## **Plant Archives**

Volume 15 October - 2015 Number 2 Contents Plant Growth Regulators in Vegetable Production: An Overview Sunil Prajapati, Tarun Jamkar, O. P. Singh, Neelesh Raypuriya, Rishikesh Mandloi and P. K. Jain 619-626 Morphological Characterization and Comparison of different Accessions of Traditional Aromatic Rice Varieties Bisni, Dubraj, Vishnubhog and Chinnor Nirmala Bharti Patel, Namrata Dhirhi and Rajeev Shrivastava 627-632 Effect of different Sources and Levels of Potassium on Yield and Carotenoids Content of African Marigold (Tagetes erecta Linn.) cv. 'Maxima Yellow' M. Sanghamitra, V. Vijaya Bhaskar, A. V. D. Dorajee Rao and P. Subbaramamma 633-636 Genetic Variability and Inter-relationship Analysis for Various Yield Attributing and Quality Traits in Traditional Germplasm (Oryza Ruth Elizabeth Ekka, A. K. Sarawgi and Raja R. Kanwar 637-645 Management of Dry Root Rot of Blackgram caused by Macrophomina phaseolina (TASSI) Goid. using Bio Agent Sowmya Tetali, S. Karpagavalli and S. Lalitha Pavani 647-650 An Economic Analysis of Rice Cultivation and Constraint in Dhamtari District of Chhattisgarh, India Dwarikadhish Churpal, A. K. Koshta and V. K. Choudhary 651-656 Response of Calendula to Plant Density for Cut Flower Production Neha Chopde, J. G. Jadhav and M. H. Bhande 657-660 Performance of Chilli (Capsicum annuum L.) Genotypes for Yield and Yield Attributing Traits M. Janaki, C. Venkata Ramana, L. Naram Naidu and M. Paratpara Rao 661-666 Performance of a Highly Potent Strain of Trichoderma harzianum Possessing Egg Parasitic Character Against Root Knot Nematode in Addition to Mycoparasitism Isolated from Vegetalde Growing Area of Northern India 667-670 Neetu Singh, Chaitali Bhattacharya, Archana Singh, M. C. Sharma and B. K. Goswami Field Incidence of Mealybugs and its Parasitization by Encyrtids in Various Crop Ecosystems T. Nalini 671-676 The Knowledge Level of Farmers Regarding Parthenium (Parthenium hysterophorus L.) Weed and their Control Actions Uma Rani Singh, K. K. Shrivastava, Virendra Kumar Painkra and Preeti Khare 677-683 Correlation Coefficient Analysis for Yield and Yield Attributes in Groundnut (Arachis hypogaeaL.) R. Prabhu, N. Manivannan, A. Mothilal and S. M. Ibrahim 685-689 Growth, Yield and Quality of Gladiolus as Influenced by Growth Regulators and Methods of Application Neha Chopde, Ashwini Patil and M. H. Bhande 691-694 Correlation and Path Analysis in Sweet Potato [Ipomoea batatas (L.) Lam] Sasmita Priyadarsini Dash, Jitendra Singh, Thalesh Panigrahi and Padmakshi Thakur 695-699 Effect of Sprouting Time on Antinutritional Factors in Vigna mungo Varieties Aradhana Kumari and Yashodhara Verma 701-703 Genetic Variability, Heritability and Genetic Advance in Tomato (Solanum lycopersicum L.) Neeraj Singh, C. N. Ram, Chandra Deo, G. C. Yadav and Devesh Pratap Singh 705-709 Extraction Method of Flax Fibre and its Uses Namrata Dhirhi, Rajshree Shukla, Nirmala Bharti Patel, Hemant Sahu and Nandan Mehta 711-716 Effect of Lead and Cadmium Stress on Biochemical Parameters and Antioxidant Activity in Germinated Seedlings of Cicer Gulam Khwaza and Yashodhara Verma 717-721 arietinum L. The Growth, Yield and Quality Parameters of Banana Cultivar Grand Naine (AAA) as Influenced by different Organic Amendments S. Firoz Hussain, S. Naresh, A. V. D. Dorajee Rao and