

综合评述

## 增强UV-B辐射对作物生理代谢、DNA和蛋白质的影响研究进展

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收稿日期 2004-12-15 修回日期 2005-3-24 网络版发布日期 接受日期

摘要

大气平流层的臭氧层逐渐破坏导致太阳辐射中抵达地球表面的UV-B辐射增加,对作物产生不同程度的影响.本文讨论了UV-B辐射增强对作物生理代谢、DNA损伤和蛋白质含量的影响.UV-B辐射增强,作物叶片类黄酮含量增加、叶绿素含量降低、光合作用减弱,同时UV-B辐射诱致基因活性变化,导致DNA损伤和蛋白质含量的改变.

关键词 [UV-B辐射](#) [作物](#) [生理代谢](#) [DNA](#) [蛋白质](#)

分类号

## Effects of enhanced UV-B radiation on physiological metabolism, DNA and protein of crops: A review

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### Abstract

Ozone depletion in stratosphere has led to the increase of solar UV-B radiation reaching to the earth surface, which would affect crops to various extents. This review dealt with the effects of enhanced UV-B radiation on the physiological metabolism, DNA damage and protein content of crops. Enhanced UV-B radiation could increase crops' flavonoid content but decrease their chlorophyll content and photosynthesis, induce gene change, and result in DNA damage and change of protein content.

**Key words** [UV-B radiation](#) [Crops](#) [Physiological metabolism](#) [DNA](#) [Protein](#)

DOI:

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