

**PBIO-141**

# **Sensory and Physiological Ecology of Plants**

## **12: Carbon Assimilation (C)**

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# Response curves

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# Light response curve

- A light response curve is a plot of  $A$  (net photosynthetic rate = assimilation rate) against  $I$  (irradiance).
- $A$  is usually expressed in moles of C per unit leaf area and unit time ( $\mu\text{mol m}^{-2} \text{s}^{-1}$ , for example).
- $I$  is usually incident PAR photon irradiance ( $\mu\text{mol m}^{-2} \text{s}^{-1}$ ) also called PPFD.
- less frequently absorbed light ( $\mu\text{mol m}^{-2} \text{s}^{-1}$ ) is used instead of irradiance.