

Presentation:

Dynamics of water and carbon dioxide gas-exchange through the adaxial and abaxial surfaces of leaves

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Abbreviation	Name
ABA	Phytohormone abscisic acid
A-C_i curve	Relation between assimilation rate and C _i at constant light intensity.
A_T	Net assimilation rate
ASD	Air moisture saturation deficit
β	Ratio g_{cc}/g_{cw}
C_a	CO ₂ concentration in the atmosphere
C_i	CO ₂ concentration in the mesophyll air space of a leaf
C_{in}	CO ₂ concentration flowing into the cuvette
C_{out}	CO ₂ concentration flowing out of the cuvette
C_s	CO ₂ concentration at the surface of a leaf
E_c	Rate of transpiration through the cuticle
E_s	Rate of transpiration through the stomata
E_T	Total transpiration rate
g_{bc}	Boundary layer conductance to CO ₂
g_{bw}	Boundary layer conductance to H ₂ O vapour
g_{cc}	Cuticular conductance to CO ₂
g_{cw}	Cuticular conductance to H ₂ O vapour
g_{lc}	Total conductance to CO ₂ through the surface of a leaf
g_{lw}	Total conductance to H ₂ O through the surface of a leaf
g_{sc}	Stomatal conductance to CO ₂
g_{sw}	Stomatal conductance to H ₂ O vapour
g_{tc}	Total conductance to CO ₂
g_{tw}	Total conductance to H ₂ O vapour
γ	Ratio g_{cw-ab}/g_{cw-ad}
Γ	C _i at CO ₂ compensation point
κ	Ratio C_{i-ad}/C_{i-ab}
w_a	Water vapour concentration in the atmosphere
w_i	Water vapour concentration in the mesophyll air space of a leaf
w_{in}	Water vapour concentration flowing into the cuvette
w_{out}	Water vapour concentration flowing out of the cuvette
w_s	Water vapour concentration at the surface of a leaf
Subscript -ab	The abaxial face of the leaf
Subscript -ad	The adaxial face of the leaf
Subscript -T	Total leaf, adaxial plus abaxial faces of the leaf
Subscript -vCF	Identifies unknowns derived from vCF equations

