

DIRECT ACTION OF MINERAL FERTILIZERS AND OPTIMUM LEVEL OF THEIR APPLICATION IN CROP ROTATIONS DEPENDING ON SODDY-PODSOLIC SOILS FERTILITY IN THE WESTERN POLISSYA

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With long-term stationary field research in crop rotations in Ukrainian Western Polissya using methods of division of experimental plots and nitrogen (^{15}N) of fertilizer it was defined direct action of fertilizers on crop rotation productivity; were calculated coefficients of nitrogen fertilizer use by winter rye and determined the effect of fertilizer systems on some properties of sod-podzolic sandy loam soil. According to the results of 40-year monitoring of different fertilizer systems, the optimal timing of their use in crop rotations were recommended.

Keywords: fertilizers, nitrogen, direct action, operating ratios, efficiency of crop rotations, soil properties, monitoring.

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ПРЯМОЕ ДЕЙСТВИЕ МИНЕРАЛЬНЫХ УДОБРЕНИЙ И ОПТИМАЛЬНЫЙ УРОВЕНЬ ИХ ПРИМЕНЕНИЯ В СЕВОБОРОТАХ В ЗАВИСИМОСТИ ОТ ПЛОДОРОДИЯ ДЕРНОВО-ПОДЗОЛИСТЫХ ПОЧВ ЗАПАДНОГО ПОЛЕСЬЯ

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Многолетними стационарными полевыми исследованиями в севооборотах западного Полесья с использованием методов расщепления опытных делянок и меченого (^{15}N) азота удобрений определено доленое участие прямого действия минеральных удобрений в приросте продуктивности севооборотов, установлены коэффициенты использования озимой рожью азота удобрений и влияние систем удобрения на отдельные свойства дерново-подзолистой супесчаной почвы. По результатам 40-летнего мониторинга различных систем удобрения рекомендованы оптимальные сроки их применения в севооборотах.

Ключевые слова: удобрения, меченый азот, прямое действие, коэффициенты использования, продуктивность севооборотов, свойства почвы, мониторинг.