M. L. N. Reddy 723-727 Response of Wheat (Triticum aestivum L.) to the Foliar Applied Brassinosteroid and Thiourea with Recommended Fertilization Practice on Farmer's Fields K. M. Sharma, Ram Asarey and Harish Verma 729-732 Assessment of Floristic and Avian Faunal Diversity of Bhindawas Wetland, Jhajjar (Haryana), India 733-740 Sunil Kumar and Rajesh Dhankhar Study the Economic Analysis and Benefit-Cost Ratio of Green Pea (Pisum sativum) at different Level of Farm Size Groups Ajit Verma, Indra Jeet Singh, Savita Gupta, S. P. Singh and Avinash Kumar 741-742 Assessment of Genetic Diversity in Indigenous Genotypes of Tikhur (Curcuma angustifolia Roxb.) Deo Shankar, S. S. Rao, D. P. Singh, P. S. Markam and M. K. Sahu 743-751 Assessment of Nutrient Status of Rice Growing Soils of Canal Ayacut Soils of Kurnool District (A.P.), India P. N. Siva Prasad, P. Kavitha and N. Kishore Kumar Yadav 753-758

Response of Jasminum sambac (L.) to Time and Severity of Pruning	
Sushma Lokhande, Neha Chopde, Parinita Wasnik and Neha Nehare Antagonistic Potential of Mycorrhiza Associated <i>Pseudomonas putida</i> against Soil Borne Fungal Pathogens	759-762
B. Saritha, P. Panneerselvamand A. N. Ganeshamurthy	763-768
Effect of Seed Rhizome Size and Plant Spacing on Growth, Yield and Quality of Ginger (Zingiber officinale Rosc.) under Coconut	
Cropping System B. Mahender, P. Syam Sundar Reddy, G. Thanuja Sivaram, M. Balakrishna and B. Prathap	769-774
Insect Pests Associated with Basmati Rice in Western Plain Zone of Uttar Pradesh, India  Uma Pal Saini, S. K. Sachan*, Amrendra Pratap, B. Singh and Kaushlendra Kumar	775-777
Effect of Organic Manures and Inorganic Fertilizers on Growth and Flower Yield of Marigold ( <i>Tagetes erecta</i> L.) var. Pusa	113-111
Narangi Gainda Lal Singh, P. K. S. Gurjar, A. K. Barholia, A. Haldar and A. Shrivastava	779-783
Comparative Studies on Tissue Culture Plantlet versus Conventional Sucker var. Grand Naine Banana	
M. R. Bhanusree, K. Ravi Kumar, C. P. Suresh, G. Shukla and S. Chakravarty	785-788
Problems Faced by Tribes in Collection and Marketing of Non-timber Forest Products (NTFPs) in Chhattisgarh, India  Ashish Kumar Gupta, M. L. Sharma, M. A. Khan, S. Narbaria and A. Pandey	789-793
Improvement in Nutritional Properties of Product through Fortification with Aloevera, Mushroom and Pearl Millets	103 130
Seema Sonkar and Alka Singh	795-800
Response of Annual Chrysanthemum Genotypes to different Levels of Nitrogen	
Neha Chopde, K. S. Gore, Ommala Kuchanwar and M. H. Bhande	801-804
Comparative Efficacy of some Biopesticides Against Shoot and Fruit Borer, <i>Leucinodes orbonalis</i> Guenee in Brinjal  Mohit Singh and S. K. Sachan	805-808
Knowledge of Recommended Brinjal Production Technology among the Farmers	000 000
Yogendra Shriwas, J. D. Sarkar, H. K. Awsthi and Neha Sarthi	809-812
Adoption of Storage Practices of Food Grains among the Farmers of Northern Hills of Chhattisgarh, India	040 045
Gamini Sahu, K. K. Shrivastava and B. K. Chaturvedi Differential Responses of Sugarcane (Saccharum officinarum L.) Varieties Exposed to Salinity under a Hydroponic System	813-815
R. Anitha, P. Christy Nirmala Mary, M. Antony Joseph Ravi Savery, N. Sritharan and R. S. Purushothaman	817-822
Effect of Age of the Rootstock on the Success of Softwood Grafting in Jack (Artocarpus heterophyllus Lam.)	
