Funcționarea rețelei de drenaj din sectorul Păltinoasa-Drăguşeni, județul Suceava, în condițiile exploatării terenurilor agricole pe parcele individuale orientate perpendicular pe liniile de drenuri absorbante

RADU O. - USAMV Iasi

Among the main limitative factors for the agricultural production manifesting according to the local pedoclimatic conditions we should mention excessive humidity, floods, reduced permeability and soil compaction, erosion processes, landslides and others. In order to improvethe production capacity of the agricultural lands, drainage works as well as works of diking and regularization, underground drainage and other operations to combat soil erosion were carried out across time. In the sector from the hydrographic basin Păltinoasa-Drăguşeni of Moldova river there have been arranged, in the period 1978-1980, 3 systems of drainage (Rotopăneşti-Rădăşeni-Fântâna Mare, Drăgoieşti-Berchişeşti, Bogdăneşti-Baia) and the system of irrigation and drainage Băişeşti-Dumbrava on a total surface of 8761 ha drained, of which 2559 ha with undergroung drainage works. In the period 1980-1985 drainage works have been carried out, from the system Băişeşti-Dumbrava, on a surface of 552 ha and completed with a undergroung drainage network on a surface of 500 ha.
Through constituting and reconstituting the property right, according to Law no. 18/1991, the arable surface was fragmented by the individual execution of soil workings leading, in time, to a modelling in bands with crests, widths, diffrences of level and transversal slopes which vary according to the width of the parcels, the way they are used and the equipments used in agricultural workings. Thus, maximum transversal slopes of 11.8% and level differences of 0.558 m have been measured. Considering the fact that the application of Law 18/1991 did not have in view the ditance between the absorbant drain lines and their orientation, the parcels modelled in bands with crests may be perpendicular on the absorbant drain lines, in which case the gutters intercept the drain lines or they can be parallel with these, and in this case the absorbant drains may be positoned under the gutters, at a certain distance between the gutters and the crests and under the crests. The functional efficiency of the absorbant drains on the surfaces with individual parcels oriented perpendicularly on the absorbant drain lines is almost equal to the one obtained in the case of drains placed under the gutters on the parcels parallel with drain lines.