

研究论文

CPPU提高柚树苗抗旱性的研究

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摘要 水分胁迫下, 柚树苗叶片RWC、 ψ_w 、Pn及可溶性蛋白质、叶绿素含量下降, 游离脯氨酸、MDA含量及SOD活性升高, CAT活性先上升后下降, APX活性、AsA和GSH含量明显下降, 抗旱性强的品种具有较高的活性氧清除能力。CPPU处理提高柚树苗叶片RWC、Pn、叶绿素、游离脯氨酸、AsA、GSH含量, 并增强SOD、APX活性, 降低MDA水平, 从而提高柚树苗抗旱性。实验结果表明, CPPU处理提高叶片对膜脂过氧化作用的保护能力可能是其提高柚树苗抗旱性的原因。

关键词 [CPPU](#) [柚树苗](#) [抗旱性](#)

Enhancement of Drought Resistance in Pomelo Seedlings by CPPU

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Abstract Under water stress, leaf RWC, ψ_w , Pn, soluble protein and chlorophyll contents in pomelo seedlings were decreased, the contents of MDA and free proline, SOD activity were increased, CAT activity increased at first, then decreased. And activity of APX, the contents of AsA and GSH were declined too. The activated oxygen decomposing capacity in the drought-resistant variety was higher than that in the drought-sensitive one. CPPU treatment increased leaf RWC, Pn, chlorophyll, free proline, AsA, GSH contents, SOD, APX activities, and decreased the accumulation of MDA, therefore the drought resistance of pomelo seedlings was improved. These results indicated that CPPU treatment increased protective capacity against membrane lipid peroxidation, therefore resulted in the increase of drought resistance of pomelo seedlings.

Keywords [CPPU](#) [Pomelo seedlings](#) [Drought resistance](#)

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扩展功能

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