

### 枫杨种子和幼苗对地下水位及埋藏深度的响应

徐玲玲,雷耘,汪正祥

华中师范大学生命科学学院

### Seed Germination and Seedling Establishment of *Pterocarya stenoptera* as Affected by Groundwater Table and Seeding Depth

XU Ling-Ling, LEI Yun, WANG Zheng-Xiang

Life Science College, Central China Normal University

摘要

参考文献

相关文章

Download: [PDF \(1005KB\)](#) [HTML 1KB](#) Export: [BibTeX](#) or [EndNote \(RIS\)](#) [Supporting Info](#)

**摘要** 通过室内试验研究在不同地下水位(0、-2、-4、-6、-8和-10 cm)和不同埋藏深度(0、1、2、3、4、5和6 cm)条件下枫杨(*Pterocarya stenoptera*)种子的萌发特性以及幼苗的建成状况。结果表明,种子萌发的最适水位为0~-4 cm;幼苗定植与生长的最适水位为-6 cm。随埋藏深度增加,枫杨出苗率下降,出苗时间推迟,幼苗的生物量根冠比增大。试验第11周,各埋藏深度下幼苗的地上株高无显著差异,埋藏深度对幼苗的生长也无显著性影响。枫杨种子萌发及萌发后幼苗生长的最适埋藏深度为1~3 cm。

**关键词:** 枫杨 地下水位 埋藏深度 种子萌发 幼苗建成 植被恢复

**Abstract:** An indoor test was carried out to investigate effects of seeding depth (0, 1, 2, 3, 4, 5 and 6 cm beneath sand) and ground water table (0, -2, -4, -6, -8 and -10cm from soil surface) on seed germination of *Pterocarya stenoptera* and establishment of their seedlings. It was found that seed germination was the highest with the groundwater table at 0 - -4cm and seedling establishment the best with ground water table at -6cm. With increasing seeding depth, seed germination decreased and delayed and root/canopy ratio in biomass increased. In the 11<sup>th</sup> week of the test, no significant difference in plant height was found between seedlings in plots different in seeding depth, indicating that seeding depth does not have any significant impact on seedling growth. Seeding depth of 1-3cm is the most favorable for seed germination and afterward seedling growth.

**Keywords:** *Pterocarya stenoptera* groundwater table seeding depth seed germination seedling establishment revegetation

Received 2012-06-17; published 2013-01-25

Fund:

国家自然科学基金(40971028)

Corresponding Authors: 雷耘 华中师范大学生命科学学院 Email: yunlei@mail.cnu.edu.cn

About author: 徐玲玲(1988-),女,安徽安庆人,硕士,主要从事湿地植被恢复研究。E-mail: 296397031@qq.com

引用本文:

徐玲玲,雷耘,汪正祥.枫杨种子和幼苗对地下水位及埋藏深度的响应[J]生态与农村环境学报,2013,V29(1):49-52

XU Ling-Ling, LEI Yun, WANG Zheng-Xiang. Seed Germination and Seedling Establishment of *Pterocarya stenoptera* as Affected by Groundwater Table and Seeding Depth[J] Journal of Ecology and Rural Environment, 2013, V29(1): 49-52

#### Service

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [Email Alert](#)
- ▶ [RSS](#)

#### 作者相关文章

- ▶ [徐玲玲](#)
- ▶ [雷耘](#)
- ▶ [汪正祥](#)