COMPARATIVE EVALUATION OF VARIOUS APPROACHES TO THE FOUNDATION OF PARAMETERS OF AGRICULTURAL DRAINAGE

Abstract

The traditional and optimization approaches to substantiation the parameters of agricultural drainage and the results of their comparative effectiveness are considered. The results of calculation of the defined yields of crops grown at appropriate levels of drainage efficiency show that in given conditions the optimal distance between the drains at the lowest level of the hierarchy of crop performance varied from 20 m for potatoes in peat up to 38 m for cereals on sand at the appropriate change of calculation of the drainage runoff module across the entire spectrum of efficiency from ecological drainage of 0.4 m$^2$·day$^{-1}$ to the economic one of 0.85 m$^2$·day$^{-1}$.

Key words: agricultural drainage, approaches, evaluation, justification, parameters