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**On the Cover:** Plants are exquisite in their capacity to convert photons of light through photosynthetic fixation of carbon dioxide into sugars that are assimilated and partitioned from source to sink tissues, including roots and flowers. Oxygen is utilized for efficient conversion of sugars to ATP via aerobic respiration in mitochondria. This Focus Issue on Energy: Light and Oxygen Dynamics evaluates the plant's exquisite integration of light and oxygen with sugar sensing to maximize development and fitness. The cover contrasts the canopy of rice in environments that differ in the availability of light and oxygen. On the left, the plant is submerged and on the right solar radiation, oxygen and carbon dioxide are represented. The cover was created by graphic artist Alexander Bailey of Berkeley, California, USA.

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