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ECOLOGICAL REGULATION OF HYDROCHEMICAL PROCESSES OF GROUNDWATER LOCATED CLOSE TO THE SURFACE

A. T. Aimen^{1*}, E. C. Ahmetov², F. R. Tashmukhamedov³, G. B. Demeuova⁴,
G. Mussayeva⁵, L. Ukibayeva⁶, K. Golikova⁷, S. A. Aimenova⁸

^{1*}*M. Kh. Dulaty Taraz Regional University, Taraz, Republic of Kazakhstan;*

*Corresponding Author A. T. Aimen, e-mail: aimenov_111@mail.ru;

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ABSTRACT

Studies regarding the predictions of changes in water and salt balance, the movement of salts due to both natural and artificial influences are of great importance. As for the ecological state of the studied irrigation array, it largely depends on the hydrochemical regime of water sources and the system of agriculture and determined by the factors of optimal management of natural and anthropogenic processes. Regulation of meadow gray soils of chloride-sulfate salinization by controlling the processes of groundwater supply through channel filtration, defining the mechanism of salts movement in the soil using the technological scheme of flushing, determination of the permissible salt content and evaporation from the groundwater surface, will serve as the basis for rational nature management, due to the fact that it will ensure the environmental sustainability of geo-agrolandscapes and create favorable conditions for the long-term exploitation of natural resources without their depletion, degradation and pollution. Field studies created opportunities to develop a rational technological scheme of flushing, taking into account environmental assessment and regulation of the water and salt regime of meadow gray saline soils.

Keywords: soil, ecology, irrigation, groundwater, salt, soil fertility