

## A quick report of measurement to estimate scattering of radioactive Cs with Japanese cedar pollen

TANAKA, Misako<sup>1\*</sup>, SATO, kaori<sup>1</sup>, KITA, Kazuyuki<sup>1</sup>, ONDA, Yuichi<sup>2</sup>, Keisuke Sueki<sup>2</sup>, Atsushi Shinohara<sup>3</sup>, Akihiko Yokoyama<sup>4</sup>, TSURUTA, Haruo<sup>5</sup>, Hisao Nagabayashi<sup>5</sup>, WATANABE, Akira<sup>6</sup>, NAKAZAWA, Takakiyo<sup>8</sup>, YOSHIDA, Naohiro<sup>9</sup>, Monitoring team of Radioactives<sup>10</sup>

<sup>1</sup>Faculty of Science, Ibaraki University, <sup>2</sup>Tsukuba University, <sup>3</sup>Osaka University, <sup>4</sup>Kanazawa University, <sup>5</sup>AORI, University of Tokyo, <sup>6</sup>Fukushima University, <sup>7</sup>Nihon University, <sup>8</sup>Tohoku University, <sup>9</sup>Tokyo Institute of Technology, <sup>10</sup>JPGU-GSJ-JNRS

A tremendous amount of radioactive matters have been released by the Fukushima nuclear plant accident. A significant part of them fell to leave and branches of Japanese cedar trees, which are commonly seen in the Japanese mountain areas. Attached radioactive cesium (Cs-134 and Cs-137) has been absorbed in the tree body and are sent to all of it, including flower and pollen. Because the Japanese cedar releases a large amount of pollens and they can be widely transported by winds, significant amount of radioactive Cs may be transported by the scattering of the pollens.

In order to monitor atmospheric radioactivity and to estimate the influence of the pollen scattering on it, we have started simultaneous observation of the atmospheric radioactivity and the scattered pollen amount. The density of Cs-134 and Cs-137 radioactivity is observed by collecting aerosols including pollen and by measuring gamma-ray emission from the collected aerosol. The observation was carried out at 11 stations: Fukushima-city, Sendai-city, Marimori-town, Minami-Soma city, Kawamata-town, Koriyama-city, Iwaki-city, Nikko-city, Hitachi-city, Mito-city, and Tokyo. We will report of preliminary analyses of the observed data to indicate influence of the pollen Cs.

Keywords: radioactive Cs, Pollen of Japanese cedar