

杨松,张淑敏.柔性梳刷式牧草排种器设计与试验[J].农业工程学报,2012,28(14):24-30

柔性梳刷式牧草排种器设计与试验

Design and experiment on flexible combing brush seed metering device for forage

投稿时间: 2012-01-19 最后修改时间: 2012-06-12

中文关键词: [种子](#),[农业机械](#),[柔性结构](#),[播种机](#),[牧草](#)

英文关键词: [seed](#) [agricultural machinery](#) [flexible structures](#) [seeder](#) [forage grass](#)

基金项目: 十二五国家科技支撑计划 (2011BAD20B11)

作者	单位
杨松	中国农业大学工学院, 北京 100083
张淑敏	中国农业大学工学院, 北京 100083

摘要点击次数: **172**

全文下载次数: **102**

中文摘要:

为了解决牧草播种时因部分牧草种子流动性差和种子细长形状带来的种子架空或堵塞的问题, 并提出播种均匀性, 提出采用梳刷原理改善种子排列姿态, 并研制了柔性梳刷式牧草排种器试验台。通过试验确定了充种口长度应在48~55 mm。试验表明羊草和苇状羊茅平均播种均匀性变异系数分别为28.54%和21.28%, 达到了国家标准要求。试验表明柔性梳刷装置能使牧草顺利排种并避免造成种子破损。为同类排种器和牧草播种机的设计研制提供了参考。

英文摘要:

Slender shape and insufficient fluidity of some varieties of forage seeds lead to the bridging or blockage problem under sowing condition. To solve this problem, a mechanical combing method was proposed to improve uniformity of the forage seeder. A prototype of flexible combing forage seeder was developed. The length of seed outlet was determined, which was 48-55 mm. The sowing uniformity experiment was conducted and the mean coefficient of variation of Chinese Leymus and Tall Fescue was 28.54% and 21.28%, respectively, which met the Chinese national standard requirements. The results also showed that flexible combing forage seeder could perform successfully and avoid seed damage. This research can provide reference for the development of seed metering devices and grass seeders.

[查看全文](#) [下载PDF阅读器](#)

[关闭](#)

您是第**5153821**位访问者

主办单位: 单位地址: 北京朝阳区麦子店街41号

服务热线: 010-65929451 传真: 010-65929451 邮编: 100125 Email: tcsae@tcsae.org
本系统由北京勤云科技发展有限公司设计