

长白山红松阔叶林不同演替阶段优势种的变化

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Dynamic changes of dominant tree species in broad-leaved Korean pine forest at different succession stages in Changbai Mountains.

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摘要

以皆伐后长白山红松阔叶林4个不同演替阶段的林分为对象,分析其群落和优势树种的变化特征.结果表明: 在长白山红松阔叶林不同演替阶段中,乔木树种的丰富度、Shannon多样性和Simpson优势度变化较小,多度和均匀度变化较大.随着演替的进程,群落的优势树种组成发生变化,种数逐渐减少,优势种的胸高断面积和和最大重要值逐渐增加,说明不同演替阶段群落的优势种地位不断提高.长白山红松阔叶林的演替过程是白桦、山杨、黄檗、春榆等阳性或半阴性树种不断减少,而紫椴、水曲柳、红松、色木槭等阴性树种不断增加的过程.

关键词: 长白山 红松阔叶林 优势种 皆伐干扰 耐阴性 重要值

Abstract:

Taking the broad-leaved Korean pine forest stands at four different succession stages after clear-cutting in Changbai Mountains as test objects, this paper studied the change characteristics of community composition and dominant species. The tree species richness, Shannon diversity index, and Simpson dominance index at different succession stages had less change, but the evenness and abundance changed greatly. As succession progressed, the community composition changed constantly, *i.e.*, species number decreased, while the basal area sum and the maximum importance value of dominant tree species increased, suggesting that the dominance of dominant species was continuously improved with succession. In the succession process of broad-leaved Korean pine forest in Changbai Mountains, *Betula platyphylla*, *Populus davidiana*, *Phellodendron amurense*, *Ulmus japonica*, and other intolerant or semi-intolerant tree species decreased, while *Tilia amurensis*, *Fraxinus mandshurica*, *Pinus koraiensis*, *Acer mono*, and other shade-tolerant species increased.

Key words: Changbai Mountains broad-leaved Korean forest dominant species clear-cutting disturbance shade tolerance importance value

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- [1] 胡乃发;王安志;关德新;袁凤辉;金昌杰;吴家兵;王纪军. 1959—2006年长白山地区降水序列的多时间尺度分析[J]. 应用生态学报, 2010, 21(3): 549-556.

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