T. Uma Maheswari and K. Nivetha	823-825
Adoption Pattern of Vegetable Cultivation Practices in River Bed Areas	827-832
Shilpa Beck, M. A. Khan, S. Narbaria and N. K. Gupta Efficacy of Bio-pesticides Against the Jassid, <i>Amrasca biguttula biguttula</i> in Okra at Bhubaneswar, Odisha, India	021-032
Mohanisha Janghel	833-836
Response of Gladiolus var. "American Beauty" to Spacing and Corm Size	
M. H. Bhande, Neha Chopde, Parinita Wasnik and V. P. Warkade	837-840
Study the Cost of Cultivation and Net Income of Mustard in Different Farm Size Groups on the Fields  Ajit Verma, Savita Gupta, Indra Jeet Singh, S. P. Singh and Avinash Kumar	841-842
Constraints in Adoption of Modern Agricultural Technologies on Leased Forest Land	041-042
Nitesh Kumar Gupta, M. A. Khan, S. Narbaria and S. Beck	843-845
Variation in Crop Yield in Rice-Wheat Dryland Agroecosystem: Impact of Varying Resource Quality Inputs	
Aanchal Agarwal and Nandita Ghoshal	847-851
Growth and Physiological Response of <i>Dendrobiumcv. earsakul</i> in Different Growing Conditions  M. Raja Naik and K. Ajith Kumar	853-861
Assessment of Genetic Variability, Heritability and Genetic Advance for Seed Yield and it's Attributes in Linseed ( <i>Linum usitatissimum</i>	000 001
L.) Nimit Kumar, Satish Paul and Ranjana Patial	863-867
Studies on Correlation and Path Coefficient Analysis in Tomato (Solanum lycopersicum L.)	000 070
Neeraj Singh, C. N. Ram, Chandra Deo and G. C. Yadav Influence of Genotype and Seed Weight on the Performance of Rootstock and the Success of Softwood Grafting in Jack	869-873
(Artocarpus heterophyllus Lam.)  K. Nivetha and T. Uma Maheswari	875-878
Response of Castor ( <i>Ricinus communis</i> L.) to Sulphur under Irrigated Conditions of Uttar Pradesh, India	2.0010
S. K. Srivastava and Jagdish Kumar	879-881
Study the Yield and Economics of Pigeon pea ( <i>Cajanus cajan</i> ) at Different Size of Holdings	000 004
Ajit Verma, Savita Gupta, Indra Jeet Singh, S. P. Singh and Avinash Kumar contninued on pa	883-884
continued on po	ige 1403

Farmer's Response on Kisan Mobile Advisory: A Critical Evaluation	005 007		
P. K. S. Gurjar, Lal Singh, L. S. Gurjar, C. B. S. Jatav, A. Haldar and Jagati Yadagiri	885-887		
Biology of Brinjal Shoot and Fruit borer, <i>Leucinodes orbonalis</i> G. under Lab Condition at 35°C Temperature and 90% Relative	000 000		
Humidity during 2009 and 2010 Adbhut Yadav, S. K. Sachan, Arvind Yadav and Tarun Yadav	889-893		
Evaluation of Scented Rose Varieties for Yield and Quality of Flowers	005 007		
Parinita Wasnik, V. U. Raut, M. H. Bhande and V. B. Shambhavkar	895-897		
Effect of Plant Growth Regulators on Flowering and Yield of Muskmelon ( <i>Cucumis melo</i> L.)	000 004		
Y. Reenata Devi and P. Madhanakumari	899-901		
Knowledge and Adoption of Management Practices of Prevalent Insects of Groundnut Crop	000 007		
B. K. Chaturvedi, K. K. Shrivastava and C. P. Khare	903-907		
Development and Standardization of Soup Mix based on Black Rice and Okra Powder Value Added with Barley	000 044		
Seema Sonkar, Tanu Shree Saha and Alka Singh	909-911		
Agrometeorological Indices of Rice Cultivars under different Environment at Navsari (Gujarat), India	042 047		
B. M. Mote, Neeraj Kumar and Y. G. Ban	913-917		
Genetic Divergence in Round Fruited Brinjal (Solanum melongena L.)  G. Kranthi Rekha and V. A. Celine  Assessment the Efficacy and Especial Combination of Reinial	919-921		
Assessment the Efficacy and Economic of Insecticides and Bio-pesticides against Major Insect Pest Combination of Brinjal			
(Solanum melongena Linn.) cv. JB-64	923-930		
Satyendra Patel, Rishikesh Mandloi, Sunil Prajapati, A. K. Saxena and Ravindra Parmar and Om Pal Singh  Effect of Folior Silipio Acid on Crouth and Viold Attributes of Pose Cut Flowers (Pose bybrid)	923-930		
Effect of Foliar Silicic Acid on Growth and Yield Attributes of Rose Cut Flowers ( <i>Rosa hybrid</i> )	931-937		
Shrinivas Chikkur, N. B. Prakash, A. S. Parmeshwar and L. Rajeshwari Physico-chemical Characters and Sensory Evaluation of Jamun based Blended Squash Beverages during Storage	331-331		
N. Priyanka, A. V. D. Dorajeerao, V. Sudhavani and K. Umakrishna	939-946		
