

## **Photosynthesis & The Environment**

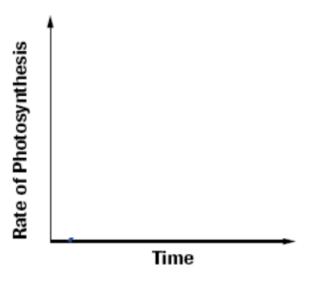
Irradiance: PHOTORESPIRATION PHOTOSYNTHESIS CO2 RuBP ATP + NADPH **Photorespiration:** RUBISCO ATP + NADPH ATP + NADPH Net CO<sub>2</sub> Uptake: CO<sub>2</sub> CO<sub>2</sub> CO<sub>2</sub> Net O<sub>2</sub> Release:  $O_2$ 02 0, **C3** Light Response Curve: 25 Rate of net CO<sub>2</sub> Uptake (mmol/m<sup>2</sup>/s) 20 15 10 5 0 -5 Light Response Curve at Different CO₂ Concent 3 9 12 15 Rate of Photosynthesis

higher CO<sub>2</sub> concentration lower CO<sub>2</sub> concentration

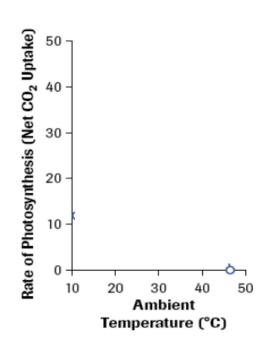
Irradiance Level



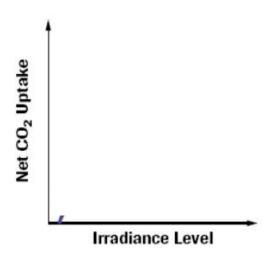
## Oxygen Consumption & Rate of Photosynthesis:



## **Temperature & Rate of Photosynthesis:**



**Photosynthetic Efficiency:** 



**Sun Plants vs. Shade Plants:** 

