

研究报告

准噶尔盆地东南缘不同生境条件下梭梭群落结构特征研究

王春玲¹ 郭泉水² 谭德远³ 史作民² 马超²

¹国家林业局野生动植物保护司, 北京 100043; ²中国林业科学研究院森林生态环境与保护研究所, 北京 100091; ³北京林业大学生物科学与技术学院, 北京 100083

收稿日期 2004-8-20 修回日期 2005-3-15 网络版发布日期 接受日期

摘要 在新疆准噶尔盆地东南缘,以平缓低洼地、平缓沙地、半流动沙丘等3种不同生境类型上的天然梭梭群落为研究对象,从物种结构、物种多样性、生物量以及梭梭天然更新幼苗幼树种群分布格局等方面,研究不同生境条件下梭梭群落的结构特征.结果表明,以平缓低洼地上梭梭群落的植物种类最丰富,其次是平缓沙地,半流动沙丘上的植物种类最少.3种生境类型上群落中的植物种类分别为16种、15种和12种;梭梭天然更新幼苗幼树以半流动沙丘上的梭梭群落为最多,达6 687 株·hm⁻²,但幼苗幼树在梭梭群落内分布不均匀,平缓低洼地上梭梭群落内的幼苗幼树比半流动沙丘上的略少,为5 799株·hm⁻²,但幼苗幼树在梭梭群落内分布均匀,总体评价以平缓低洼地上梭梭群落的天然更新最好;平缓低洼地上梭梭群落的总生物量为19.39 t·hm⁻²,平缓沙地上为9.32 t·hm⁻²,半流动沙丘上为6.69 t·hm⁻²;不同生境类型上梭梭群落天然更新幼苗幼树的分布格局均为聚集分布.平缓低洼地地面固定,土壤水分和肥力较好,比较适宜梭梭林木生长和梭梭群落的发育,平缓沙地和半流动沙丘的地面容易产生风蚀,土壤水分和肥力较差,生境条件比较严酷.

关键词 [梭梭群落](#),[生境类型](#),[物种结构](#),[物种多样性](#),[生物量分布格局](#)

分类号

Haloxylon ammodendron community patterns in different habitats along southeastern edge of Zhunger Basin

WANG Chunling¹, GUO Quanshui², TAN Deyuan³, SHI Zuomin², MA Chao²

¹Department of Protection, State Forestry Administration, Beijing 100043, China;

²The Research Institute of Forestry Ecological Environment and Protection, Chinese Academy of Forestry, Beijing 100091, China;

³College of Bioscience and Biotechnology, Beijing Forestry University, Beijing 100083, China

Abstract

Low-lying land, slow and gentle desert, and semi-mobile dune are the three different habitats of natural Haloxylon ammodendron community along the southeastern edge of Zhunger Basin in Xinjiang Uygur Autonomous Region. This paper studied the structural characters of H. ammodendron community from the aspects of species structure, species diversity, biomass, and distribution patterns of natural regeneration sapling. The results showed that the species of H. ammodendron community was the richest on low-lying land, the second on slow and gentle desert, and the least on semi-mobile dune. The number of plant species in the three different habitats was 16, 15 and 12, respectively. The amount of H. ammodendron natural regeneration sapling was the largest (6 687 trees·hm⁻²) on semi-mobile dune, but its distribution was not even. Low-lying land had a slightly smaller amount (5 799 trees·hm⁻²) of H. ammodendron natural regeneration sapling than semi-mobile dune, but the distribution of the sapling was more even. The overall evaluation was that the natural regeneration of Haloxylon ammodendron community was the best on low-lying land. Its total biomass on low-lying land was 19.39 t·hm⁻², while that on slow and gentle desert and semi-mobile dune was 9.32 and 6.69 t·hm⁻², respectively. The distribution patterns of H. ammodendron natural regeneration sapling in different habitats were

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(583KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中包含“梭梭群落,生境类型,物种结构,物种多样性,生物量分布格局”的相关文章](#)

▶ [本文作者相关文章](#)

· [王春玲](#) [郭泉水](#) [谭德远](#) [史作民](#) [马超](#)

all aggregative. The ground of low-lying land was fixed, with fairly good soil moisture and fertility, which was appropriate for the growth of *H. ammodendron* and the development of *H. ammodendron* community, while that of slow and gentle desert and semi-mobile dune was easier to suffer from wind erosion, with poor soil moisture and fertility and fairly serious habitat conditions.

Key words

[Haloxylon ammodendron community](#) [Habitat type](#) [Species structure](#) [Species diversity](#) [Biomass](#) [Distribution pattern](#)

DOI:

通讯作者