

## THE POSSIBILITIES FOR PROTECTION AND MAINTENANCE OF SOIL RESOURCES AND ECOLOGICAL EQUILIBRIUM FOR YAKORUDA MUNICIPALITY

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**Abstract:** For potential yield realization from different agricultural crops it is necessary to determine crops species, climatic and soil conditions, as well as to manage soil cultivations and soil water use efficiency.

For better using of GIS of Soil Resources a new version of the attributive table formation was created. This gives the possibility soil physical and water properties to be included into the table.

The simulation procedure for soil hydro-physical properties determination was realized by using soil particle size distribution data only. This develops a calculation algorithm for soil water content dynamic monitoring. Kolev, 1994 realized this for the first time for Bulgarian soils, with developed in his Ph.D. thesis universal model. The modeling of the meteorological conditions could be done by using the same simulation model.

The main aims of the study are:

To demonstrate how useful is the new version of the attributive table formation.

To demonstrate how could be applied the simulation model for environment conditions monitoring and agricultural production management.

**Keywords:** environment conditions, simulation model, soil moisture at field capacity, wilting point, effective soil water content, particle size distribution.

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