

论文

覆沙改良科尔沁沙地-松辽平原交错区盐碱地与造田技术研究

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摘要:

为了研究盐碱地改造利用,进行了沙土和盐碱土混合,研究混合后的“沙碱土”特性,并实验了其种植作物的幼苗表现。科尔沁沙地与松嫩平原盐碱地和辽河平原盐碱地在松辽分水岭两侧交错重叠分布,面积达350×10⁴hm²,具有可改造旱田100×10⁴hm²的潜力。当盐碱土中混入40%~60%的沙丘风沙土时,电导率指示的盐分含量降低20%~50%,碱化度降低40%~60%,满足种植玉米、向日葵等旱作作物的条件。此区进行盐碱地“覆沙造旱田”在理论和实践上都具有可行性。

关键词: 覆沙 作物生长 盐碱地

Research on "Sand-covered Reclaimed Crop Land" of Alkali-saline Soil

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Abstract:

In order to reclaim alkali-saline land, we mixed the sandy soil to alkali-saline soil, then evaluated the chemical parameters of mixed soil and the crop seedling response under such grow condition. Sandy land in Horqin, alkali-saline land in Songnen Plain and Liaohe Plain besides watershed ridge of Songnen Plain watershed and Liaohe Plain watershed interlaced and overlapped in mosaic distribution, with an overlapping area up to 3.5 million hm². It has the potential to be reclaimed as crop land of one million hm². When 40%-60% of sandy soil was mixed, the salt content which indicated by EC reduced 20%-50%, and ESP reduced 40%-60%. The mixed soil could adapt to many crop's growth, such as corn, sunflower, etc. It is feasible to use sand-covered reclaimed crop land in the study area from theoretical and practical aspect.

Keywords: sand-covered crop growth alkali-saline land

收稿日期 2010-09-25 修回日期 2011-01-05 网络版发布日期

DOI:

基金项目:

国家自然科学基金(30970493)。

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参考文献:

[1] 万宝瑞. 关于我国粮食安全的几个问题[J]. 高等农业教育, 2009, 10(2): 3-5. [2] 袁隆平. 粮食安全就是一场输不起的战争[J]. 农村工作通讯, 2009, 24: 52. [3] 夏珺. 我国耕地面积已逼近18亿亩红线[J]. 农村展望, 2007 (4): 17. [4] 祝滨滨, 刘笑然. 新时期保障我国粮食安全的措施研究[J]. 当代经济研究, 2009(12): 55-59. [5] 王学志, 张正祥, 盛连喜, 等. 基于地貌特征的东北土地利用格局[J]. 生态学杂志, 2010, 29(12): 2444-2451. [6] 赵学勇, 张春民, 左小安, 等. 科尔沁沙地沙漠化土地恢复面临的挑战[J]. 应用生态学报, 2009, 20(7): 1559-1564. [7] 肖荣寰. 松嫩沙地的土地荒漠化研究[M]. 长春: 东北师范大学出版社, 1995. [8] 姚丽, 刘廷玺. 科尔沁沙地土壤化学特性研究[J]. 内蒙古农业大学学报: 自然科学版, 2005, 26(2): 35-38. [9] 鲍士旦. 土壤农化分析[M]. 北京: 中国农业出版社, 2000. [10] 陈棣, 李英杰. 松嫩平原西部风沙区流动沙地工程防治措施的研究[J]. 水土保持科技情报, 2002(1): 28-29. [11] 李彬, 王志春, 迟春明. 吉林省大安市苏打碱土含盐量与电导率的关系[J]. 干旱地区农业研究, 2006, 24(4): 168-171. [12] 李彬, 王志春, 迟春明. 吉林省大安市苏打碱土碱化参数与特征[J]. 西北农业学报, 2006, 15(1): 16-19, 35. [13] 许林书, 王升忠. 温带半湿润地区草原风沙土的水分特征[J].

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