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植物生产层

腾格里沙漠南缘荒漠霸王群落演替特征

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摘要：

依据霸王（Zygophllum xanthoxylon）群落的外貌特征及霸王个体数量和冠幅，将霸王演替分为先锋群落阶段[猫头刺（Oxytropis aciphylla）+霸王]、郁闭群落阶段[霸王+猫头刺+荒漠锦鸡儿(Caragana roborovskyi)]和衰退阶段（猫头刺+荒漠锦鸡儿+霸王），研究了腾格里沙漠南缘霸王群落在不同演替阶段的物种组成、种群分布格局及优势物种重要值变化特征。结果表明，霸王群落演替过程中共有17种植物，分属7科14属；在3个演替阶段，物种丰富度变化不明显，而物种多样性指数呈先上升后下降趋势，生态优势度则相反；在先锋群落阶段霸王群落呈均匀分布，郁闭阶段和衰退阶段呈集群分布；郁闭稳定阶段霸王重要值最高，先锋群落阶段和衰退阶段次之。

关键词： 腾格里沙漠 霸王群落 演替特征

Succession characteristics of Zygophllum xanthoxylon communities in the edge regions of Tengger Desert

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Abstract:

Based on appearance of Zygophllum xanthoxylon community, crown and numbers of individual plant, the succession processes of Z.xanthoxylon community were classified into three stages, and they were pioneer stage dominated by Oxytropis aciphylla and Z.xanthoxylon stage, canopy closure stage dominated by Z.xanthoxylon+O.aciphylla+Caragana roborovskyi and recession stage dominated by O.aciphylla+C.roborovskyi+Z.xanthoxylon, respectively. A field survey in the edge regions of Tengger Desert was conducted to determine the plant species composition, distribution pattern of population and important value of dominant species of different succession stages in this study. This study showed that 17 plant species were identified in this survey, and they belonged to 14 genera of 7 families. The species richness was not significantly different, and the species diversity firstly increased and then decreased when the Z.xanthoxylon community developed from pioneer stage to recession stage. The ecological dominance was inverse trend with the species diversity. The Z.xanthoxylon population was uniform distribution at pioneer stage, aggregation distribution in canopy closure stage and recession stage. The important value of Z.xanthoxylon was the biggest at canopy closure stage, and the others were the secondary.

Keywords: Tengger desert Zygophllum xanthoxylon community succession characteristic

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