

Epiphytic plants responses to light and water stress.

ABSTRACT

Epiphytes are plants susceptible to the current climate change due to continuous exposure of environmental changes. In this study, we review the epiphytes responses to fluctuations in their surrounding environments. Abiotic factors such as light and water are the important contributors towards the epiphytes growth. Epiphytes might suffer from environmental stresses namely high light intensity and water deficit, affecting its growth and physiological attributes. Epiphytes use several mechanisms to counter aforementioned problems and one of it is through changes of physiological pathways. Some of the epiphytes use Crassulacean Acid Metabolism (CAM) as protection system for survival in severe environments. Future studies should include more approaches used by this plant as defense mechanisms to such stresses and more studies on leaf anatomy, leaf structure and variations in biochemical components for further understanding of the mechanisms involved.

Keyword: Epiphytes; High light intensity; Drought; Physiological pathway; Crassulacean Acid Metabolism (CAM).