

实验简报

塔里木河下游胡杨林胸径结构及林木分布特征

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收稿日期 2007-11-12 修回日期 2008-4-23

摘要 采用“面”上宏观调查与“点”上典型研究相结合, 集中对塔里木河下游阿拉干断面100 hm²的胡杨(*Populus euphratica*)林木分布与胸径结构进行了调查。结果发现, 在距河道0-20 m的范围内, 胸径为0-4 cm的幼龄胡杨占最多, 达到13.24%。以后随着离河道距离的增加, 幼龄胡杨所占比例逐渐减小。胸径分布范围简单, 胸径为16-36 cm的林木株数在胡杨林中所占的比例最多。另外, 随着离河道距离的增加, 胸径在48 cm以上的过熟林和衰老林的比例逐渐增多。距河道0-200 m的范围内, 胡杨分布占整个胡杨林的80%以上。其中以疏失度为0-50%的长势较好的胡杨为主。在200-400 m的范围内, 疏失度为50%-75%的长势较差的过熟林和衰老林的比例开始增多。距河道400 m以上, 胡杨密度开始急剧下降, 胡杨株数所占的比例几乎下降到5%以下。

关键词 胸径结构 胡杨 塔里木河 林木分布

Study on DBH-structure of *Populus euphratica* and Their Spatial Distribution in the Lower Reaches of the Tarim River

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Abstract Combining spatial large-scale survey and selective plot investigation, we examined the distribution and diameter at breast height (DBH) of *Populus euphratica* trees in 100 hm² of the Argan transect in the lower reaches of the Tarim River, NW China. Within 20 m of the river, the proportion of young trees with DBH<4 cm was the greatest, at 13.24%. With increasing distance from the river, the proportion of young trees gradually dwindles. DBH distribution is simple; the proportion of trees with DBH ranging from 16 to 36 cm is the greatest in the forest. In addition, the further from the river, the higher the proportion of the over-mature forests and effete forests, with DBH > 48 cm. Within 200 m of the river is 80% of the poplular forest of *P. euphratica* trees with high vitality, with crown density 0-50%. From 200 to 400 m of the river, the proportion of over-mature forests and effete forests with trees of crown density between 50% and 75% and lower vitality begins to increase. At more than 400 m from the river, the density of *P. euphratica* begins to decrease greatly, with the proportion<5%.

Keywords DBH structure *Populus euphratica* Tarim River tree distribution

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