

林学—调查报告

小陇山锐齿栎群落物种多样性特征分析

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摘要:

为了研究小陇山自然保护区锐齿栎群落的稳定性与动态, 以及不同自然条件与群落之间的相互关系, 通过对“天然林保护工程”下小陇山锐齿栎群落的物种多样性进行调查研究, 结果显示: (1) 研究区锐齿栎群落乔木层物种多样性测度结果为: 丰富度指数R为10.6, 多样性指数H' 为1.422, 均匀度指数Jsw为0.545, 优势度指数C为0.413; (2) 群落内不同生长型的物种多样性指数在森林群落中大小顺序多样性指数: 乔木层<草本层<灌木层; 均匀度指数: 乔木层<灌木层<草本层; (3) 区域内多样性指数随海拔的升高, 呈递减的趋势, 丰富度指数的变化与之相反; (4) 多样性指数随林龄的增长呈递增的趋势, 优势度的变化亦与之相反。本次调查为划定小陇山锐齿栎保护区和进行区域环境管理提供了基础数据。与早期研究相比, 以锐齿栎为建群种的群落处于稳定状态, 验证了研究区“天然林保护工程”实施的科学性和成效性。关键词: 锐齿栎林; 物种多样性; 小陇山国家级自然保护区; 西秦岭

关键词: 西秦岭

Analysis of Species Diversity Characteristics about *Quercus aliena* var. *acuteserrata* in the Xiaolong Mountain

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Abstract:

In order to research the dynamic stability of *Quercus aliena* var. *acuteserrata* community in Xiaolong national nature reserve, as well as the different natural conditions and the relationship between communities, based on the implementation of 'Tianbao project', the author investigated the species diversity and stability of the *quercus aliena* var. *acuteserrata* community. The conclusions were as followed: (1) Patrick abundance index R was 10.6, Shannon-Wiener index H' was 1.4222, Pielou index Jsw was 0.5450, Simpson index C was 0.413; (2) Through the comparison between herbs layer, shrub layer and the tree layer: for the diversity index, the shrub layer was greater than the herb layer, while was larger than the tree layer; for the uniformity index, the herbs layer was larger than the shrub layer, while was larger than the tree layer; (3) Within the region, the diversity index was decreasing with the increasing elevation, but the abundance index changes; (4) The *Quercus aliena* var. *acuteserrata* community, which was built with *Quercus aliena* var. *acuteserrata* species, which belonged to be stable. Compared with the earlier studies, the results proved that the implementation of 'Tianbao project' was scientific and effective. The survey provided the basic data for the delimitation in the *Quercus aliena* var. *acuteserrata* areas of Xiaolong mountain and regional environmental management.

Keywords: west Qinling mountain

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