

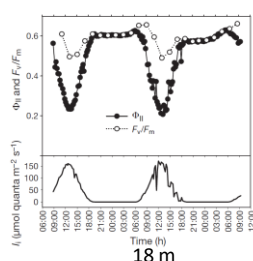
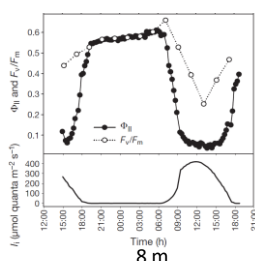


Monitoring plant stress

Aquation Pty Ltd provides plant stress monitoring equipment suitable for environmental studies on land, and in freshwater, estuarine and marine environments.

Shutter Fluorometer

Aquation's Shutter Fluorometer employs multiple sensors to measure photosynthesis using the widely-used chlorophyll fluorescence-based PAM technique. The continuous monitoring capability, combined with Aquation's patented automated dark-acclimation feature, enable the Shutter Fluorometer to measure the effective and maximal photochemical efficiency throughout the day and night.



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The figure demonstrates daily changes in photochemical efficiency in both high- and low-light environments, with the greatest decline coincident with the highest light intensity. Photosynthetic rates suffer the most under high light conditions, yet are able to recover during the afternoon.

Benefits

Aquation's Shutter Fluorometer provides ongoing information describing a plant's ability to conduct photosynthesis and how this ability is impaired under high light conditions. Accompanying PAR measurements enable one to also calculate relative electron transport rates. Continuous monitoring provides data 24/7; automated dark-acclimation enables powerful measurements including F_v/F_m , rapid- and recovery-light curves any time during the day and night.

