PBIO-141
Sensory and Physiological Ecology of Plants

12b: Carbon Assimilation (E)

Pedro J. Aphalo

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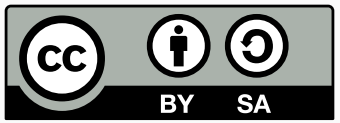
M.Sc. in Plant Biology, University of Helsinki

http://blogs.helsinki.fi/aphalo/



Outline

Canopy photosynthesis

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- If we use the big leaf analogy to express photosynthesis of a canopy we can compare the light response of a leaf to that of a canopy.
- In a canopy even when upper leaves are light saturated (photosynthesizing at maximum rate (A_{max}) other lower leaves can still increase A if irradiance above the canopy increases.
- Consequently canopy photosynthesis ($\mathcal{A}$) saturates at higher irradiances that A of individual leaves.