

RESEARCH FOR THE DETERMINATION OF THE OPTIMUM WATER CONSUMPTION OF THE MAIN CROPS FOR IMPROVEMENT OF THE IRRIGATION SCHEDULING IN DIFFERENT ROMANIA'S ZONES

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Abstract. *Research programme “Exploitation of the Irrigation and Drainage” of the Research Institute for irrigation and Drainage Băneasa – Giurgiu had research fields (30) in the all the areas of Romania. Crop coefficients “Kc” are used in the irrigation scheduling and it is obtained like report between water consumption and pan evaporation determined daily at 8⁰⁰ o’clock. In the 12 location (Oradea, Suceava, Podu Iloaiei, Tecuci, Braila, Valul lui Traian, Dor Marunt, Baneasa – Giurgiu, Caracal, Siminic, Malu Mare and Maglovit) were placed the research fields and the research results obtained in winter wheat, maize, sunflower, soybean, sugar beet, and alfalfa are presented. The daily water consumption of crops differs depending on the month and the locality. Whereas Romania, in all the areas of interest for irrigation, has an impressive database for irrigation scheduling using the pan class A, is recommended to improve the current situation by using the variable depths for irrigation, depending on the growth rate of the root canal system and not of a fixed depths as at present.*

Keywords: crop coefficient, irrigation scheduling, research field, water consumption, evaporation

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