

INFLUENCE OF ELEVATED RADIONUCLIDE CONTAMINATION ON NATURAL PLANT POLESSKY STATE RADIOECOLOGICAL RESERVE.

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Our investigations confirm that plant complexes as a whole are relatively resistant to radiation exposure. The majority of the species on the absence of visible violations on population and ecosystematic levels in plants communities it is impossible to rule out the possibility of changes in phytocenosis with predominance of the most radioresistant species. The group of meadow dominants was selected-representatives of families of *Gramineae*, *Compositae*, *Primulaceae*, *Rosaceae* in which the ¹³⁷Cs migration from soil to overgrown phytomass relates closely with the sum of atmospheric precipitation's. It is necessary to take into account that in the conditions of chronic irradiation the vegetation of majority of meadow dominants (representatives of families of *Gramineae* and *Leguminosae*) is completed by the formation of valued seed posterity able to produce a new generation. The radiology situation in meadow grassland was evaluated in the territory of Polesky State Radioecological Reserve. In a 9-year population monitoring experiment was observed that the radiosensitivity of different plants species is different. This fact determined by the different specificity of genetic systems and bioecological peculiarities of species. The plants species with narrow ecological amplitude, high ploidy, apomictic breeding are the most radiosensitive, ones as well as the plants which grow in Southern Belarus as a limit of there natural dissemination. Decrease in number was noted for the majority of such species, or elimination from plants communities. The anthropogenic load removal from the evacuation territories followed by the radical phytocenoses reconstruction is of important ecological significance as the ionising radiation effect. It may be inferred that long - time chronic action of radionuclides on plants in the fall out zone will depend on specific features of their accumulation by some plant species, the age related radiosensitivity and some other factors, associated with their growing conditions such as soil types, forms of radionuclide fall out, chemical and physical effect.



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