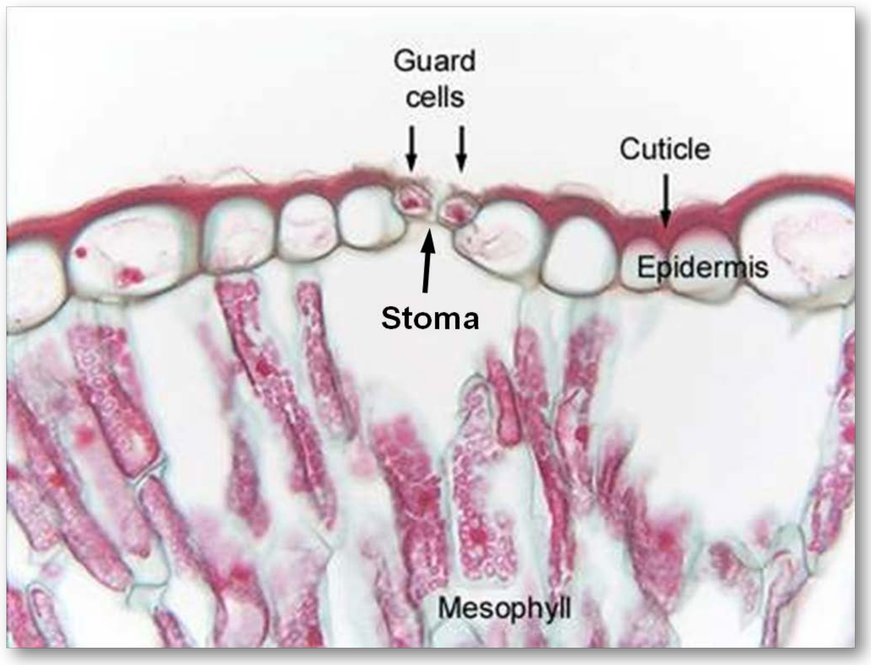
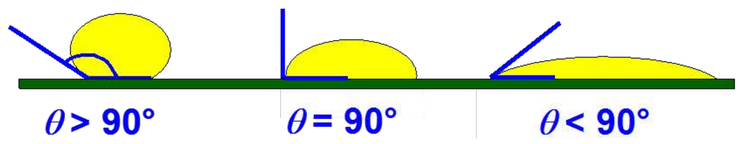
Blattdüngung – Wie funktioniert das?

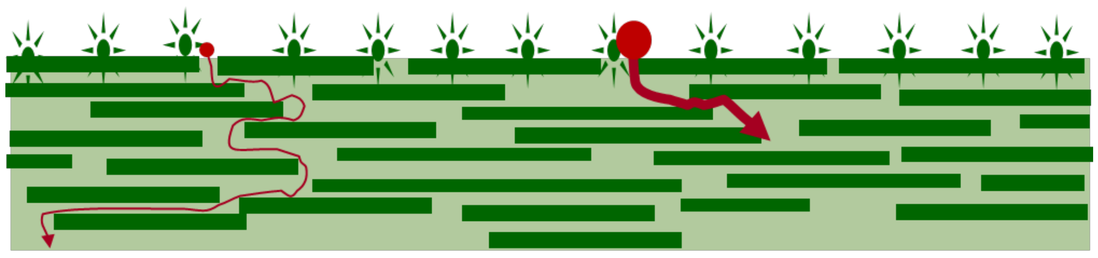
Wo und wie erfolgt die Aufnahme?

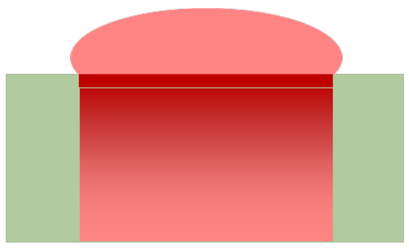




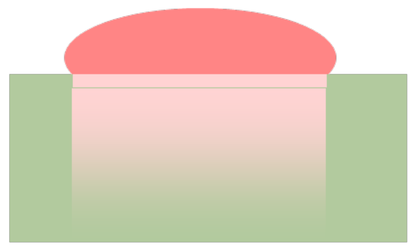
Die Benetzbarkeit und Oberflächenspannung bestimmen das Volumen der Lösung auf dem Blatt

