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Report of field work funded by JSPS Program for Leading Graduate Schools "Leading Graduate Program for Primatology and Wildlife Science"

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I visited Danum Valley conservation area, Sabah, Malaysia and Singapore zoo, Singapore from 24th January 2014 to 23rd February 2014 with supports of Dr. Abdul Hamid Ahmad in Sabah, and Mr. John Sha at Singapore zoo.

Here I report the brief result of this field study.

I have studied on feeding ecology of frugivorous carnivore, palm civets since 2012. This time, I conducted experiment of digestibility in palm civets with captive individuals in Singapore zoo. This experiment is feasible to use captive civets because I need feces derived from controlled foods. I used near-infrared spectroscopy (NIR) because NIR enables us to estimate chemical amounts and quality without destruction of materials. Therefore I estimate the chemicals contained in the foods before they eat, and that in their feces after they consume foods. I chose prune fruits as their foods since the ripeness of prunes is related with the color of its pericarp. I am conducting chemical analysis to evaluate their digestibility. At the same time, I analyze the chemicals in the fruits which were selected by civets in the early time after they sniffed each fruit in order to evaluate their fruit choice at individual level. In my field site, Danum Valley, I have tracked a female binturong continuously since 2013 to locate her feeding sites. So far I located only fig trees as her feeding site.

This study would be fundamental, but important and constructive to think about conservation of these cryptic species.

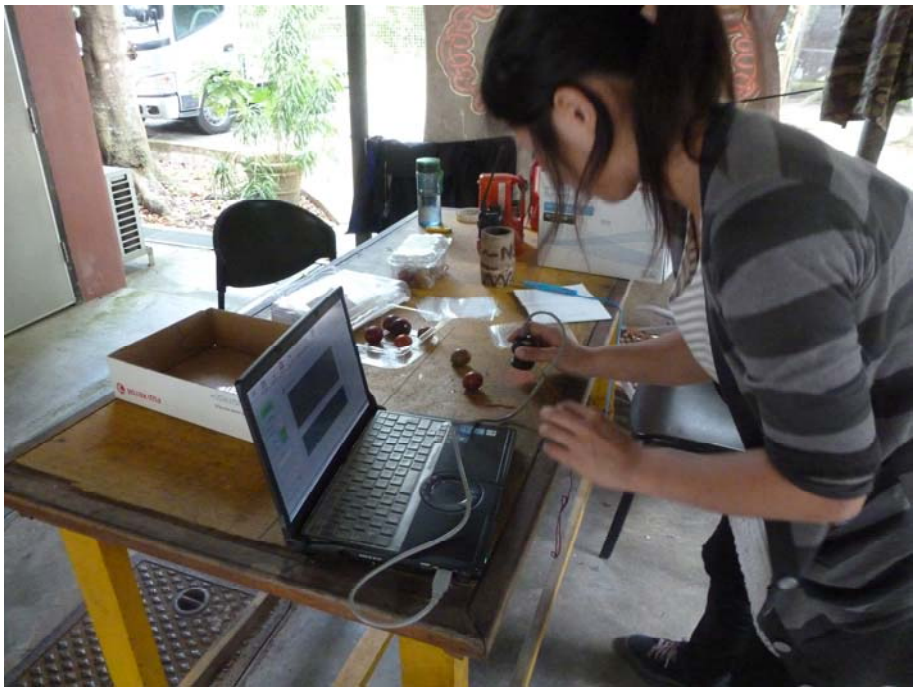

Fig. Scanning prune fruits by NIR spectrometer