

研究报告

花生品种芽期抗旱性指标筛选与综合性评价

张智猛¹, 万书波², 戴良香¹, 宋文武¹, 陈静¹, 苗华荣¹

(1. 山东省花生研究所, 山东 青岛 266100|2. 山东省农业科学院, 济南 250100)

摘要:

通过PEG渗透胁迫人工模拟干旱条件,研究了27个花生品种种子萌芽期对渗透胁迫的响应并对其抗旱性进行了鉴定评价。结果表明,不同花生品种芽期各性状指标对水分胁迫浓度的适应性不同,其中根长、生根率、根干重、发芽率对胁迫浓度表现差异明显,与品种综合抗旱能力间呈显著或极显著相关,筛选出8130、冀花2号、冀花4号、花育27号、花育25号和鲁花14等抗旱能力较强的品种。结合田间直接鉴定的结果,室内高渗溶液萌发法是鉴定花生萌芽期抗旱性的一种快速、简便、准确的方法。

关键词: 花生品种; 萌芽期; 抗旱性

Index Screening and Comprehensive Evaluation for Drought Resistance of Peanut Varieties at Germination Stage

ZHANG Zhi-meng¹, WAN Shu-bo², DAI Liang-xiang¹, SONG Wen-wu¹, CHEN Jing¹, MIAO Hua-rong¹

(1. Shandong Peanut Research Institute, Shandong Qingdao 266100|2. Shandong Academy of Agricultural Sciences, Jinan 250100, China)

Abstract:

Under PEG solution simulated soil drought condition, the experiments were conducted to study on the response to water stress and estimate the drought resistance of twenty-seven varieties at germination stage. The results showed that the characters of peanut response to water stress were different among every variety at germination stage. The response of root length, rooting ratio, root dry weight and germinating rate of these varieties to water stress treatments were obviously different. These indexes were significantly or very significantly related to colligate drought resistance. We found 8130, Jihua No.2, Jihua No.4, Huayu No.27, Huayu No.25 and Luhua No.14 had better drought resistance. These results came from field observation and inside of laboratory the bourgeon method with high PEG concentration solution is a quick, simple and accurate method for drought-resistance identification.

Keywords: peanut variety germination stage; drought resistance

收稿日期 2009-08-12 修回日期 2009-10-19 网络版发布日期 2010-01-26

DOI: 10.3969/j.issn.1008-0864.2010.

基金项目:

“十一五”国家科技支撑计划项目(2006BAD21B04-2);青岛市科技支撑项目(08-2-1-22-nsh);山东省农业科学院创新基金项目(2007YCX024-04)资助。

通讯作者: 万书波,研究员,硕士生导师,主要从事科研管理和花生栽培生理研究工作。E-mail: qinhdao@126.com

作者简介: 张智猛,研究员,博士,主要从事作物栽培生理、植物营养生理科研工作。

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