粤北六地森林群落的比较研究

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摘 要:利用植被样方法和重要值计算,对地处广东北部山区的南雄青嶂山、始兴南山、曲江沙溪、翁源青云山、新丰云髻山、河源大桂山的森林群落乔木层优势科、优势种及各地共优种的径级结构进行了比较分析。结果表明,各地共有优势科为壳斗科、樟科、山茶科、金缕梅科、冬青科、杜鹃花科等13 科,与他们所处的中亚热带地理位置相适应;6 地共有优势种9个,优势度存在明显差异。群落的相似性系数以沙溪与南山之间的75.88%为最大;青云山与大桂山之间的45.64%为最低;南山与其他各地的群落相似性系数均大于60%。共有优势种的种群径级结构中,甜锥(Castanopsis eyrei)、罗浮柿(Diospyros morrisiana)、酸枣(Choerospondias axillaris)种群在粤北6地的个体数量分布,与各地的纬度差异有较明显的相关性。云髻山和沙溪的黧蒴(Castanopsis fissa)种群呈增长趋势,而南山和大桂山的趋于衰退。青云山的木荷(Schima superba)种群呈增长趋势,而其他地区的更新不良。黄樟(Cinnamomum porrectum)在各地分布为散生,种群规模小,径级结构不完整。各地枫香(Liquidambar formosana)种群的径级结构不完整,缺乏 I 级幼苗。杉木(Cunninghamia lanceolata)、马尾松(Pinus massoniana)种群在粤北6地均呈现衰退趋势。研究结果提示,整体上粤北6地森林的非地带性植被趋于衰退,常绿阔叶林的恢复进展顺利。

关键词: 森林群落; 优势科; 优势种; 相似性系数; 种群; 径级结构; 粤北

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A Comparison of the Forest Communities at Six Research Sites in North of Guangdong, China

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Abstract: By using the vegetation quardat method and calculating the important values, the dominant families, species and their size classes of arbor layer in the forest communities in Qingzhangshan of Nanxiong City, Nanshan of Shixing County, Shaxi of Qujiang County, Qingyunshan of Wengyuan County, Yunjishan of Xinfeng County, and Daguishan of Heyuan City, are compared in this paper. The results show that there are 13 common families which are dominant in the forests of 6 research sites, such as Fagaceae, Lauraceae, Theaceae, Hamamelidaceae, Aquifoliaceae, Eriaceae, etc. These families are coincidence with their locations of subtropical region. There are 9 common dominant species in the forests of 6 research sites and their dominance are different from each other. The biggest similarity coefficient of communities is 75. 88% between Shaxi and Nanshan, while the lowest is 45. 64% between Qingyunshan and Daguishan. All of the similarity coefficients between Nanshan and other sites are more than 60%. Among the size classes of the common dominant species, the individuals amount and their distribution of the population of Castanopsis eyrei, Diospyros morrisiana, and Choerospondias axillaries are related to the differences of the latitude of the research sites. The population of Castanopsis fissa in Yunjishan and Shaxi present an increasing trend, while the population in Nanshan and Daguishan present a decreasing trend. The population of Schima superba in Qingyunshan presents an increasing trend, but the population in other sites are difficult to regeneration. The sizes of Cinnamomum porrectum population in each site are small and reflect the distribution of the species is scatter type, and the size class is not integrity. The population of *Liquidambar* formosana in each site are lack of seedlings in stage I showing a not complete size class structure. Basically,

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