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ПРОГНОЗУВАННЯ НАДХОДЖЕННЯ РАДІОНУКЛІДІВ ^{137}Cs І ^{90}Sr У СІЛЬСЬКОГОСПОДАРСЬКІ КУЛЬТУРИ

За результатами радіологічного обстеження на виведених із господарського використання сільськогосподарських угідь Народицького району Житомирської області побудовано карти щільності забруднення ґрунту ^{137}Cs. Оцінено статистичні характеристики щільності забруднення ґрунту (медіана, геометричне стандартне відхилення, верхня межа для P = 0,9) радіонуклідами ^{137}Cs, ^{90}Sr та ізотопами плутонію. Наведено прогноз імовірного вмісту радіонуклідів ^{137}Cs, ^{90}Sr (медіана, геометричне стандартне відхилення, верхня межа для P = 0,9) в урожаї характерних для цього регіону сільськогосподарських культур та ризики їх перевищення встановлених нормативів. Надано рекомендації щодо повернення цих угідь в господарське використання.

Ключові слова: щільність радіоактивного забруднення ^{137}Cs і ^{90}Sr, картографування, прогноз вмісту радіонуклідів ^{137}Cs, ^{90}Sr в урожаї.

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FORECASTING OF ^{137}Cs AND ^{90}Sr RADIONUCLIDES INTAKE INTO AGRICULTURAL CROPS

Maps of the ^{137}Cs contamination of abandoned agricultural land in Narodychi district (Zhytomyr region) were built using data of the radiological survey. Statistical characteristics of the soil contamination with ^{137}Cs, ^{90}Sr, and plutonium isotopes (median, geometric standard deviation, upper limit for P = 0.9) were estimated. Contamination of the local crops with ^{137}Cs and ^{90}Sr as well as the risk of exceeding permissible levels were estimated. Recommendations for the return of these lands for commercial use are provided.

Keywords: contamination of land with ^{137}Cs and ^{90}Sr, mapping, forecasting of ^{137}Cs and ^{90}Sr uptake.

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Надійшла/Received 15.04.2021