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桂林岩溶洼地生态系统中大气CO₂动态及环境意义 [点此下载全文](#)

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摘要:

对桂林岩溶试验场岩溶洼地生态系统中大气CO₂动态的昼夜观测结果说明, 岩溶洼地对大气CO₂具有一定的调蓄作用, 并促进岩溶发育; 植被的光合呼吸作用是制约大气CO₂日动态直接的因素, 而土壤CO₂向大气的排放居次要地位。

关键词: [岩溶洼地](#) [岩溶作用](#) [大气](#) [二氧化碳](#) [生态系统](#)

Atmospheric CO₂ Dynamics in the Guilin Karst Depression Ecosystem and Environmental Significance [Download Fulltext](#)

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Abstract:

The diurnal observations on atmospheric CO₂ dynamics in the Guilin karst depression ecosystem indicate the following: the karst depression has a certain regulation effect on atmospheric CO₂ and may accelerate karst development; the photosynthesis-respiration of bush vegetation is the direct factor for controlling the atmospheric CO₂ dynamics in the karst depression ecosystem, while the CO₂ emitting from soil, is less important. CO₂ is both the important driving force of the karst process and the focus of the global change research. The key factor for carbonate rock dissolution and uptaking atmospheric CO₂ is the dynamics of CO₂ and water and their actions near the surface. The results of this research will be conducive to clarifying the mechanism of carbonate rock dissolution and uptaking atmospheric CO₂ in terms of CO₂ dynamic change and provide a new clue for the karst dynamic system and world carbon cycle study.

Keywords: [karst depression](#) [CO₂ dynamics](#) [karst process](#) [ecosystem](#) [Guilin](#)

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