

METHOD OF CALCULATION OF VARIABLE RATE APPLICATION TECHNOLOGY MATERIAL USING DATA FROM TECHNICAL SYSTEMS OPERATIONAL MONITORING

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Abstract. *The methods of calculating simultaneous variable rate application of seeds and mineral fertilizers for sowing of agricultural crops depending on the agro-biological condition of agricultural land produced using technical systems to quickly monitor the status of agricultural land. Technical system for operational condition monitoring of agricultural lands are placed on the machine-tractor units, allowing you to provide differentiated application of technological materials (seed and fertilizer) based on utochneny of data on agro-biological condition of soil environment derived from technological systems, operational monitoring the condition of the soil medium. When implementing differentiated technology introduction process material excluded their mutual influence on each other. This technique makes it possible to predict the mutual influence and predict the required rate of each process material taking into account agro-biological condition of soil environment. Given the different implementation methods with different variables: variable rate applications of seed and fertilizer, variable rate applications of seeds and stable rate of introduction of mineral fertilizers, stable rate of introduction of seed and change of norms of mineral fertilizers. So different layout for different variation of one of the parameters of the variables with other values and determine the best option for implementation of proposed technology. For each parcel with a specific set of agrobiological parameters it is possible to implement an effective strategy agrobiological management of natural potential. It is also possible this method can be used to implement not only strategies, but also to bring what criterion need to optimize the process.*

Key words: ***differential application, technical monitoring systems, agro-biological condition***