

耕作栽培·生理生化

低纬高原地区UV-B辐射对报春花类黄酮含量的影响

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摘要 利用获得的云南不同纬度、不同海拔高度, 而经度差异不大的5个试验点的UV-B辐射观测资料, 以同期种植的云南报春花为试验材料, 分析得到报春花叶片的类黄酮试验数据。初步研究了低纬高原地区不同UV-B辐射强度变化对云南报春花类黄酮的影响。结果表明: UV-B辐射强度与报春花类黄酮含量存在明显的联系; 尤其在紫外辐射变化最大的生长初期, 报春花类黄酮含量变化也最大; 在紫外辐射强度最强的试验点观测到了类黄酮含量的最高值; 整个生育期内, 随着UV-B辐射强度增强, 报春花类黄酮含量由生长期开始先明显升高至衰老期后降低; 不同试验点在不同生育期内达到了类黄酮含量的最高值, 总体来说含量以生长期和开花期最高; 叶片类黄酮含量变化对UV-B辐射强度变化较敏感时期是开花期。

关键词 [UV-B辐射](#); [报春花](#); [类黄酮](#); [纬度](#); [海拔高度](#)

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The Influence of Low Latitude and High Elevation Regions UV-B Radiation on Flavonoids Content of *Primula*

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Abstract

With the favorable geographical environment of low latitude and high elevation in Yunnan province, the content of flavonoids in *Primula* planted in different test regions were researched. The results indicated that, the relationship between UV-B radiation strength and content of flavonoids showed notable correlative relation, especially during the *Primul* growing term when UV-B radiation strength increased sharply, the content of flavonoids also increased. In the test place where the UV-B radiation strength reaches the highest point, content of flavonoids present to tiptop. During the whole physiology term, with the enhance of UV-B radiation strength, content of flavonoids climbed up in growing term at first and then decreased in decrepitude term. The highest content of flavonoids was showed in different physiology term at different test place, averagely content were higher in growing and anthesis term. During the different physiology terms of *Primul*, its sensitivity to UV-B radiation was different with the most sensitivity during blooming term.

Key words [UV-B radiation](#) [Primula](#) [flavonoids](#) [latitude](#) [elevation](#)

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