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研究论文

不同年龄麻竹阴阳叶生态生理特性

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摘要 麻竹是中国重要的大型经济竹种，其栽培已从过去河滩、四旁零散种植发展到规模化培育，通过山地麻竹发笋期内不同年龄植株阴阳叶养分和代谢动态的比较研究，结果表明麻竹阳叶氮素、磷素浓度比阴叶高，但钾素浓度阳叶低于阴叶；从发笋初期至末期阴阳叶氮、磷、钾素浓度都呈逐渐减少的变化趋势，阴阳叶氮、磷、钾素浓度差异逐渐减小；阳叶在净光合速率、暗呼吸速率、CO_2补偿点、光补偿点、光饱和点等方面较阴叶高，光呼吸较低，但不同年龄麻竹之间各指标变化有所不同。

关键词 麻竹； 阴阳叶； 生态生理； 特性

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Comparison on ecophysiological characteristics between sun and shade leaves in different age *Dendrocalamus latiflorus*

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Abstract Dendrocalamus latiflorus is one of the important bamboo species as cash-crops in China. It has been cultivated widely on hills and mountains in some places. In recent year, some researches on it had been done, such as expanding plantation, cultivation techniques, biomass and nutrient characteristic. However, few studies had been made on ecophysiology of different sun side leaves of Dendrocalamus latiflorus. Therefore, further research on the topic is imperatively necessary. The characteristics of sun leaves and shade leaves on nutrient and metabolism dynamic in different age bamboo have been described in the paper. The results showed that N and P concentration of sun leaf was higher than that of shade leaf, K concentration ison the contrary. During bamboo shoots emerging stage, Nutrient concentration of N, P and K tended to decreasing, difference of N,P,K concentration between sun leaf and shade leaf tended to decreasing. sun exposed leaves were higher than shade leaves in net photosynthesis, dark respiration, CO2 compensation point, and light saturation point. For light respiration, it was reverse. These indices varied with bamboo age throughout bamboo shoots emerging.

Key words Dendrocalamus latiflorus _ sun and shade leaves _ _ ecophysiology _ _ characteristic

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