



Long-term fate and its control for radioactive cesium and other radionuclides in the agricultural environment

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Since 30 and 5 years after the radioactive disaster of Chernobyl and Fukushima, respectively, large area of agricultural field is still under contamination and required decontamination and mitigation of radioactive Cs from soil and food.

The dynamics of radioactive cesium is monitored for both areas and it is required for continuous discussion about mapping techniques and modeling the dynamics of radioactive Cs in agricultural field, forest, water (pond, dam, and river). Based on the long term behavior of radioactive Cs, mitigation of radioactive Cs to the plant procedure has been developed such as potassium application (in chemical form, organic form, clay, etc.), varietal difference, mutation selection, etc. And as these areas (soil, plant, forest, and water) are interacted, it is required to deepen the discussion about the countermeasure against the contamination by radioactive materials from different research areas. This step is required to leave the knowledge how to manage radioactive materials contaminated agricultural field for the future.