

## 祁连山青海云杉林冠层持水能力

彭焕华<sup>1</sup>, 赵传燕<sup>2\*</sup>, 许仲林<sup>1</sup>, 彭守璋<sup>2</sup>, 王瑶<sup>2</sup><sup>1</sup>兰州大学西部环境教育部重点实验室, 兰州 730000; <sup>2</sup>兰州大学干旱与草地生态教育部重点实验室, 兰州 730000Water storage capacity of Qinghai spruce (*Picea crassifolia*) forest canopy in Qilian Mountains.PENG Huan-hua<sup>1</sup>, ZHAO Chuan-yan<sup>2</sup>, XU Zhong-lin<sup>1</sup>, PENG Shou-zhang<sup>2</sup>, WANG Yao<sup>2</sup><sup>1</sup>Ministry of Education Key Laboratory of Western China's Environmental Systems, Lanzhou University, Lanzhou 730000, China;<sup>2</sup>Ministry of Education Key Laboratory of Arid and Grassland Ecology, Lanzhou University, Lanzhou 730000, China

- 摘要
- 参考文献
- 相关文章

全文: PDF (616 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

**摘要** 基于2008年祁连山大野口关滩流域青海云杉林冠截留观测数据和青海云杉林冠各组分持水能力实验室数据,采用直接测量和回归分析方法对青海云杉林冠层持水能力进行研究.结果表明:受不同因素影响,两种方法测得的青海云杉林冠层持水能力有一定差异.回归分析法主要受林内穿透雨观测方法的影响,所得林冠层最大持水能力为0.69 mm;直接测量法主要受样地内树高、胸径、植株密度、叶面积指数等影响,所得林冠层最大持水量为0.77 mm.直接测量法得到的青海云杉林冠各组分单位面积最大持水量依次为树皮(0.31 mm)>枝(0.28 mm)>叶(0.08 mm).

**关键词:** 关滩流域 青海云杉林 林冠持水能力 林冠截留

**Abstract:** By the methods of direct measurement and regression analysis, this paper estimated the water storage capacity of *Picea crassifolia* forest canopy in Guantan in Qilianshan Mountains, based on the observed throughfall and the laboratory experimental data about the water storage capacity of various canopy components in 2008. Due to the impacts of various factors, differences existed in the canopy water storage capacity estimated by the two methods. The regression analysis was mainly impacted by the measurement approaches of the throughfall, the maximum water storage capacity estimated being 0.69 mm, whereas the direct measurement was mainly impacted by tree height, diameter at breast height, plant density, and leaf area index, with the estimated maximum water storage capacity being 0.77 mm. The direct measurement showed that the maximum water storage capacity per unit area of the canopy components of the forest was in the order of barks (0.31 mm) > branches (0.28 mm) > leaves (0.08 mm).

**Key words:** Guantan *Picea crassifolia* forest water storage capacity of canopy throughfall

## 引用本文:

. 祁连山青海云杉林冠层持水能力[J]. 应用生态学报, 2011, 22(09): 2233-2239.

. Water storage capacity of Qinghai spruce (*Picea crassifolia*) forest canopy in Qilian Mountains.[J]. Chinese Journal of Applied Ecology, 2011, 22(09): 2233-2239.

## 链接本文:

<http://www.cjae.net/CN/> 或 <http://www.cjae.net/CN/Y2011/V22/I09/2233>

没有本文参考文献

[1] 何常清薛建辉;吴永波;张雷燕;刘冲;刘兴良. 岷江上游亚高山川滇高山栎林的降雨再分配[J]. 应用生态学报, 2008, 19(09): 1871-1876 .

## 服务

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ E-mail Alert
- ▶ RSS

## 作者相关文章