Technical-constructive solutions for irrigated horticultural micro-farm

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A drip-irrigation system - when properly designed, maintained and operated - can be a production asset for a small farm. Using drip irrigation for profitable vegetable production requires an understanding of several basic engineering and horticultural concepts and their application. The goals of this publication are to present the principles behind drip irrigation and some practical guidelines for successful and profitable use of drip irrigation. For crops irrigation at horticultural micro-farm which will be achieved at Agricultural Scholar Group Al. Vlahuta from Sendriceni-Botosani on a 4.50 ha surface, is proposed dripping water-application method, both in protected spaces and into field. In the present paper is presented the variant for micro-irrigation project for this surface. The arrangement of irrigation is constituted by a irrigation water supply pipe which alimentation with water distribution conduit from black polyethylene by high density, equip with dripper, which are constituted from micro-pipe. At irrigation application, the distribution conduits are moved in successive positions of working, transversal by main pipe-line, at interval of time necessary for distribution of norm of water application. The water volume through pumping from coterminous storage of farm for a discharge by 17.5 m3/h at a total dynamic head by 12.5 mCA, permit the distribution of an average norm of water application by 300 m3/ha on a 0.70 ha surface for 12 hours, the time of irrigation for total arrangement surface been by 6 days.