Emitter Discharge Evaluation Of Subsurface Trickle Irrigation Systems

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Abstract

This paper presents a procedure to evaluate subsurface trickle irrigation systems. The procedure allows determination of the reduction in emitter flow rates due to plugging and other aging factors, even if the original flow capacity of the system was not measured. The procedure uses a computer model to determine discharge of a system, as installed, and compares results with measured values after a period of use. The model also can be used to simulate the effects of hydraulic and manufacturer's variation on the uniformity of trickle applications for a wide range of trickle set configurations.