

عنوان مقاله:

Impact of Ultraviolet-B radiation based on altitude on photosynthetic efficiency, growth performance and crop yield: a review

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خلاصه مقاله:

Purpose: Ultraviolet-B radiation was inducing enormous stress at highland and coldest area since it increases more than 40% at highland when we compare with lowland. Therefore, this review aims to assess and depict impacts of Ultraviolet-B radiation on photosynthetic efficiency, growth performance, and yield of crops based on altitude. **Findings:** Indicate that ultraviolet-b radiation has a severe effect on photosynthesis, especially the coldest time. It reduces photosynthetic efficiency in such an area, but it depends on the type of the crop and cultivar difference. On the other hand, it reduces growth performance and biomass accumulation based on altitude. There is a contrasting view on a net-assimilation rate on different studies condition. The effect of UV-B on crop yield was more contrasting in some studies says no effect on other studies it says it affect, but this contradictory result was mainly due to the difference in study conditions, still current studies on Yield revealed that UV-B has a high impact on yield. **Research limitations:** Ultraviolet-B radiation has high effect on the highland area, but there is no much research focuses, but UV-B was profoundly affecting photosynthetic efficiency, growth performance and yield of crops on highland area. **Directions for future research:** UV-B was reducing crop production, and productivity at highland and this review gives .more insights on UV-B impact at the highland and allow UV-B adaptive and preventive investigation in the future

کلمات کلیدی:

Growth and yield, Photosynthetic efficiency, Ultraviolet-B Radiation

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