

园艺—研究进展

茶树抗性生理评价研究进展

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摘要:

茶树生长随时都可能受到不良环境因子的胁迫, 诸如高低温、干旱、强光等。开展茶树的抗逆机制研究, 探明并建立茶树抗性生理评价体系, 对茶树抗性育种、茶树资源抗性鉴定、抗性种质材料的筛选及建立茶树对不良环境的预警与调控机制都具有重要意义。文中从保护性酶活性、组织结构、丙二醛、电导率和可溶性糖等方面对茶树抗性生理评价研究进展作一阐述, 并就未来茶树抗性生理评价指标研究提出2点展望: ①深层次地开展胁迫抗性及持续胁迫抗性机理研究; ②开展抗性生理指标筛选与综合评价研究。

关键词: 茶树; 抗性; 超氧自由基; 膜脂过氧化; 研究进展

Research Progress on Evaluating the Physiological Indexes of Tea Plant Resistance

Abstract:

Tea plant is affected by adverse conditions at any time as it grows, such as high or low temperature, drought, high light, etc. It is of significance in resistance breeding, identifying the resistance, screening out the resistant materials and setting up the early-warning and regulation mechanism to study how tea plant resist to environmental stress, ascertain and build up physiological evaluation system with all kinds of new technique and testing method. Based on the current study situation in agriculture, this paper explicated the research progress on physiological evaluation of tea plant resistance mainly from the following aspects. They were anti-oxidative enzyme activities, organization structure, MDA, electrical conductivity and soluble sugar content, etc. Two realizations were suggested: ①Have the theoretical research of resistance to stress of environment and lasting resistance to stress; ②Screen out physiological indexes of tea plant resistance and evaluate them.

Keywords: Camellia sinensis resistance superoxide radicals membrane lipid per-oxidation research progress

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