

M. V. Zheltonozhskaya, N. V. Kulich, A. I. Lypska, L. V. Sadovnikov

**RESEARCH OF VERTICAL MIGRATION OF RADIONUCLIDES IN THE SOIL  
AT TESTING «RED FOREST» AREA**

Researches of vertical migration of Chernobyl origin radionuclides at testing «Red forest» area in 5-km ChNPP-zone were carried out. The  $\gamma$ - and  $\beta$ - spectrometer measurements of soil samples were carried out using the anticompton spectrometer and a beta spectrometer. Presence of  $^{60}\text{Co}$ ,  $^{134,137}\text{Cs}$ ,  $^{154,155}\text{Eu}$ ,  $^{241}\text{Am}$  to depth of 30 cm in all soil cuts was fixed. The sites with sod-low-podzol sandy soils on alluvial sands contain  $^{137}\text{Cs}$ ,  $^{90}\text{Sr}$  and  $^{241}\text{Am}$  to depth of 60 cm. The presence  $^{243}\text{Am}$  and  $^{243}\text{Cm}$  was found in the top layers of soils at territory of testing area.

*Keywords:* radio nuclides, migration, soils, cesium, strontium, americium.