

研究简报

$^{60}\text{Co}-\gamma$ 射线辐射对红掌几种酶活性及MDA含量的影响

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摘要 试验研究了用不同剂量 $^{60}\text{Co}-\gamma$ 射线辐射处理整株红掌后,其叶片中几种酶活性及MDA含量的变化。结果表明:辐射后丙二醛(MDA)含量,超氧化物歧化酶(SOD),过氧化物酶(POD)活性与对照相比均有增加,且最大值均出现于50Gy处理时;多酚氧化酶(PPO)和过氧化氢酶(CAT)活性最大值分别出现于20Gy,90Gy,为对照的1.75倍、1.25倍; SOD活性与MDA含量呈极显著正相关,与POD活性呈极显著正相关;CAT活性与MDA含量呈显著负相关。

关键词 [红掌](#) [辐射](#) [酶](#) [MDA](#)

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Effect of Radiation of $^{60}\text{Co}-\gamma$ Ray on Some Enzyme Activities and MDA Content of *Anthurium adndraeanum*

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Abstract

We studied the effects of irradiation of $^{60}\text{Co}-\gamma$ ray on some enzyme activity and MDA content of *Anthurium adndraeanum*.The results showed that after treated with irradiation of $^{60}\text{Co}-\gamma$ Ray, The MDA content, SOD activity, POD activity increased and at the treatment of 50Gy they reached the maximum;PPO and CAT activity come to the head at treatment of 20Gy,90Gy and were 1.75 and 1.25 times of CK respectively; There was a significant positive correlation between SOD activity and MDA content, between SOD activity and POD activity also,but the correlation between the CAT activity and MDA content was negative.

Key words [Anthurium adndraeanum](#) [irradiation](#) [some enzyme](#) [MDA content](#)

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