



ISSN 0974-0775

NAAS Rating : 4.38

GREEN FARMING

(International Journal of Applied Agricultural & Horticultural Sciences)

(Abbreviation : *Green Farming Int. J.*)

Volume 8

Number 1

January-February 2017

Bimonthly

CONTENTS

Previous issue :

Vol. 7, No. 6, pp. 1266-1518

Research Papers

Manifestation of heterosis and combining ability analysis for seed cotton yield and yield contributing characters in cotton (*G. hirsutum* L.)

— P.A. RATHVA, K.V. VADODARIYA, M.M. PANDYA and M.B. PATEL 1

Genetic variability and heritability for growth and yield of cucumber (*Cucumis sativus* L.)

— PUSHPALATHA N., ANJANAPPA M. and PITCHAIMUTHU M. 6

Principal component analysis of agro-morphological traits in RIL population of rice (*Oryza sativa* L.) grown in a irrigated lowland water regime

— HEMANT SAHU, RITU R. SAXENA, S.B. VERULKAR and VIKAS KUMAR 11

Principal component analysis of submergence related traits in landraces of rice (*Oryza sativa* L.)

— RAJESH KUMAR, NILMANI PRAKASH, U.K. SINGH and NEERAJ KUMAR 16

Bio-chemical evaluation of landraces/hybrid rice in Eastern Uttar Pradesh

— NITIN VIKRAM, RAJA HUSAIN, RAJ NARAYAN KEWAT, PRATIBHA SINGH and N.A. KHAN 20

Genetic divergence, correlation, path analysis and variability studies in maize genotypes (*Zea mays* L.)

— S. NAGALAKSHMI, M. SURENDER, B. SPANDANA and G. HADASSHA 25

Assessment of genetic diversity in fieldpea (*Pisum sativum* L.) based on SSR markers

— NIKI NAUTIYAL and R.K. PANWAR 29

Characterization of mungbean (*V. radiata*) genotypes through morphological markers and their divergence studies

— GUNNJEET KAUR, ARUNABH JOSHI, DIVYA VYAS and DEVENDRA JAIN 33

Identification of promising hybrids through exploitation of heterosis in chickpea (*Cicer arietinum* L.)

— ARJUN KUMAR, G. ROOPA LAVANYA and SOWJANYA B.A. 37

Agronomic and physiological characterization of RILs for drought tolerance in wheat (*Triticum aestivum* L.)

— VINODKUMAR S.B., P.C. NAUTIYAL, G.P. SINGH, KALPANA SINGH, NEETA DWIVEDI and HARIKRISHNA 41

Estimation of genetic variability, heritability, genetic advance and diversity studies in okra genotypes

— PRAKASH KERURE, M. PITCHAIMUTHU and AKSHATA HOSAMANI 47

Combining ability analysis in chilli (*Capsicum annuum* L.)

— MANISH SHARMA and O. SRIDEVI 52

Studies on combining ability analysis in tomato

— G. ESWARA REDDY, R. NANDAN, M.P. REDDY, B. RAJASEKHAR REDDY and H.R. BHANDARI 56

Association studies in muskmelon (*Cucumis melo* L.) : A principal component analysis

— SAYEED ABDULHAMID PATEL, VINOD KUMAR VASHISHT and PRIYA BRATA BHOI 60

Study on gene action inheritance for growth, yield and yield traits in sponge gourd [*Luffa cylindrica* (R.) L.]

— YAMUNA PRASAD SINGH and V.B. SINGH 65

Genetic divergence studies in gum cluster bean genotypes

— RAJENDRA S. WANKHADE, V.S. KALE, S.G. BHARAD and H.H. DIKEY 69

Contd.

