

Research Topic	Research on pesticide investigation of oil palm plantation	Graduate School of Engineering
Host University	National University of Palangka Raya/ Central Kalimantan / Indonesia	Applied Chemistry, Environmental and Biomedical Engineering
Duration	From August 13 to September 15, 2019	KOTANI Yuki

Summary of the Research Activities

Palm oil is the most produced plant oil in the world, and Indonesia is the largest producer (2016). There are many oil palm plantations in Palangka Raya, the Central Kalimantan. The usage of large amounts of pesticides in oil palm plantations is the serious problem for water environment and human health. Japan imports a lot of palm oil from Indonesia and we use many kinds of products made by palm oil such as cup noodle, chocolate, cosmetics, soap etc. Therefore, the problem of pesticides used in oil palm plantation is not only for Indonesian but also for Japanese people.

In this research program, I investigated runoff of pesticide from oil palm plantation at University of Palangka Raya (UPR). As the research activities, I collected water samples and measured some parameters with Dr. Ardianor and his students every week at two oil palm plantations near Palangka Raya. I conducted passive sampling for adsorption of pesticides in river water. I took many pictures from sky by using a drone. I had experienced pesticide spraying, too. Now, I have been analyzing pesticides of samples.

Dr. Ardianor and Ms. Kamillah supported my study in UPR. Dr. Segah accepted me as host parents. Mr. Rosi who is a manager of oil palm plantation helped my research. I appreciate them for their kindness while I stayed in Palangka Raya.



Experience of pesticide spraying

Passive

Sampling team

Oil palm

Sampling

Lunch time

After the sampling

College Life, Friends and Others

In addition to my research activities, I visited kindergartens, elementary and junior high schools in Indonesia. I taught origami in kindergarten to convey Japanese culture. I introduced Japan in elementary school. In class, I tried to incorporate Indonesian language. Although there was a failure, I tried to improve every day. I was able to find many differences between Japanese schools and learn how to interact with children.



Visit to elementary school

指導教員講評

森林火災による煙害にも負けず、調査に頑張り、研究だけでなく様々な体験を通して成長したと思います。研究の成果と今後の活躍に期待します。

指導教員氏名：駒井 幸雄