Research Paper:

Development of software design of drip irrigation system

V.T. BOMBALE, P.G. POPALE AND A.P. MAGAR

Received: May, 2011; Revised: July, 2011; Accepted: August, 2011

See end of the article for authors' affiliations

Correspondence to:

A.P. MAGAR

Department of Farm Machinery and Power, Aditya College of Agricultural Engineering and Technology, BEED (M.S.) INDIA Email: ajitmagar@indiatimes. com

ABSTRACT

Drip irrigation is the application of controlled quantity of water and nutrients in the vicinity of each plant such that the crop water and nutrients needs are almost matched with irrigation water supplies. There are large number of consideration, which must be taken into account in the design of micro irrigation system including field topography, soil type, crop to be grown, weather condition, availability of labour, energy, available technology and financial resources. Drip irrigating software provides interaction at all stages of the design process and a solution based on individuals own capabilities and the information base available within the software. The individual not only can suit to his requirements but can also compare his design with several other alternate designs resulting from the application of the software with different possible inputs. This software will provide tools that can help farmers, industrialist, marketing executive, extension specialist and researchers who design drip irrigation system. The software has been tested at developer's level. Results obtained using software was compared with on-paper calculation and the results were found satisfactory.

Bombale, V.T., Popale, P.G. and Magar, A.P. (2011). Development of software design of drip irrigation system. *Internat. J. Agric. Engg.*, 4(2): 170-175.

Key words: Design, Drip irrigation system, Software