Aufnahme durch die Cuticula

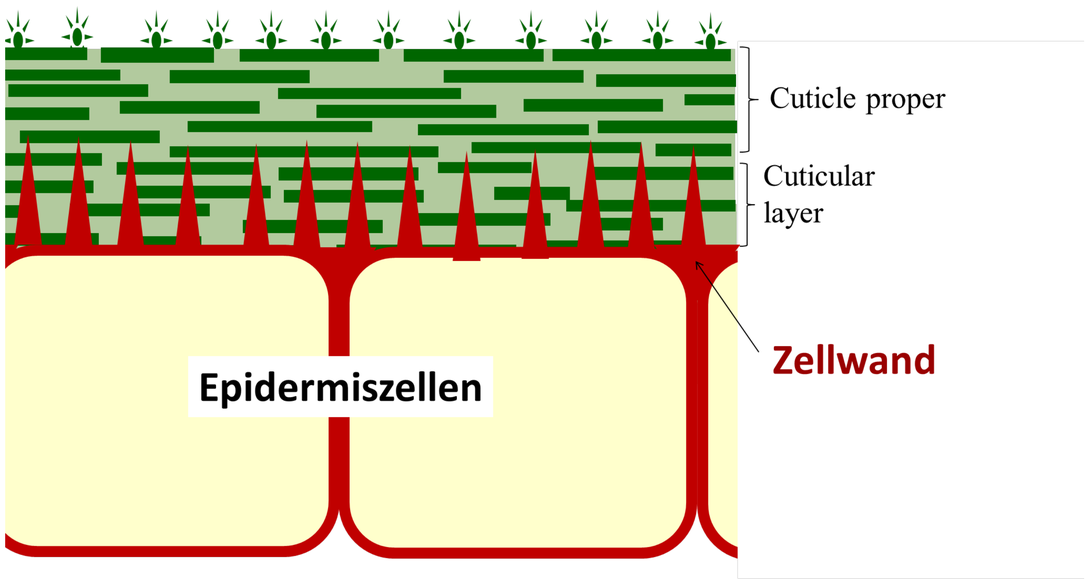


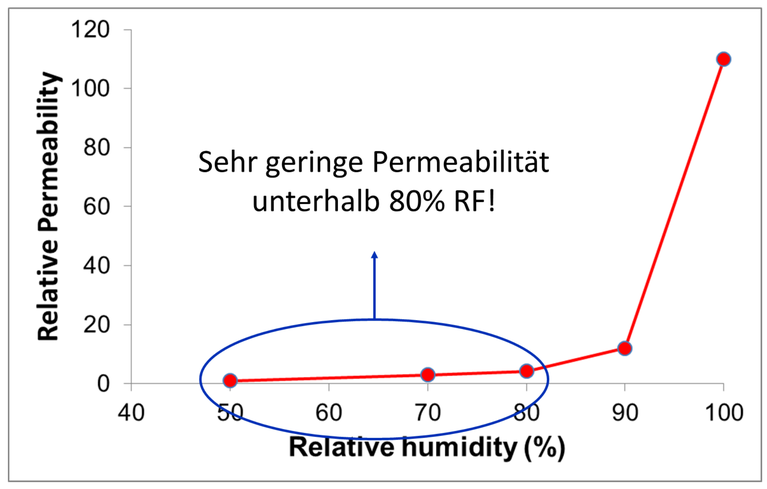


Gut löslich
(lipophile = „fettliebende“ Substanz)
Beispiel: viele Pestizide

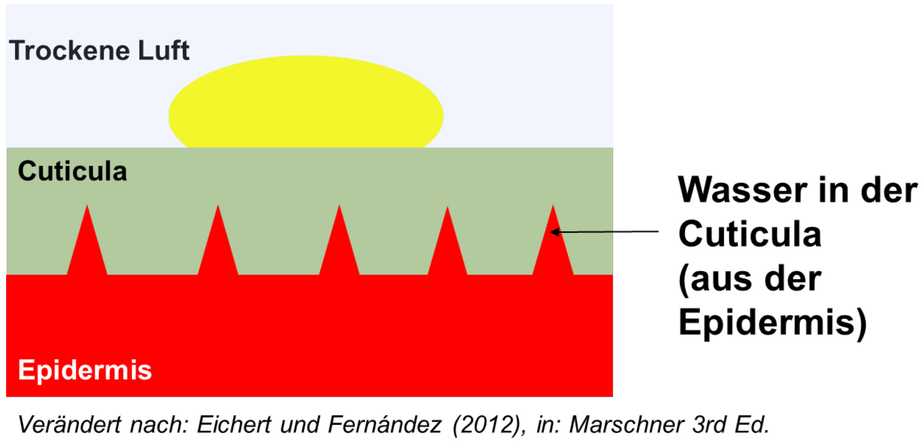


Schlecht löslich
(lipophobe = hydrophile = „wasserliebende“ Substanz)
Beispiel: Salze

