Radiation Monitoring in Forest

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Readings of the Monitoring of Radioactive Cesium in Mountain Streams (2012)

Category	Snowmelt season (March 1 - April 30)		Rainy season (May 1 - July 31)		Autumn season (Aug. 1 - Oct. 31)
Total number of samples	118	(342)	184	(264)	175
Samples wherein Cs was not detected*1	111	(333)	181	(260)	169
Samples wherein Cs was detected*2	7	(9)	3	(4)	6
Concentration of Cs in samples wherein Cs was detected*3: (minimum - maximum) (Bq/L)	1.1~5.9	(1.0~5.9)	1.0~ 13.1	(1.0~13.1)	1.1~6.8
Percentage of samples wherein Cs was not detected	94.4%	(97.4%)	98.4%	(98.5%)	96.6%
Source: Prepared based on the Readings of the Monitoring of Radioactive Cesium in Mountain Streams (press releases by the Forestry and Forest Products Research Institute on June 12, Sep. 21 and Dec. 20, 2012) Forestry Agency					

Water samples collected from streams from forests in Fukushima Prefecture were inspected but radioactive cesium was not detected in most of them. Radioactive cesium was detected only in some of the samples, such as those collected on days with rainfall. These samples contained suspended solids with insoluble particles. Measurement was conducted again after filtering them and radioactive cesium was not detected in any of those filtered samples.

This suggests that radioactive cesium was detected mainly due to temporary increases in suspended solids, which are often observed when forest streams increase after rainfall.

*1 Detection lower limits for both Cs-134 and Cs-137 are 1 Bq/L.

*2 Samples wherein radioactive cesium was detected all contained suspended solids. As a result of the second measurement of those samples after filtering, radioactive cesium was not detected in any of them.

*3 Concentration of radioactive cesium is the total of Cs-134 and Cs-137 concentrations.

*4 Monitoring points were as follows:

Snowmelt season: Date City, litate Village, (Nihonmatsu City, Aizuwakamatsu City, Koriyama City and Hirono Town)

Rainy season: Date City, litate Village, (Nihonmatsu City)

Autumn season: Date City, litate Village

*5 Values in the table are the readings for Date City and litate Village throughout these seasons. Values in the parentheses for the snowmelt season and rainy season contain the readings for the cities and the town in the parentheses indicated in *4 above.

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