

农学—应用研究

辽西半干旱区抗旱高产玉米品种筛选

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摘要:

水分是制约半干旱区玉米生长的主要环境因子之一,严重影响玉米产量。为了有效筛选出适合辽西半干旱区应用的春玉米品种,在2007~2008年开展了田间品种试验。结果表明:产量和水分利用效率(WUE)显著地受品种影响,在统计学上均达显著水平(P<0.05)。与对照丹玉39相比,郑单958、东单90、辽单565的产量差异达到5%显著水平。辽单565、郑单958与对照的WUE差异达到5%显著水平。结果表明,郑单958和辽单565两个品种的应用能够实现获得高产的同时,提高水分利用效率的目的,适宜于东北半干旱区推广和大规模种植。

关键词: 春玉米; 产量; 水分利用效率; 差异显著性

Screening on Varieties of Spring Maize in Semiarid Region of West Liaoning

Abstract:

Scarcity of water is a environmental constraint to maize growth in semiarid region and cause loss in maize yield greatly. In order to screening spring maize varieties, which were well suited to semiarid region of west Liaoning. We conducted maize varieties test during 2007-2008. Results showed that seed yield and water use efficiency (WUE) were strongly influenced by spring maize varieties. There was statistically significant difference (P<0.05) among varieties in yields and WUE. Compared with CK (danyu39), zhengdan958, dongdan90 and liaodan565 reached 5% significant level. As for WUE, compared with CK (danyu39), Liaodan565 and zhengdan958 reached 5% significant level. Accordingly, it was recommended that zhengdan958, liaodan565 were more suitable to semiarid region of northeast China for their better yield performance and high WUE.

Keywords: spring maize yield WUE significance of difference

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