

Wintersemester / Winter Term 2014/2015

BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung
Lecture series in Ecology and Environmental Research

Donnerstag 20.11.2014, 12:00 Uhr, H6

Anschließend Postkolloquium mit Mittagsimbiss im Foyer H6

Prof. Dr. Sonoko D. Bellingrath-Kimura

Tokyo University of Agriculture and Technology
& Technical University München

Mobility of radioactive caesium in soils

- new studies from Fukushima

Due to the nuclear power accident on 11th March, 2011, a wide area of Japan was polluted by radioactive elements. Especially, caesium (Cs) was spread in a wide area, which led to a severe threat for agricultural production. Immediately after the accident, extend of pollution as well as scientific knowledge how the elements will react in the agroecosystem was limited. Thus, many research activities with farmers and rural institution were started to analyze the Cs concentration in soil and plant. In this lecture, I will introduce the overview of the pollution condition in Northern Japan from official data and a survey conducted by our group in central Fukushima.

Similar to Chernobyl, the spread of radioactive pollutants was closely related to the wind direction and speed, however the area was much smaller in the case of Fukushima than Chernobyl. The severely polluted area at the north-west to the nuclear power plant was caused by a wind on 12th March. The wind turned due to the mountains to the south, polluting the central part of the Fukushima prefecture. The Cs concentration in the south-central Fukushima ranges from 30,000-600,000 Bq/m² and is at the border of the acceptable limit to live. Even though the high soil pollution, most of the agricultural product were found to be under the acceptable limit of 100 Bq/kg for food in Japan. Relatively young soils with high buffer capacity and potassium supply were the reason for that. However, there are still dangers of secondary pollution and the high internal Cs cycle in the forest. The newest results will be introduced in this lecture.

Do. / Thu. 12 st
Gebäude/Building
GEO
Hörsaal/Lecture hall
H6

Die Vortragsreihe
ist eine
interdisziplinäre
Plattform zur
Information und
Diskussion für
Studierende,
Forschende und
Lehrende

Gäste
sind herzlich
willkommen

*The lecture series
serves as an
inter-disciplinary
platform for
students, junior
and senior
scientists.*

*Guests
are cordially
invited!*