Phenotyping of mango (<i>Mangifera indica</i> L.) genotypes for fruit shape and size related traits for association mapping — SHIV LAL, SANJAY KUMAR SINGH and MANISH SRIVASTAV	 75
Effect of rates of iron application on yield, quality, nutrient content, uptake & soil fertility status of rice varieties — OJEFKHAN PATHAN, G.G. PATEL, K.B. PATEL and S.M. BAMBHANEYA	 80
Response of <i>Bt</i> cotton and changes in soil properties under different fertilizer management practices in rainfed black soils — M. SUNITHA RANI, S. SRIDEVI, G. PADMAJA, Y. PRAVEEN KUMAR and V. RAMULU	 87
Effect of zinc mobilizing microbial cultures on yield, nutrient uptake & quality of <i>Bt</i> cotton grown on Vertisol — ANURADHA PAWAR and SYED ISMAIL	 93
Sustainable production of tomato under different fertigation aspects in polyhouse environment — S.R. UGHADE, A.D. TUMBARE and U.S. SURVE	 98
Impact of irrigation & fertigation scheduling through drip irrigation in tomato (<i>Lycopersicon esculentum</i> Mill.) — ANKUSH, S.K. SHARMA, S.C. MEENA, VIRENDRA SINGH and VIKRAM SINGH	 104
Effect of nutrient & crop arrangement on yield of component crops under maize + soybean intercropping system — PRAGYA PANDEY, M.C. BHAMBRI and S.S. KOLHE	 109
Role of organic and inorganic nutrient sources on fruit yield and quality of sweet orange (<i>C. sinensis</i> (L.) Osbeck) cv. Mosambi — P. PEDDA NAGI REDDY, N.N. REDDY, M.L.N. REDDY, N. JYOTHI LAKSHMI, VEENA JOSHI and P. VIJAYAKUMAR	 115
Effect of humic acid foliar application on growth, biochemical parameters and yield of redgram (<i>Cajanus cajan</i>) — M.K. MEENA, B.K. DESAI and M.M. DHANOJI	 121
Manipulation of source to sink ratio to increase the productivity of sunflower (<i>Helianthus annuus</i> L.) by enhancing translocation and partitioning efficiency — M. GAYITHRI, T.K. NAGARATHNA and Y.G. SHADAKSHARI	 126
Yield and nutrient uptake of rainfed sunflower as influenced by humic acid under nutrient management practices in alfisols — SAI KUMAR T., BHANU REKHA K., SUDHAKARA BABU S.N. and MADHAVI A.	 132
Performance of rice establishment methods and nutrient management practices — KRISHNA MURTHY R. and K. PUSHPA	 137
Effect of structured water and fertilizer on yield attributing and quality parameters of grape (<i>Vitis vinifera</i> L.) cv. Manjri Naveen — BALESH GOUDAPPANAVAR, D.R. PATIL, SATEESH PATTEPUR and KULAPATI HIPPARAGI	 142
Effect of scheduling drip irrigation on water use efficiency, yield attributes and yield of papaya (<i>Carica papaya</i> L.) — G. DESHMUKH, M.K. HARDAHA, S.D. SAWARKAR, KUMAR SONI, S.L. ALAWA and D.K. TIWARI	 147
Effect of different levels of nitrogen and sulphur on growth, yield and storage of onion (<i>Allium cepa</i> L.) in black soils — S.K. SHARMA, A.K. NAIDU and S.P. MISHRA	 151
Exploring effect of various organic manure on microbial community of soil from banana organic farm — TRUPTIK. VYAS, PRACHI DESAI, AVANTIKA PATEL, SHWETA PATEL and KAMLESH G. PATEL	 156
Influence of crop geometry and age of seedlings on yield, nutrient uptake, post-harvest nutrient status and economics of finger millet — D. ANITHA, A.V. NAGAVANI and V. CHANDRIKA	 160
Response of late sown pigeonpea (<i>Cajanus cajan</i> (L.) Mill Sp.) to trace elements — PANDIT S. RATHOD, D.H. PATIL, RACHAPPA V., S.B. BELLAD and B.M. DODAMANI	 164

