INFLUENCE OF POLYMER GEL «RITIN-10» ON THE WATER-PHYSICAL PROPERTIES OF SOILS

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Hydrogels are considered to be useful for regulation of water-physical properties of agricultural soils. Hydrogels increase soil water-holding capacity, water use efficiency and infiltration rates. The hydrophilic polymer chains of hydrogel can swell in water.

In our research the swelling of hydrogel in water and in Knop solution were studied as well as water-holding capacity of sandy soil, grey forest soil and loamy sand Spodosol with and without hydrogel. The results have shown that water-holding capacity of the soil with the hydrogel was higher.

Key words: Hydrogels, swelling, water retention, soil.