

研究报告

元谋干热河谷苏门答腊金合欢、新银合欢人工林天然更新初步研究

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摘要 通过样地调查, 比较了苏门答腊金合欢、新银合欢的林分结实量、种子散布格局、种子密度及幼苗、幼树数量, 并对影响天然更新的因素以及树种的适应性进行了分析; 同时, 使用灰色关联度法对两树种天然更新状况进行了综合评价. 结果表明, 相同年龄新银合欢树种的单株结实量为1 199粒/株, 苏门答腊金合欢为566粒/株, 同一树种单株平均结实量为混交林高于纯林; 天然更新的新银合欢林单株结实量介于新银合欢和苏门答腊金合欢之间. 随着距母树距离的增加, 林地苏门答腊金合欢种子密度减少的幅度较新银合欢小, 新银合欢种子的传播距离为90 m、苏门答腊金合欢为110 m. 苏门答腊金合欢人工林、新银合欢人工林及天然更新的新银合欢林关联系数分别为0.7269、0.6000和0.6000, 苏门答腊金合欢天然更新效果稍好.

关键词 [苏门答腊金合欢](#) [新银合欢](#) [天然更新](#) [灰色关联度分析](#)

分类号

Regeneration of *Acacia glauca* and *Leucaena leuccephala* plantations in Yuanmou dry and hot valley

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Abstract

An investigation on the seed yield, seed dispersal pattern, seed density, and the numbers of seedlings and saplings was conducted at the sampling sites of *Acacia glauca* and *Leucaena leuccephala* plantations. The factors affecting the natural regeneration and tree adaptability of *A. glauca* and *L. leuccephala* were analyzed, and their regeneration status was evaluated by gray relational analysis. The results showed that the seed yield of *A. glauca* with the same age was 566 grains per tree, while that of *L. leuccephala* was 1 199 grains per tree. The mean seed yield of individual tree, whether *A. glauca* or *L. leuccephala*, was higher in mixed forest than in pure forest, and that of naturally regenerated *L. leuccephala* forest was between those of *A. glauca* and *L. leuccephala* plantations. With the increasing distance to mother tree, *A. glauca* had a smaller decrement of seed density than *L. leuccephala*. The seed dispersal distance of *A. glauca* was 110 m, while that of *L. leuccephala* was 90 m. The gray relational coefficient of *A. glauca* plantation, *L. leuccephala* plantation, and naturally regenerated *L. leuccephala* forest was 0.7269, 0.6000 and 0.6000, respectively, indicating that *A. glauca* plantation had a better regeneration status.

Key words [Acacia glauca](#) [Leucaena leuccephala](#) [Natural regeneration](#) [Gray relational analysis](#)

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