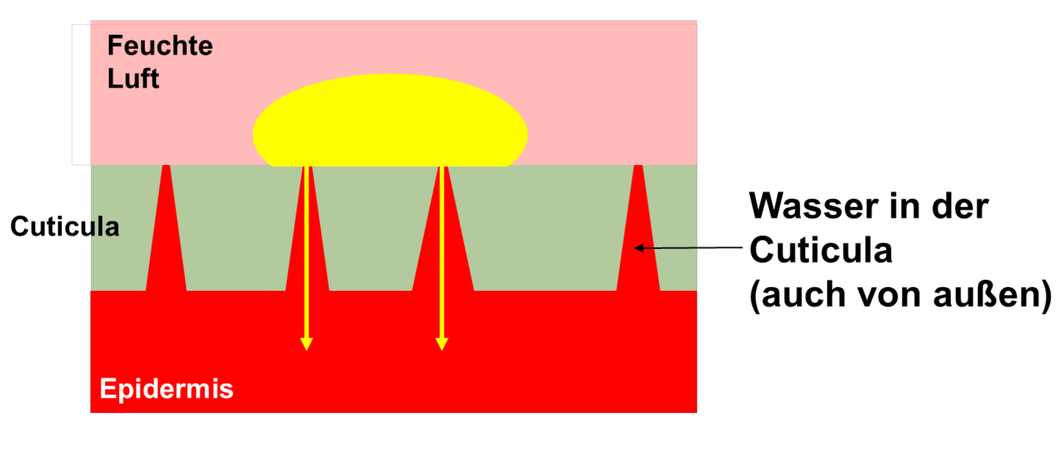




Modifiziert nach : Fernández and Eichert (2009), Criti. Rev. Plant Sci. 28:36–68.



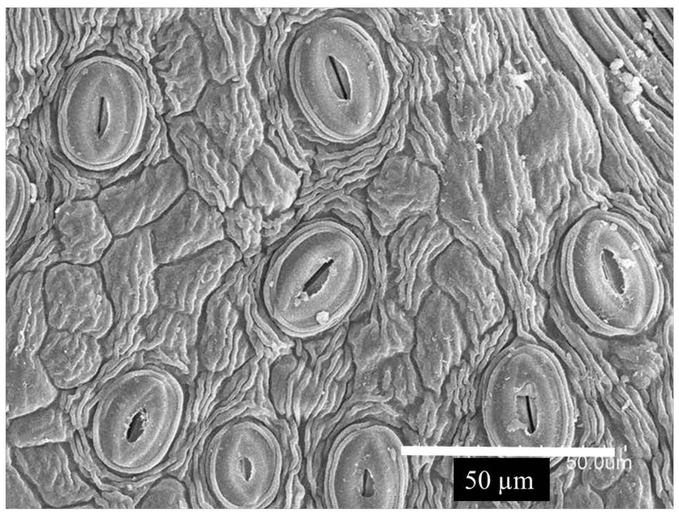
Verändert nach: Eichert und Fernández (2012), in: Marschner 3rd Ed.



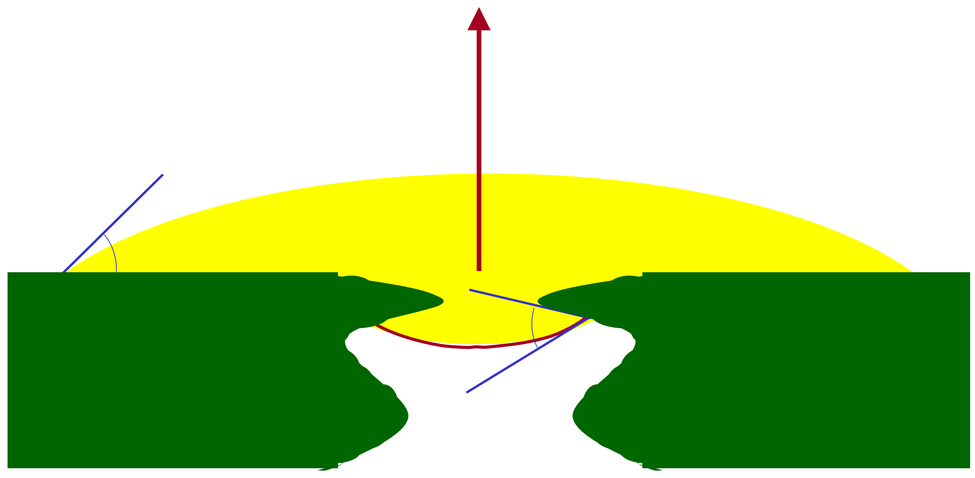
Blattdüngung – Wie funktioniert das?

