HYDROLOGICAL AND HYDRAULIC RESEARCH FOR RE-EQUIPPING AN IRRIGATED PLOT WITH PRESSURIZED PIPELINES

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Abstract

Considering these factors we have decided that the following basic data are necessary for modernizing an irrigation plot: the climate studies for the last three decades regarding monthly precipitations and potential evaporation; the current crop planning; pedological studies on hydro-physical characteristics of the soil; phytotechnology studies; hydrogeological studies on the variation of the groundwater level; the types and functional characteristics of the irrigation systems in use now and/or in the future for each pipeline on the plot. Based on the aforementioned studies, there has been a recalculation of the maximum monthly norms of water application for the provisions of 50% and 80% on the rotating crops – norms which are indispensable in determining the maximum watering (hydro)module and the average weighted watering hydromodule, hydraulic variables used to determine the sizing flows of the plot pipeline network.

Key words: norm of water application, watering (hydro)module, medium-weighted watering hydromodule, sizing flow