## News

## First deposit from Japan: Barley seeds are preserved in Svalbard Global Seed Vault

Professor Kazuhiro Sato of Okayama University's Institute of Plant Science and Resources (IPSR) visited the "Svalbard Global Seed Vault" (Spitsbergen island, Svalbard islands, Norway) on 25 February 2014 and deposited 575 strains of barley seed samples (300 grains each) brought from IPSR. The Vault is the world's largest facility for the storage and preservation of plant seeds from all around the world. The IPSR barley seeds are important genetic resources as the bases for crop improvements for food security of human beings, and by storing them in the Vault, their long-term safety will be guaranteed.

The barley seeds included many lost strains for cultivation, and were collected from several locations around the world for about 70 years and kept at IPSR. Currently, they are distributed to domestic and foreign scientists as part of the National BioResource Project supported by the Ministry of Education, Culture, Sports, Science and Technology. East Asian areas, especially Japan, Korean Peninsula, China and Nepal, are regions of high barley genetic diversity and IPSR has become the center of preservation and distribution of barley seeds from these areas, which are considered as being one of the top five precious genetic resources in the world.

The plant seeds taken by Professor Sato from the IPSR were the first ones ever to be deposited in the Vault Japan. To commemorate the event, the seeds were deposited in the presence of Marie Haga, the Executive Director of Global Crop Diversity Trust (established by Food and Agriculture Organization of the United Nations and Consultative Group on



Entrance of Svalbard Global Seed Vault



Staff carrying the barley seeds to the Vault



Professor Sato (right) depositing the barley seeds.

International Agricultural Research) which manages the Vault.

Currently, about 800,000 different kinds of seeds are preserved in the Vault, with the barley seeds being preserved at minus 18 degree Celsius. The IPSR is planning to deposit 5,000 strains of barley. The genetic diversity of all these strains is used to carry out basic research to overcome unfavorable environments and to develop new cultivars for the future.



The barley seeds deposited by the Institute of Plant Science and Resources  $\,$