

Relative Water Content (RWC)

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Protocol

Field

1. **Prior measurement:** Weigh the empty zip lock bag with the code name of the future individual.
2. Place an isolated, dry leaf sample in the zip lock bag provided.
3. Close the bag tightly and store in the cooler.

$$RWC = \frac{\text{Fresh Weight} - \text{Dry weight}}{\text{Saturated Weight} - \text{Dry weight}} \times 100$$

Material

- Small zip lock bag
- Paper towel
- Distilled water
- Refrigerator
- Analytical balance
- Indelible felt pen

Lab

1. Weigh the zip lock bag with the leaf in it without opening it (Fresh Weight).
2. Carefully remove the leaf from the zip lock bag, cut off the petiole under water, and place it in a plastic upright glass with the petiole in the water.
3. Replace the leaf in the glass in the zip lock bag and place in the overnight refrigerator for 12 hours.
4. At 12 hours, measure the mass of the leaf alone after removing it from the bag (Saturated Weight).
5. Place the leaf in an envelope and leave to dry in the oven for at least 48 hours.
6. Then record the mass of the sheet (Dry Weight / Masse sèche).
7. Compute RWC with:

References