

Summer monitoring program for young scientists in Kiso River

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Place: Kiso Biological Station, Kiso-fukushima, Nagano

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International workshop was held as a part of Joint-Use and Cooperative Research Program by Center for Ecological Research and also as a curriculum in Kyoto University. This workshop aims to monitor the long-term dynamics of riparian ecosystems under ongoing anthropogenic disturbances, such as eutrophication, river improvement and global climate changes. It was also intended to train young researchers as new-generation leading ecologists who can manage international projects.

This is the first time to organize our routine program as an international workshop in collaboration with DIWPA, which is supporting the capacity building for young researchers in Asian developing countries to promote research networks in this region. Prior to the workshop, we called for participation extensively though DIWPA News Letter and web site. After careful screening, we decided to invite two persons, one from Malaysia and another from Vietnam. A Korean high school teacher applied for the participation as an observer to learn the knowhow of environmental education through this workshop. Three undergraduate students also joined it to take Field Biology Course as a curriculum in Faculty of Science, Kyoto University. At first, they hesitated to communicate with foreign participants because of inexperience in English conversation but it did not take long to come out of their shells. I guess that delicious and healthy home cooking Japanese dishes provided by a housekeeper, Mrs. Yamada, relaxed them and promoted their communication.

In the first half of workshop, participants learned some of standard limnological methods, taking a lecture on basic stream ecology. We practiced routine monitoring at each site in Kuro River and Akashio Stream, located in the middle stream of Kiso River, which was registered to JaLTER (Japan Long-Term Ecological Research Network) two years ago.

Beginning with physico-chemical environmental measurements, we collected epilithon and benthic macroinvertebrates from the riffle and pool habitats to measure algal biomass and identify macroinvertebrate taxa in the laboratory (Photo 1). All of our monitoring data were summarized to leave them open to the public through the web site (see below). In the latter half, participants practiced specific short-term researches which were individually designed. It might have been a terribly tough work for beginners to complete the basic learning and short-term research within less than one week, as one participant pessimistically complained that we can't do it. Contrary to such a negative opinion, however, it is praiseworthy that all of them successfully completed their own researches, working late at night. To get a research position, non-career young researchers are requested to show the highest performance under constraints of limiting research resources, such as time, money and man-power. I believe that the foremost fruit of this workshop is that all participants learned "If you try to do, it can be achieved".



Photo 1. Monitoring and sampling works in the field (left) and sorting works in the laboratory (right)

We also enjoyed a tour of Sake brewery and Soba (Japanese traditional noodle) restaurant around the downtown of Kiso-fukushima. This city was developed as the post-town located on Nakasen Road, an arterial road in the Edo Era of Japan, and is famous for Sake and Soba, both of which have been preferred by travelers throughout the ages. Good Sake and Soba need clear water, cool weather and diversity of native organisms living in their surroundings. Needless to say, one of covert objectives in this workshop is to realize how local biodiversity provides us with ecosystem services as food culture.

As stated in the introduction, it is meaningful for this monitoring program to go on forever. We will hereafter make great effort for invitation of young researchers from Asian countries. We would also like a member of DIWPA to recommend excellent young researchers for this workshop and provide generous support and consideration for our activities.



Photos 2 Participants of this workshop

Our monitoring data and workshop reports are available from the following URL. The use of our database will be permitted only for educational and/or research purposes after reviewing by Specimen Committee and Joint-Use Committee.

<Database>

<http://www.ecology.kyoto-u.ac.jp/~nokuda/JaLTER/En/Kiso.htm>

<Workshop report>

<http://www.ecology.kyoto-u.ac.jp/~nokuda/research&education/education/limnolpracticeI1H24.htm>