

Is leaf water absorption capacity related to its surface biophysical properties?

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Cloud forests
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Frequent fog events

Foliar water repellency



Courtesy of Bruno

Is leaf water repellency related with its rehydration capacity when they get wet?

Methods

- Collected branches from 5 individuals of 8 woody species in Wayqecha
- Measured the contact angle between a water droplet and the leaf surface

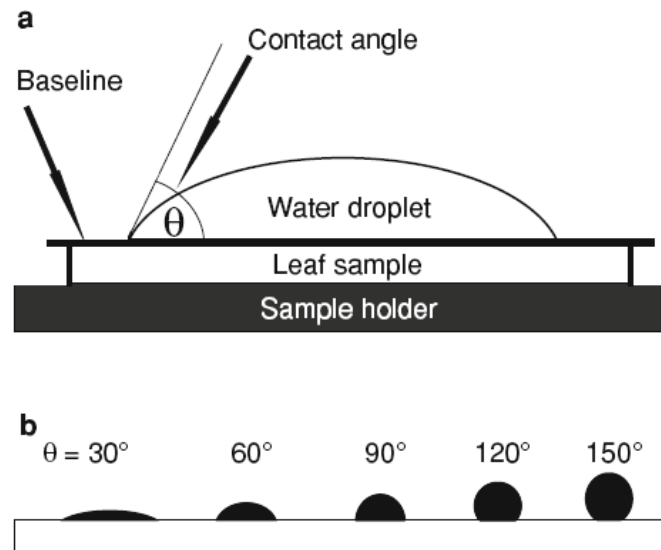


Fig. 2 a Determination of the contact angle (θ) between the baseline and the point of contact of a 5- μ l water droplet with the surface of a leaf sample. b When θ is lower than 110° the leaf surface is termed “wetable”, if θ is higher than 110° it is termed “non-wetable”

Methods

- Drought treatment (to lower water potential of detached branches down -1 to -2 Mpa)
- Leaf wetting treatment and control (in closed bags to suppress transpiration)
- Measure water potential again to estimate rehydration

Leaves with hydrophilic surfaces rehydrated more

