

园艺—研究进展

嫁接提高植物耐盐性研究进展

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摘要:

蔬菜设施栽培中, 由于不合理的肥料使用、栽培管理措施不当以及雨水淋洗相对较少等原因, 造成土壤盐分积累, 土壤次生盐渍化现象普遍发生, 导致蔬菜作物生长发育受到抑制、产量和品质降低, 严重影响了设施蔬菜生产的可持续发展。实施嫁接栽培是克服设施土壤次生盐渍化的一条有效途径。此文综述了近年来国内外盐胁迫下嫁接植物的研究进展, 包括植物生长发育、离子分布、光合作用、渗透调节作用、抗氧化酶及内源物质等方面, 分析目前相关研究中存在的问题及其研究前景, 旨在为开展嫁接植物抗盐机理研究提供参考。

关键词: 嫁接; 植物; 盐胁迫; 耐盐机制

Advances in the Studies of Salt Tolerance in Plant by Grafting

Abstract:

Soil secondary salinization has been a common phenomena in vegetable protected culture, mainly as a consequence of improper fertilizer application, unsuitable culture and management practices, less raining rinse and so on, leading to the progressive accumulation of salts in the soil, which inhibits vegetable growth and development, causes decline of yield and quality, brings a negative effect on sustainable development of vegetable. It showed that grafting could improve vegetable tolerance to environmental stresses, became an effective approach to overcome salt stress. In the article, it provided advances of plants by grafting under salt stress, including growth and development, ion distribution, photosynthesis, osmotic substances, antioxidative enzymes and endogenous hormones etc, and the problems and prospects on these relative studies about grafting were put forward. This review may help to study the salt-tolerant mechanism of plants by grafting.

Keywords: grafting plant salt stress salt mechanism

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