

Research Activity Report
Supported by “Leading Graduate Program in Primatology and Wildlife Science”

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Affiliation/Position	Tanzania Wildlife Research Institute/Njiro Wildlife Research Center
Name	Chediel Kazael MRISHA

1. Country/location of visit
Japan, Kyoto University
2. Research project
Study on Japanese macaques diet through DNA analysis using collected samples of insects
3. Date (departing from/returning to Japan)
2014.06.01-2014.06.05
4. Main host researcher and affiliation
Pro. Shiro Kohshima, Wildlife Research Centre of Kyoto University
5. Progress and results of your research/activity
<p>Genome Training Course</p> <p>The direct observation and dry sample analysis for Japanese Monkey discovered that monkeys do eat insects in their diets. After noticing that the genome course was organized to make sure that we come up with all the details on the insects consumed by Japanese monkeys as part of their diets.</p> <p>The Genome Course was conducted at Kyoto University from 1st June to 5th June to make sure that all the selected samples collected from Yakushima Island National Park field trip are identified in the laboratories using the Next Generation Sequencer (NGS). I was in the insect metagenome course as a beginner for the course. We used the samples of insect collected at Yakushima Island National Park field trip and compared with the samples of fresh feces collected from Japanese monkeys in Yakushima Island to see if the insect consumed are related with the insect caught in the field.</p> <p>After undergoing the DNA analysis we managed to compare the sequence of insects from Sanger Direct Sequencing (SDS) and monkey feces using Next Generation Sequencer (NGS) and find that only one sequence matched for 99.7% which indicates that the Japanese monkey eats mostly the insect from the following orders namely; Lepidoptera, Hemiptera, Hymenoptera, Coleoptera, Orthoptera to mention but a few basing on the percentage of their relatedness.</p> <p>I have been able to acquire a knowledge and skills related to DNA analysis using the Next Generation Sequencer (NGS) not only that but also the statistical software like R’ software.</p> <p>The Genome Course will improve my career on metagenome analysis using Next Generation Sequencer (NGS). Meanwhile I am developing a proposal titled “Assessment of genetic variation, forage quality and suitable habitat of Black Rhinoceros (<i>Diceros bicornis</i>) in the Ngorongoro Conservation Area (NCA), Tanzania”, for my graduate studies. If this proposal will be accepted I am expecting to use the similar knowledge and skills acquired during Genome Field Course.</p>

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6. Acknowledgement

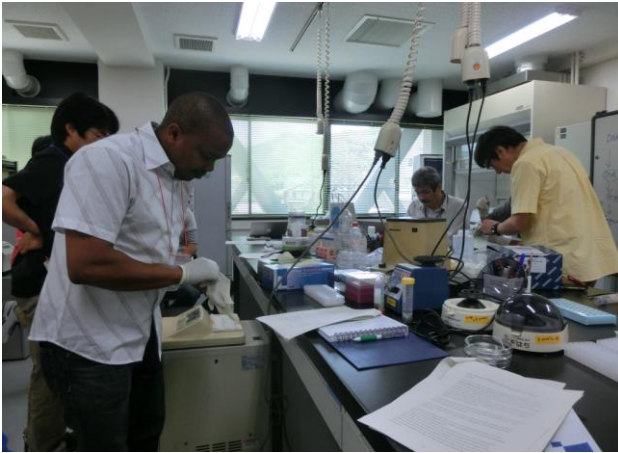


Photo 1: Molecular Lab, Kyoto University



Photo 2: Dr. Takushi with the students at the Lab

I would like to extend my sincere gratitude to the Wildlife Research Centre (WRC) of Kyoto University for organizing this Field Training Course. The Professors and Doctors at WRC as well as at Science building at Kyoto University, I would like to thank you for your great cooperation which you have shown to us during field work as well for laboratory work, you have imparted something towards my career.

Finally, my heartfelt thanks to all the Genome Training Course participants, 2014 for making my life easy during my studies as well as walking through Kyoto city. Thank you all and well come to Tanzania.