

鹿大「進取の精神」支援基金 平成 29 年度 留学生受入推進事業
 研究留学生受入推進プロジェクト 報告書

2018 年 9 月 30 日

1. 申請者 (所属・職名・氏名)	農学部・教授・坂上潤一
2. 受入留学生 (国・大学・学年・氏名)	(1) インドネシア スリウィジャヤ大学、博士 2 年 ERNA SIAGA
	(2) インドネシア スリウィジャヤ大学、博士 2 年 LAILY ILMAN WIDURI
3. 留学生受入期間	2018 年 3 月～2018 年 8 月
4. プログラム研究分野	熱帯作物学
5. 本プログラムの目的と概要と成果 (申請者/日本語)	
<p>目的: 本プログラムは、アジア地域で共通的な問題となる農業の課題について、主要作物の品質・生産性向上のための作物学研究に取り組み、地域の活性化への貢献を通して、鹿児島のおよき理解者として出身国と鹿児島をつなぐグローバルな視点を持った人材を育成する。</p> <p>概要: 東南アジアを中心に留学生を集め、地球温暖化による農作物被害、特に洪水や干ばつ等水ストレスを回避する農学的手法の解明を通して、適応技術を提案して、地域の農業の安定化に寄与する。</p>	
6. 鹿児島大学での研究活動と成果 (Student/English or Japanese)	
<p>Explain your activities and achievement for your research in Kadai.</p> <p>(1) ERNA SIAGA I have been conducted research activities specially crop science under supervision of Pr of. Sakagami Jun-Ichi in Kagoshima University entitled 'Physiological traits of chili pepper under water saturated rhizosphere. This study was conducted to evaluate the physiological responses of chili pepper grown on water saturated rhizosphere as water logging condition. The varieties of chili pepper were selected by screening method as preliminary research, and selected varieties used in main research. I have been evaluated its physiological traits, including stomatal conduction, transpiration and photosynthetic rate, etc. The results of this research show effect of water saturated rhizosphere in particular on shoot biomass and leaf photosynthesis. Thus some Indonesian local varieties have tolerance to water logging condition. Flooding is not only environmental stress in Indonesia but also in Kagoshima. I believe that this results and conclusions will be contribute to both countries. So this research results will be presented at 1st Conference of Sustainable Agriculture for Food Security and Sovereignty, 10th November 2018 in Indonesia. Finally I'd like to thank to all member of Tropical Crop Science Laboratory to achieve the objectives of project.</p> <p>(2) LAILY ILMAN WIDURI I had two main activities. First, I conducted a research about "chili pepper" in Tropical Crop Science Laboratory, Faculty of Agriculture, second, learned Japanese language. During my study in Japan, multi-cultural and international atmosphere in my Japanese class supported me to increase my ability on practicing foreign language and communication fluency in both English and Japanese language. Regarding of my research, "Physiological traits of some varieties of chili pepper under</p>	

drought stress condition” was done supervised by Prof. Sakagami. In first step varietal screening was conducted, and selected varieties were analyzed with physiological parameters in 2nd step. Based on the results of main research, the best performance of chili pepper during limited water supply condition was Lomario which is one of Indonesian local varieties in the experiment. This fruitful results can be introduced and applied to farmer’s field in Indonesia. I continuously analyze data in details and write a draft manuscript now. Hopefully I can also submit the manuscript to an international journal publisher. Finally I could get new knowledge and new experience from my Professor and other researchers to enrich and improve my skill in writing collaborated manuscripts during my stay in Kagoshima as my achievements. We are going to continue to tackle these issues as world problem including Kagoshima under change of global environment. Besides, I had exchanged so many things with Japanese and improved knowledge in particular Kagoshima.