REGIONAL CONSERVATIVE TILLAGE SYSTEM OF CHERNOZEMS BETWEEN PRUT AND DNIESTER

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Abstract

The basic components of chernozems conservative tillage technology between Prut and Dniester are stipulated in the State Program "Conservative tillage system of soils" developed by Ministry of Agriculture and Food Industry of Moldova. Development and implementation was conditioned by accelerated degradation of soil resources in the region. Conceptual framework theoretical and applied in the regional conservative tillage system of chernozems (RCTSC) is provided by procedural approach of soil fertility in the concept of landscape evolution of chernozems genesis. Chernozems genesis is perceived as result of landscape development determined by complexation and intensification of soil-plant relationship. In accordance with these basic components of RCTSC the most important are landscape adaptation of agroecosystem, biologization and their ecological restoration focused on restoring composition and volume of substances through biogeochemical cycle's renaturation in the elementary pedogentic processes in the formation of chenozems type. A component part of RCTSC is practice of integrated system for plant protection in a crop rotation with minimum 5 crops including one ameliorative. RCTSC implementation involves elaboration of a technology fiche that provides a transitional period lasting 3-5 years during which are practiced biologization and optimization processes for agrogen layer.

Key words: conservative tillage technology, regional conservative tillage system of chernozems, chernozems genesis, landscape adaptation, agroecosystem