

- [Home](#)
- [Products](#)
- [Help](#)
- [About us](#)
- [News & Events](#)
- [Price List 2010](#)
- [Contact Us](#)

Gateway to access, disperse and preserve knowledge!

Visit IndianJournals.com

What's New

Browse

Journals (167)

Subjects (17)

Books (12)

Advance Search

Click to View Journals

Last week's downloads (From 6-Sep-2010 to 12-Sep-2010)

[\(hide\)](#)

Most Read Article (Full Text)	No. of Downloads
Peri-Urban vegetable production (<i>Environment and Agriculture</i> , Vol. 2006, Issue 1)	13
Most Read Publication (Full Text)	No. of Downloads
Journal of Neonatology	208
Most Visited Publication	No. of Hits
Indian Journal of Genetics and Plant Breeding (The)	4,675

Addition(s)

[\(hide\)](#)

Welcome

Guest

Please Login

Email id

Password

Unable to login ???

[Forgot password](#)

New user?

[Click to Register](#)





Email id

Password

Log In

- Home
- My Profile
- Registration
- Products
- Help
- About us
- News & Events
- Price List 2010
- Contact Us

Browse publications

Currently showing

- ☒ All publications
- ☐ Open Access publications
- ☐ Subscribed publications
- ☐ Subscribed and Open Access publications

Go

Check type of publication
to browse

No. of publication(s) available for the selection(s) made: 179

Journals

Books

Bulletins

Newsletters

- ☒ Subscribed
- ☒ Open Access
- ☒ Non-Subscribed

Color coding for
type of publication

Journals

Journal title

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

☒ Advances in Computational Sciences and Technology

Quick Search

Search

Advanced Search

Ads by Google

[Journals](#)

[Indian](#)

[Tech Journals](#)

[Arts Journals](#)

Mass Communicator: A Journal of Communication Studies

[Jagannath International Management School]

Medicinal Plants - International Journal of Phytomedicines and Related Industries

[Society for Conservation and Resource Development of Medicinal Plants]

Medico-Legal Update

[Dr. R.K. Sharma]

Money and Finance

[ICRA Limited]

[Top](#)

NEW BOTANIST- International Journal of Plant Science Research

[Today & Tomorrow's Printers & Publishers]

[Top](#)

Pearl : A Journal of Library and Information Science

[University Library Teacher's Association of Andhra Pradesh, Hyderabad]

Pest Management In Horticultural Ecosystems

[Association for Advancement of Pest Management in H

Click to go to the publisher (University Library Teacher's Association of Andhra Pradesh, Hyderabad)

Potato Journal

[The Indian Potato Association] **** Archive Available****

Power Engineer Journal

[The Society of Power Engineers (India)]

Pranjana:The Journal of Management Awareness

[Integrated Academy of Management And Technology]

Progressive Agriculture

[Society for Recent Development in Agriculture]

[Top](#)

SRELS Journal of Information Management

[Sarada Ranganathan Endowment for Library Science]

[Top](#)

TERI Information Digest on Energy and Environment

[The Energy and Resources Institute (TERI)] **** Archive Available****

Trends in Biosciences

[Society for Advancement of Science and Rural Development]

[Top](#)

Vegetos- An International Journal of Plant Research

Select & Click on
a specific Journal



Email id

Password

Log In

Potato Journal

(Formerly Journal of the Indian Potato Association)

[Journal Home](#)

[Current Issue](#)

[Archive](#)

[Previous Issues](#)

[Registration](#)

[Editorial Board](#)

[Aims & Scope](#)

[Author](#)

[Guidelines](#)

[News & Events](#)

[Subscribe TOC](#)

[Alerts](#)

[Members Login](#)

FREE

[Sample Issue](#)

[Trial Access](#)

[Quick Search](#)

Search

Click to view
Current Issue

Potato J

Year 2010, Volume-37, Issue-1and2 (January-June)

Print ISSN : 0970-8235

Online ISSN : 0973-5909

TOC of the current issue

Table of contents [RSS Feed](#)

[Past, present and future of world potato markets: an overview](#)

J.F. Guenthner

[Integration of somatic fusion into Potato breeding: problems and perspectives](#)

