技术及应用

X射线慢性照射对东方百合不定芽生长和POD同工酶的影响

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摘要 利用X射线对东方百合组织培养形成的不定芽进行慢性照射,观察不同辐照剂量对不定芽生长的影响,并对不定芽过氧化物同工酶酶谱进行分析。结果表明:X射线对东方百合不定芽的生长有显著抑制作用,对不定芽增殖影响不明显,随着辐照剂量的增大,不定芽死亡率增大,X射线慢性辐照引起了POD同工酶酶带数目的改变,活性增强。

关键词 X射线;慢照射;东方百合;生长;同工酶

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Effect of X-ray Chronic Irradiation on Growth and POD Is ozyme of Adventitious Bud of Oriental Lily

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Abstract X-ray chronic irradiation was added to the adventitious bud by the tissue culture of oriental lily. Effects of different doses of radiation on the adventitious bud were observed and P OD isozyme patterns of the adventitious bud were analyzed. X-ray obviously inhibites the growth of the adventitious bud while shows little effect on its multiplication. With the increase of the dose of radiation, the death rate rises. X-ray chronic irradiation leads to the change of POD isozyme patterns' number and enhances the activity of these isozymes.

Key words X-ray _ chronic irradiation _ oriental lily _ growth _ isozyme

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