Alternative measures for shifting conventional agriculture to Green farming : A study on perception of farmers — NITU SINDHU, JOGINDER SINGH MALIK and P.S. SHEHRAWAT	 168
Comparative effect of dried red chili pepper and raw garlic smoke on preservation of paneer — DIWAKAR MISHRA, K. JAYARJ RAO and RASHMI BHARDWAJ	 172
Corn meal – A novel substrate for the production of food bio-colours through solid state fermentation — S.R. MHALASKAR, S.S. THORAT and Y.R. DESHMUKH	 178
Nutritional evaluation of some commonly consumed leafy vegetables of Meghalaya — JURI BURAGOHAIN, V.B. SINGH, BIDYUT C. DEKA, A.K. JHA and THEJANGULIE ANGAMI	 183
Field evaluation of biopesticides against <i>Helicoverpa armigera</i> (H.) Hard. in tomato, <i>Lycopersicon esculentum</i> Mill. under middle Gujarat condition — SUSHMA DEB and T.M. BHARPODA	 188
Evaluation of different IPM modules and screening of promising chickpea genotypes against <i>Helicoverpa armigera</i> (H.) at Hisar — SABBITHIPAVAN, K.K. DAHIYA, NGANGOM UMA DEVI, ROSHAN LAL and YOGESH KUMAR	 194
Effective botanical pesticide for the management of gram pod borer, <i>Helicoverpa armigera</i> (H.) on chickpea — RACHAPPA V., CHANDRA SHEKHARA, SUHAS YELSHETTY and HARISCHANDRA R. NAIK	 200
Efficacy of biorational insecticides against major defoliators in soybean ecosystem — M.V. MATTI, R.O. DEOTALE and V.N. NANDANWAR	 205
Management of soil inhabiting insect pests in groundnut (<i>Arachis hypogaea</i> L.) through bioagents and insecticides — K.C. AHIR, B.S. RANA, ARTI SAINI, N.L. DANGI and A. MORDIA	 210
Mass multiplication and shelf-life study of liquid formulation of <i>Pseudomonas</i> sp. and their effect on PGPR activity and blast disease of finger millet — MANISHA S. SHINDE, A.N. SABALPARA and A.J. DESHMUKH	 214
Evaluation of native fluorescent pseudomonads against soil-borne pathogens of medicinal plants — S.B. MALLESH, LINGARAJU S. and JAIPRAKASH NARAYANA R.P.	 218
Biopriming and polymer coating for healthy seedling production under hydroponic condition in chilli cv. K2 — S. SATHYA, S. LAKSHMI and S. NAKKEERAN	 222
Influence of seed treatment with biocontrol agents, bio-fertilizers and humic acid on seed longevity of COH (M) 5 maize hybrid — SRINIVASAN J., SRIMATHI P. and SELVARAJU P.	 227
Physico-chemical properties and antioxidant activities of pomegranate fruit of different cultivars grown in India — DHINESH KUMAR V., D. RAMASAMY B. and JERISH JOYNER J.C.	 232
Evaluation of biomass yield, quality and nutrients uptake potential of exotic and indigenous beet varieties for green fodder — DIGVIJAY SINGH, ALKA KUMARI and AVINASH CHAUHAN	 237
Effect of operational parameters on puddled soil under different puddling methods — MURALIM., M. ANANTACHAR, K.V. PRAKASH, ARAVINDA YADAV K. and NAVEENKUMAR C.	 242
Design optimization of rotary tillage tool components proportionate to tractor power using computer software — GAUTAM M. VEGAD, RAJVIR YADAV and YAGNIK C. YOGANANDI	 246
Selection of appropriate packaging film for modified atmosphere packaging of okra — AKSHI JAIN, S.R. SHARMA, T.C. MITTAL and S.K. GUPTA	 250

Strategic Vision Message : 37

Bio-inspired Nano-nutrients : A key for sustainable agriculture

— **J.C. TARAFDAR**

Back Inner Page