

Resource Summary Report

Generated by [dkNET](#) on Sep 12, 2026

Measuring specific leaf area and water content

DOI:10.17504/protocols.io.p3tdqnn

Type: Protocol

Proper Citation

Etienne Laliberté 2018. Measuring specific leaf area and water content. protocols.io
dx.doi.org/10.17504/protocols.io.p3tdqnn

Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.p3tdqnn>

Authors: Etienne Laliberté

Group: Plant Functional Ecology Lab, Canadian Airborne Biodiversity Observatory

Summary: Here we describe the standardised protocol used by the Canadian Airborne Biodiversity Observatory (CABO) to measure leaf water content and specific leaf area, using the WinFOLIA™ software (Régent Instruments). These leaf area and water measurements are done on a subset of leaves from the same bulk leaf sample used to measure leaf spectral reflectance and transmittance. Briefly, after removing their petioles, fresh leaves are weighed, rehydrated for 6 h, scanned for total leaf area and weighed again; they are then oven-dried at 65 °C for 72 h, and weighed one last time. This allows us to measure leaf dry matter content and its complement, leaf water content, as well as leaf relative water content. Leaf area measurements are used to estimate specific leaf area, a key functional trait central to the leaf economics spectrum. Specific leaf area allows us to estimate equivalent water thickness and to convert concentrations of foliar biochemical constituents from a leaf mass to a leaf area basis.

Affiliations: Université de Montréal

External URL: www.caboscience.org

Version: 1

Publication Date: 2018

Proper Citation: Etienne Laliberté 2018. Measuring specific leaf area and water content. protocols.io dx.doi.org/10.17504/protocols.io.p3tdqnn

Record Creation Time: 20210329T220519+0000

Record Last Update: 20210329T220843+0000

Data and Source Information

Source: