

研究简报

$^{60}\text{Co-}\gamma$ 射线辐射对一品红丙二醛及几种保护酶的影响

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摘要 探讨了 $^{60}\text{Co-}\gamma$ 射线辐射对一品红丙二醛及几种保护酶的影响。结果表明,SOD酶活力与POD酶活力之间呈显著正相关($R=0.656^*$),SOD比活力与PPO酶活力、PPO比活力之间呈极显著负相关($R=-0.716^*$, $R=-0.714^*$);SOD酶活力、POD酶活力以10GY辐射处理值最高,10GY辐射处理的PPO酶活力居第2,丙二醛含量及CAT酶活力居第8。因此,综合此5项生理指标的生理生化功能,一品红的此4种保护酶活力和丙二醛含量以10GY辐射处理的表现较为适中。

关键词 [一品红](#) [辐射处理](#) [保护酶](#) [丙二醛](#)

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Effects of Radiation Dosages of $^{60}\text{Co-}\gamma$ ray on Some Cell Protective Enzymes and Malondialdehyde of the *Euphorbia pulcherrima*

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Abstract

Effects of radiation dosages of $^{60}\text{Co-}\gamma$ ray on some cell protective enzymes and malondialdehyde of the *Euphorbia pulcherrima* were studied. The results showed that there were prominently positive correlations between rates radioactivity of SOD and POD and a good minus correlation between rates radioactivity of SOD and PPO. With irradiated by $^{60}\text{Co-}\gamma$ ray of 10GY, rates radioactivity of SOD and POD were highest, and rate radioactivity of PPO was secondary, and rate radioactivity of CAT and the content of malondialdehyde were eighthly. The four kinds of cell protective enzymes and the content of malondialdehyde which irradiated by $^{60}\text{Co-}\gamma$ ray of 10GY had a better performance.

Key words [Euphorbia pulcherrima](#) [radiation treatment](#) [cell protective enzymes](#) [malondialdehyde](#)

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