

41th FEFCO

Forest Ecosystem Function Colloquium (FEFCO) は、地域や地球全体のレベルで森林生態系の機能とその持続的活用法を統合的に理解することを目的とし、研究者間の学術交流を推進します。

第41回森林生態系機能コロキウムは、京都大学農学研究科森林水文学研究室の東若菜博士にご講演いただきます。どなたでも参加できますので、多くの皆様のご参加をお待ちしております。京都大学農学研究科森林水文学研究室がホストを務めます。

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Faculty of Agriculture Main Building, S174

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高木の水分生理学的適応様式の解明

Hydraulic adaptation against height in tall trees

As trees grow tall, it is thought that a chronic water stress occur at the treetop due to physically difficult to transport water from the root to leaves. So, how do tall trees maintain life activities at the treetop? I have been conducting research with the hypothesis that tall trees have acquired an adaptive mechanism to overcome the theoretical hydraulic limitation presumed from the height. To understand the actual situation and adaptation strategy of water stress in tall trees, I try to approach unifiedly from a multi-perspective not only conventional physiological methods but also using anatomy and physicochemical method. In this presentation, I will show some hydraulic adaptation strategy of tall trees in relation to water storage, focusing on my research in Japanese cedar and cypress published at the recent special issue of "canopy ecophysiology" in Tree physiology, and on my ongoing research in emergent tree of Dipterocarpaceae in tropical forest in Peninsular Malaysia.