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Protective mechanism in UV-B treated *Crotalaria juncea* L. seedlings

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There is concern that some anthropogenic atmospheric pollutants may result in a global reduction of stratospheric ozone. This would undoubtedly increase the level of ultraviolet radiation reaching the surface of the earth, which might have important biological consequences. The antioxidant defence system of a plant consists of a variety of antioxidant molecules and enzymes. The role of antioxidant enzyme activities in *Crotalaria juncea* under control without UV-B treatment and ultraviolet-B supplemental radiation (UV-B) was investigated. UV-B treatment for 6 h for 4 days resulted in severe inhibition in catalase activity. On the other hand, the activities of peroxidase, polyphenol oxidase, superoxide dismutase and phenylalanine ammonialyase increased after the UV-B treatment when compared to control seedlings. These increases could be an adaptive mechanism to minimise the effects of UV-B radiation.

Keywords:*Crotalaria juncea* L.; UV-B radiation; antioxidant; catalase
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