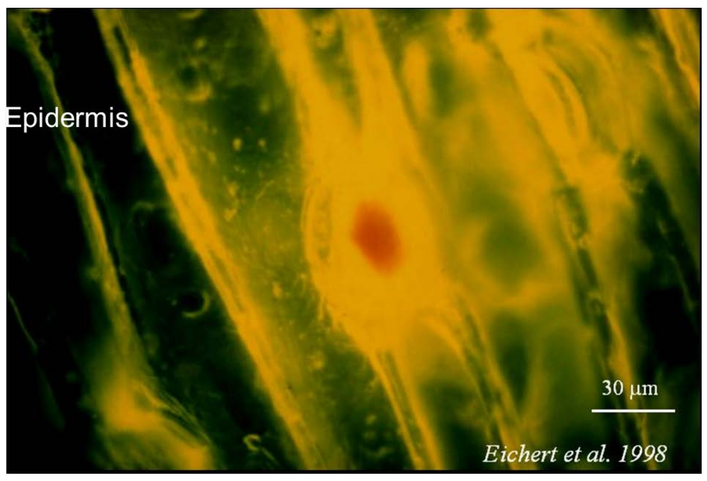
Aufnahme durch Spaltöffnungen (Stomata)

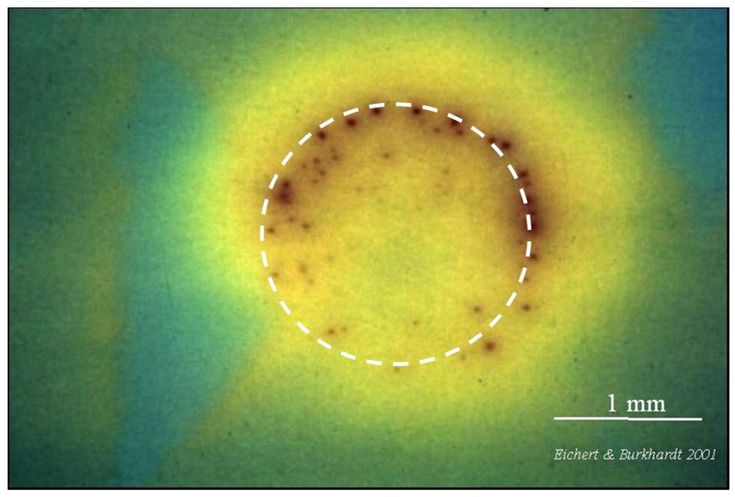
100 – 500 Stomata pro mm^2 !

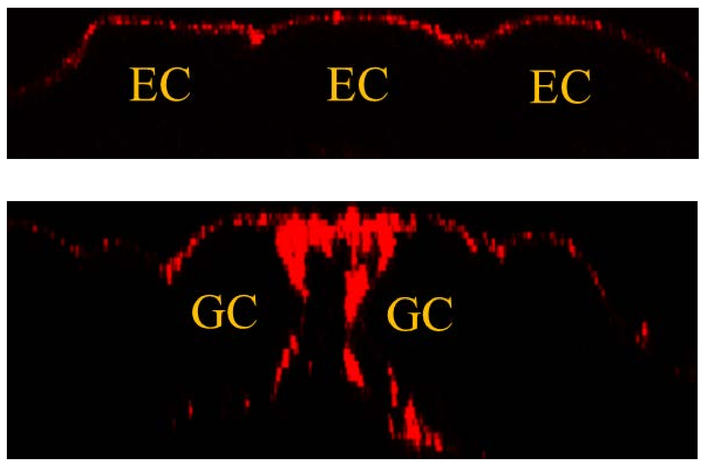


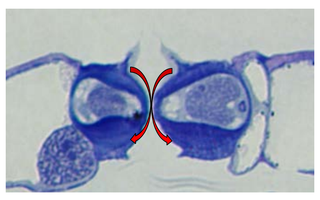
Pfirsich, untere Blattseite, Fernández et al. 2008

