草业科学 2012, 29(02) 204-210 DOI: ISSN: 1001-0629 CN: 62-1069/S

前植物生产层

青藏高原高寒草甸生态系统CO2通量研究进展

乔春连，李婧梅，王基恒，葛世栋，赵 亮，徐世晓

摘要：

高寒草甸是广布于青藏高原的主要植被类型，是青藏高原大气与地面之间生物地球化学循环的重要构成部分，在区域碳平衡中起着极为重要的作用。本研究首先系统回顾了青藏高原高寒草甸生态系统CO2通量日、季、年等不同时间尺度的变化特征，以及温度、光合有效辐射、降水等主要环境因子对高寒草甸生态系统CO2通量的影响；其次比较了青藏高原3种典型高寒草甸生态系统类型源汇效应和Q10值；最后针对青藏高原高寒草甸生态系统CO2通量研究现状，分析了当前存在的一些不确定性，展望了未来工作的重点。

关键词： 高寒草甸；CO2通量；净生态系统CO2交换量；温度

fluxes of alpine meadow ecosystems on the Tibetan Plateau

QIAO Chun lian1, LI Jing mei, WANG Ji heng, GE Shi dong, ZHAO Liang, XU Shi xiao

Abstract:

Alpine meadow is the key vegetation widely distributed on the Tibetan Plateau. Alpine ecosystem is a great important part in biogeochemical cycle between air and the ground surface, and it plays an extremely important role in carbon balance in this area. Advances on CO2 fluxes of alpine ecosystem were reviewed. The variations of carbon dioxide fluxes of alpine meadow ecosystem and its effecting factors were summarized on the Tibetan Plateau. Furthermore, the potential of source/sink and value of Q10 were compared between typical alpine meadow ecosystems and others. More specifically, some unsolved questions which need to be answered in the future were raised in this review.

Keywords: Tibetan Plateau CO2 flux net ecosystem CO2 exchange temperature

收稿日期 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

作者Email:

参考文献：

本刊中的类似文章