



Photosynthesis and Respiratory Cycles during Environmental Stress Response in Plants



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CHAPTER 14

Modulation of TCA Cycle and Enzymes During Different Environmental Stresses

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ABSTRACT

Tricarboxylic acid cycle (TCA) is an important metabolic cycle as it facilitates the synthesis of ATP through catabolic pathways. The essential signaling functions of mitochondria include the mitochondrial regulation of autophagy through AMP-activated protein kinase which induces autophagy, thus triggering the release of Ca²⁺ in endoplasmic reticulum which enhances the TCA cycle. The structure and functionality of eight different enzymes

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