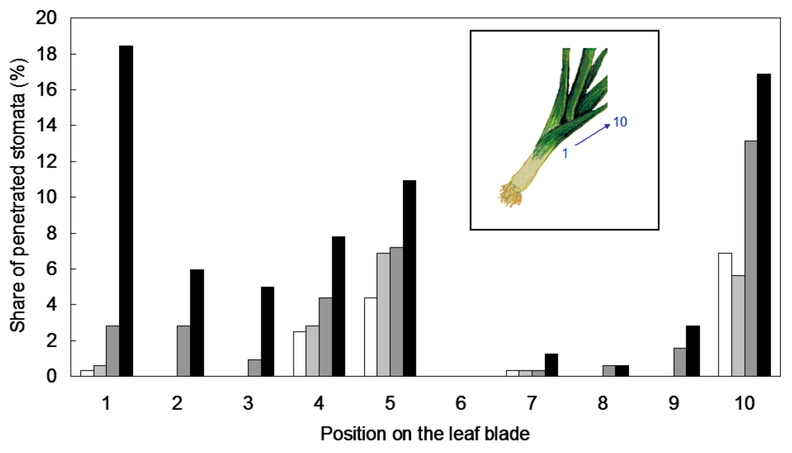




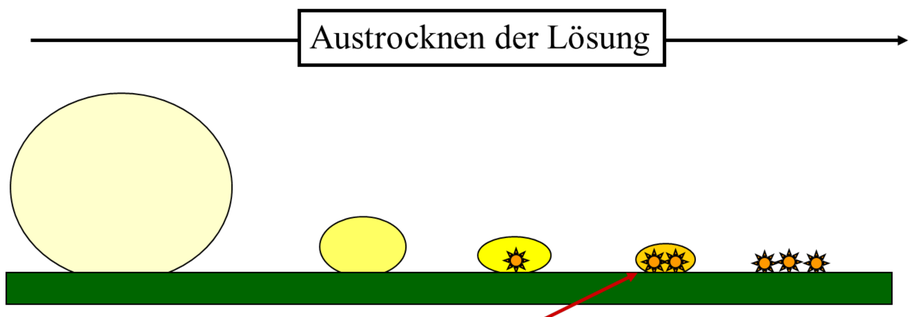


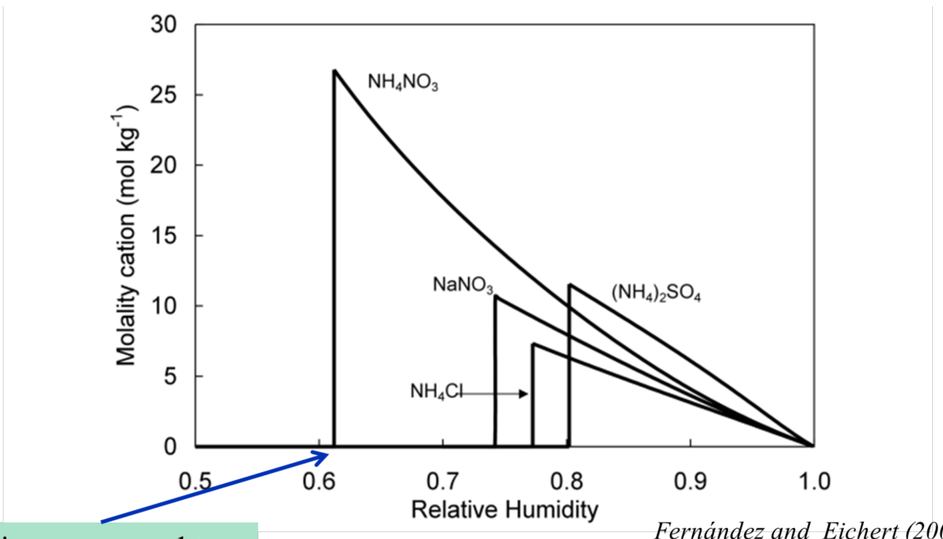






Einfluss der Luftfeuchtigkeit





Fernández and Eichert (2009), Criti. Rev. Plant Sci. 28:36–68.

$CaCl_2$	31%	KCl	85%
$Ca(NO_3)_2$	54%	KNO_3	93%
$Ca(HCOO)_2$	96%	K_2SO_4	98%
$MgCl_2$	33%	$ZnBr_2$	9%
$Mg(NO_3)_2$	54%	$Zn(NO_3)_2$	42%
$MgSO_4$	90%	$ZnSO_4$	90%

Faustregel: Chlorid < Nitrat < Sulfat