

京都大学若手人材海外派遣事業 ジョン万プログラム  
研究者派遣プログラム

英文報告書

提出日：平成 26年 4月 23日

1. 渡航者 (日本語)			
氏名	Yusuke Onoda	採択年度	2013
部局	Agriculture	電話	
職名	Assistant Professor	メール	
研究課題名	The mechanisms underlying trade-off between leaf photosynthesis and durability		
海外渡航期間	平成 25 年 9 月 22 日～平成 25 年 12 月 21 日		
渡航先 (英語表記)	国名：Australia 大学等研究機関名：Macquarie University 研究室名等：Wright lab (functional ecology) 受入研究者名：Dr. Ian Wright		
2. 渡航の報告 (英文)			
<p>渡航先の研究環境、研究者との交流、研究発表の状況等、渡航中の滞在経験について英語(500～1000語)で記述して下さい。受入研究者と撮影した写真や研究発表で用いた図等について、可能な範囲で別添として提出して下さい。ページ数については増加してもかまいません。</p> <p>この報告は、ジョン万プログラムの成果として、京都大学ホームページ(英文)などに掲載されることがあります。</p>			
<p>I stayed in the Wright lab at Macquarie University, Australia for three months to engage in the project "The mechanisms underlying the trade-off between leaf photosynthesis and durability". This trade-off can be seen irrespective of climate and vegetation types, and known as "Worldwide Leaf Economics Spectrum" (LES) which is one of the best known ecological trade-offs (Wright et al. 2004, Nature). Yet, its whole physiological mechanisms remain unclear. The host scientist, Dr. Ian Wright was the leading author of LES paper, thus staying in his group was the best place to engage in this project. I had frequent discussion with Dr. Wright how to progress the project and I spent much time to extract, summarize and integrate scattered physiological trait data from literature. I have also contacted and started to collaborate with several leading plant ecophysiologicals from Australia, Netherlands, Estonia and Japan to proceed this project. Furthermore, in order to strengthen our dataset, we did several field works to collect leaves of 35 species from different forests across gradients of rainfall and soil nutrient availability. Although my research visit has finished, the project is still ongoing, and we keep working on this project with frequent communications. We aim to complete the data integration and analysis in 2014 and hope to submit 1-2 papers to high ranked journals in plant sciences.</p>			