

## *Annotation*

*Savranska L.M., Poltoretskyi S.P.*

### *Influence of peculiarities of primary cultivation on its agrophysical indicators of fertility and water regime when growing spring rape*

*In current economic conditions when economically profitable crops are grown mainly (among cereals – winter wheat, among oil crops – sunflower), schemes of crop rotations and structure of sown areas are violated resulting crops are not provided with good predecessors and their yield is reduced due to deterioration of the physical, chemical and phytosanitary state of fields. In addition, the demand on the world market of oilseeds is high and growing. Increasing production of oilseeds in Ukraine is becoming an acute problem; it can be solved through increased use of spring rape. It is a good predecessor for winter wheat has to become that crop in levels of crop rotations which will ensure stability of agricultural production in different regions of Ukraine. This issue is extremely important for those western, central and northern regions of Ukraine where other oilseeds because of soil and climatic features cannot be grown. Applying rape into crop rotation will reduce sown areas of sunflower by half because their yield and commodity cost is almost the same but costs for rape cultivation are much less [2]. In addition, it significantly improves soil fertility state and phytosanitary of fields because rape does not deplete the soil, but rather improves its structure and increase fertility, leaving after by 1.5 times more residues than cereals.*

*So implementation is important at the appropriate level of all agrotechnical techniques that are the basis of growing technology and designed to improve productivity and increasing oil yield per unit area. Creative use of resource-saving technologies based on specific weather conditions, agricultural background and biological characteristics of spring rape will help to grow relatively high yields of this crop in various areas of Ukraine, as agro-climatic potential of most regions of Ukraine meets its biological needs.*

**Key words:** *spring rape, method and depth of primary tillage, agrophysical indicators of soil fertility, soil water regime.*