



# JOURNAL OF SOIL AND WATER CONSERVATION

NEW SERIES

Vol. 21, No. 4

ISSN: 0022-457X

OCTOBER-DECEMBER 2022

## Contents

<b>Prediction of infiltration rates of fallow and cultivated soils in Minna, Southern Guinea Savanna zone of Nigeria</b> P.C. EZE and J.J. MUSA	337
<b>Modelling and mapping of soil erosion in the north-eastern frontier Himalayan ranges of India using remote sensing and GIS</b> VANLALCHHUANGA, ROOMESH KUMAR JENA, P.C. MOHARANA, NIRMAL KUMAR, RAM PRASAD SHARMA, BACHASPATI DAS, PARTHA DEB ROY and SANJAY KUMAR RAY	345
<b>Soil erosion and sediment yield assessment using RUSLE and GIS based approach in a forest watershed in <i>Kandi</i> region of Punjab</b> ABRAR YOUSUF, M.J. SINGH, AMANPREET KAUR BENIPAL and NAVNEET SHARMA	354
<b>Application of Soil Conservation Service Curve Number model for deriving rainfall runoff relationship in an ungauged watershed of mountain region</b> GANGANNAGARI KARTHIK, K. NAGARAJAN, S. MANIVANNAN and BALAJI KANNAN	361
<b>Assessment of various land use systems on soil potassium fractions and soil properties under lesser Himalayas</b> AANISA MANZOOR SHAH, SHAISTA NAZIR, TAJAMUL ISLAM SHAH, YASIR HANIF MIR, FAHEEM WANI and A.P. RAI	371
<b>Effect of drip irrigation and NK fertigation on soil water dynamics and water productivity of strawberry under protected conditions</b> RICHA JASWAL and SANJEEV K. SANDAL	378
<b>Judging spatio-temporal variability of key river water quality vis-à-vis land use changes in Mahi Basin</b> URVASHIBEN PARMAR and MURARI LAL GAUR	385
<b>Probability analysis of rainfall for agricultural planning at Chhura tehsil of Gariyaband district of Chhattisgarh plain</b> RAJENDRA DEO, B.L. SINHA and JITENDRA SINHA	394
<b>Assessment of soft computing techniques for estimating missing temperature data using limited meteorological variables</b> JAYDIP J. MAKWANA, BRIJAL R. PATEL, A.K. SAINI and M.M. CHAUDHARY	402

All disputes are subject to the exclusive jurisdiction of competent courts and forums in Delhi/New Delhi only. The Society does not assume any responsibility for opinions offered by the authors in the articles and no material in any form can be reproduced without permission of the Society. The Society is not responsible for any delay, whatsoever, in publication/delivery of the periodicals to the subscribers due to unforeseen circumstances or postal delay. Readers are recommended to make appropriate enquiries before sending money, incurring expenses or entering into commitments in relation to any advertisement appearing in this publication. The Society does not vouch for any claims made by the advertisers of products and services. The publisher and the editors of the publication shall not be held liable for any consequences in the event of such claims not being honoured by the advertisers.

<b>Yield response and validation of CROPWAT for baby corn under drip irrigation</b> MUKESH KUMAR and ROHITASHW KUMAR	409
<b>Nitrogen mineralization kinetics in soil supplemented with organic amendments</b> AMIT KUMAR SAH, MAHENDRA SINGH, AMIT KUMAR PRADHAN, ANSHUMAN KOHLI, KASTURIKASEN BEURA and DEBJIT CHAKRABORTY	416
<b>Soil health management of an Alfisol with INM in direct seeded rice - chickpea system</b> GEETA KUMARI, SUNITA KUMARI, K.K. SINGH, AMAN JAISWAL and ANSHUMAN KOHLI	424
<b>Canal irrigation system rehabilitation and impact assessment</b> MANOJ KUMAR CHAUHAN and SHOBHA RAM	431
<b>List of Reviewers during the year 2022</b>	437

#### **ACKNOWLEDGEMENT**

*Our sincere thanks are placed on record to the Indian Council of Agricultural Research (ICAR), New Delhi for the grant of Financial support for the publication of journal of the Society.*