[EJ] Evening Poster | H (Human Geosciences) | H-CG Complex & General

[H-CG26]What scientists should do for reconstruction after Fukushima Daiichi Nuclear Power Plant Accident

convener:Taku Nishimura(Deptartment of Biological and Environmental Engineering, Graduate School of Agricultural and Life Sciences, University of Tokyo), Masaru Mizoguchi(Graduate school of Agricultural and Life Sciences, The University of Tokyo), Kosuke Noborio

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Seven years have passed since the Fukushima Dai-ichi Nuclear Power Plant accident on March 2011. Some local villagers have started returning their own home. Most of suspension on shipment of agricultural products from Fukushima has been released. Scientists temporarily concentrated on Fukushima-related issues are returning to their own research topics although we still need to solve various problems from application levels to pure scientific topics. For example, it is critical for farmers in Fukushima how to recover productivity of decontaminated agricultural lands. Radiocesium (Cs)-bearing microparticles having relatively high specific radioactivity (Bq/kg) had recently been discovered; however, the fate of the Cs-bearing microparticles, e.g., inert or not, is not well understood to date. It is about time for rural planning scientists to propose their own opinions rather than reporting case studies. We had preliminary discussion at ASA, CSSA and SSSA International Annual Meeting in Tampa, USA 2013 by driving a session of "Battles of Soil Scientists in Fukushima, Japan". In addition, we had "Battles of soil scientists for recapturing Fukushima land from Nuclear Power Plant accident. What can we do then?" last year. In this session, we are looking forward to presentations from soil and water sciences to social and agronomic sciences related to interaction of human and nature under the condition of post-nuclear power plant accident.

[HCG26-P09]Radiocesium transport on the hillslope of a backyard mountain

*Kosuke Noborio[1], Yuki Sunakawa[1], Ryuta Honda[1], Yuki Takagi[1], Masaru Mizoguchi[2], Taku Nishimura[2]

(1.Meiji University, 2.The University of Tokyo)

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The radiocesium (Cs) fallout from the Fukushima Dai-ichi Nuclear Power Plant was scraped off from the surface layer on a hillslope of a backyard mountain in Iitate Village, Fukushima Prefecture. Since the fallout radiocesium was removed from the soil surface within a 20 m range from houses, we continued to monitor changes in Cs concentration at the surface layer from the foothill to the Cs-remaining part along the hillslope. Just after the Cs-removing process, Cs concentration on the whole slope was similar from the foothill to the uphill. Radiocesium transport on the hillslope of a backyard mountain seemed to increase during big rainfall events. With time elapsed, Cs concentration seemed to increase in the middle and upper hillslopes. Interestingly, Cs concentration in the Cs-remaining part increased with time, meaning that Cs was transported from the further upper part of the hillslope. Long-term monitoring on the hillslope and vertical transport to the deeper soil layers should be needed.