

To test the bulk density of biomass, complete the following steps.

1. Weigh the bucket on the electronic scale and record as m.
2. Fully fill the bucket with biomass without any press or compression.
3. Weigh the bucket of biomass with the scale and record as M.
4. Calculate the bulk density $\rho = (M - m) / V$, while $V = 5.5 \times 10^{-3}$ m^3 as known.
5. Repeat the steps 1 – 4 five times and average all the results.
6. As a reference, the average bulk density for biomass is 221 kg/m^3, whereas that of biomass is 117 kg/m^3.