

UV-B Effect on Constituents of *Azolla caroliniana*

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Changes in growth and ultrastructure of *Azolla caroliniana* in response to elevated UV-B radiation were investigated. Exposure of plants to UV-B radiation for 1, 8, 16, 24 and 48 h exhibited a significant decrease in biomass and relative growth rate. This decrease resulted in an increase in doubling time over the control. Also, Chl a and b contents were significantly decreased especially after 16 h. The reduction was accompanied by a decrease in 5-aminolaevulinic acid content (precursor of chlorophyll). On the other hand, contents of carotenoid and UV-absorbing phenolic compounds (flavonoids and anthocyanins) were increased.

Key words: Doubling Time, Relative Growth Rate, UV-Absorbing Compounds