Suman Kumar Pandey, Debabrata Sarkar, Sushruti Sharma, Poonam Chandel

[Use of simulation modeling for enhancing potato production using subsurface drip](#)

Neelam Patel, T.B.S. Rajput

[Effect of variety and planting method of micro-plants on Potato mini-tuber production during off-season in North-Western Himalayas](#)

Ashwani Kumar Sharma, E.P. Venkatasalam, R.K. Singh, Sarjeet Singh

[Benefits of mulching with dried water hyacinth or paddy straw](#)

S.K. Rautaray

[Assessment of crop losses in potato due to late blight disease during 2006-2007](#)

M. Narayana Bhat, B.P. Singh, R.K. Arora, R.P. Rai, I.D. Garq, S.P. Trehan





Email id

Password

Log In

Potato Journal

(Formerly Journal of the Indian Potato Association)

[Journal Home](#)

[Current Issue](#)

[Archive](#)

[Previous Issue](#)

[Registration](#)

[Editorial Board](#)

[Aims & Scope](#)

[Author](#)

[Guidelines](#)

[News & Events](#)

[Subscribe TOC](#)

[Alerts](#)

[Members Login](#)

FREE

[Sample Issue](#)

[Trial Access](#)

[Quick Search](#)

Search

Potato Journal

Year 2010, Volume-37, Issue-1and2 (January-June)

Print ISSN : 0970-8235

Online ISSN : 0973-5909

Table of contents



[RSS Feeds](#)

Click on article

[Past, present and future of world potato markets: an overview](#)

J.F. Guenthner

[Integration of somatic fusion into Potato breeding: problems and perspectives](#)

Suman Kumar Pandey, Debabrata Sarkar, Sushruti Sharma, Poonam Chandel

[Use of simulation modeling for enhancing potato production using subsurface drip](#)

Neelam Patel, T.B.S. Rajput

[Effect of variety and planting method of micro-plants on Potato mini-tuber production during off-season in North-Western Himalayas](#)

Ashwani Kumar Sharma, E.P. Venkatasalam, R.K. Singh, Sarjeet Singh

[Benefits of mulching with dried water hyacinth or paddy straw](#)

S.K. Rautaray

[Assessment of crop losses in potato due to late blight disease during 2006-2007](#)

M. Narayana Bhat, B.P. Singh, R.K. Arora, R.P. Rai, I.D. Garq, S.P. Trehan



- [TOC](#)
- [Prev Article](#)
- [Next Article](#)
- [Registration](#)
- [Editorial Board](#)
- [Aims & Scope](#)
- [Author](#)
- [Guidelines](#)
- [News & Events](#)
- [Subscribe TOC](#)
- [Alerts](#)
- [Members Login](#)

Use of simulation modeling for enhancing potato production using subsurface drip

Patel Neelam, Rajput T.B.S.¹

¹Water Technology Centre, Indian Agricultural Research Institute, New Delhi-110 012, India. E-mail: neelam@iari.res.in.

Received: 26 March, 2009.

Abstract

Subsurface drip irrigation (SDI) is the most advanced method of irrigation, which enables the application of small amounts of water and nutrients to the soil through the drippers placed below the soil surface. Variations of soil structure, texture, and crop's root development pattern preclude the possibility of framing general recommendations for installation depths of SDI system. The specific objective of this study was to assess the effect of depth of placement of drip tape on crop yield and application of Hydrus-2D model for the simulation of soil water. An experiment was conducted on potato (var. Kufri Anand) during October to February for 3 years (2002–03, 2003–04 and 2004–05) to study the effect of depth of placement of drip tape at five depths namely, surface (0), 5, 10, 15 and 20 cm. Distribution of soil water under field experiment and in model simulation at different growth stages agreed closely and the differences were statistically insignificant. Hydrus-2D model helped in designing the subsurface drip system for efficient use of water with minimum drainage in potato crop. Maximum yield was obtained by 6 cm of irrigation water and by placing the drip tape at 10 cm depth in the sandy loam soil of the experimental site.

[Click to view full text](#)

[PDF](#)

[Online Submission](#)
OJPMS

[Ads by Google](#)

- [India Journals](#)
- [Indian Food](#)
- [News Journals](#)
- [Indian Dating](#)