Effect of Planting Time and Plant Densities on Yield and Yield Contributing Characters in Garlic ( <i>Allium sativum</i> L.) cv. Jamnagar	303-340		
G. Vidya	947-952		
Induction of Defense Enzymes and Suppression of <i>Macrophomina phaseolina</i> : A Root Rot Pathogen, Inciting Black Gram by	341-332		
Micronutrient Enriched <i>Trichoderma viride</i> S. Lalitha Pavani, D. Alice and Sowmya Tetali	953-958		
Studies on Farmers Perception about Maize based Cropping System in Irrigated Ecosystem of Gataprabha Left Bank Cannel	300-300		
R. Mohan Kumar, B. T. Nadagouda and S. M. Hiremath	959-961		
Studies on the Effect of Different Chemicals on the Vase Life of Cut Gerbera (Gerbera jamesonii Bolus ex. Hook) cv.	303 301		
ALPPRAZ  P. Hema, V. Vijaya Bhaskar, M. R. Bhanusree and D. R. Salomi Suneetha	963-966		
Effect of Food, Host Densities and Mating Status on Parasitization of <i>Aenasius bambawalei</i> Hayat and <i>Aenasius advena</i>	000 000		
Compere (Hymenoptera: Encyrtidae)  T. Nalini	967-972		
Effect of Planting Time and Plant Densities on Maturity and Yield of Garlic ( <i>Allium sativum</i> L.) cv. Jamnagar G. Vidya	973-976		
Studies on Thermal, Optimal and Bio-physical Behavior of Maize Hybrids as Influenced by Plant Population and Levels of			
Fertilization in Irrigated Eco-system  R. Mohan Kumar, B. T. Nadagouda and S. M. Hiremath	977-982		
Effect of Integrated Nutrient Management on Growth and Yield of Rice ( <i>Oriza sativa</i> L.) in Inceptisol			
Yugal Kishor Sahu, A. K. Chaubey, V. N. Mishra, A. S. Rajput and R. K. Bajpai	983-986		
Thermal requirements for Attainment of Phenophases of Rice Cultivars under Variable Weather Conditions			
B. M. Mote, Neeraj Kumar and Y. G. Ban	987-990		
Study on Seed Management Pattern Followed by the Tribal Farmers of Northern Hills Agro-climatic Zone of Chhattisgarh State,			
India Akanksha Pandey, M. L. Sharma, P. K. Pandey, A. K. Gupta and S. Narbaria	991-995		
Nature and Degree of Distribution for Yield and Yield Attributes in Six Backcross Populations of Groundnut ( <i>Arachis hypogaea</i> L.)			
R. Prabhu, N. Manivannan, A. Mothilal and S. M. Ibrahim	997-1001		
Phenotypic and Molecular Characterization of Microsymbionts Associated with <i>Crotalaria medicagenia</i> : A Native Legume of the			
Indian Thar Desert Indu Singh Sankhla, Raju Ram Meghwal, Nisha Tak, Alkesh Tak and Hukam Singh Gehlot	1003-1010		
Studies on Application of different Sources of Nitrogen to Evaluate the Yield of Wheat			
I. D. Singh, Deepali Bajpai and Sanjeev Verma	1011-1012		
Evaluation of Pigeonpea Genotypes for Resistance to <i>Fusarium</i> wilt M. B. Parmar and K. B. Kathiria	1013-1015		
Selected Personal and Socio-economic Characters of Bt Cotton Growers  Sanjay Kumar	1017-1020		
Economics and Quality Parameters of Toria Varieties as Influenced by Sowing Dates and Sulphur Levels			
Ashutosh Pratap Singh, Puspendra Kumar, Mayank Kumar, Mamta and S. Elamathi	1021-1024		
Genetic Dievergence in Sweet Potato [ <i>Ipomoea batatas</i> (L.) Lam] Sasmita Pr. Dash, Sunil K. Nair and Padmakshi Thakur	1025-1029		
Rootability of Hardwood Cutting of Mulberry ( <i>Morus alba</i> L.) Infuenced by Planting Time and Growing Conditions under Valley	4004 4000		
Condition of Garhwal Himalayas K. K. Singh, Dev Kishan Jat and S. K. Mehta	1031-1036		
contninued on p	page 1202		
• •			

Evaluation of Bottle gourd [Lagenaria siceraria (Mol.) Standl.] Genotypes			
	1037-1040		
Biochemical Changes in Relation to Seed Quality in Accelerated Aged Cotton Seed Varieties in different Containers	4044 4050		
Nishtha Yadav and R. S. Brar Constraints Faced By Chickpea Growers In Adoption of Integrated Pest Management Practices	1041-1050		
	1051-1053		
Differential Responses of Sugarcane (Saccharum officinarum L.) Genotypes under Salt Stress Condition	1001 1000		
R. Anitha, P. Christy Nirmala Mary, M. Antony Joseph Ravi Savery, N. Sritharan and R. S. Purushothaman	1055-1060		
Density and Efficacious Stages of Some Predator against two Spotted Spider mite, Tetranychus urticae Koch			
Dharmendra Kumar and M. Raghuraman	1061-1064		
Gas Chromatography-Mass Spectrometric Analyses of Acetone Extract of Marwar Dhaman Grass for Bio-active Compounds	100E 1074		
Premlata Singariya, Krishan Kumar Mourya and Padma Kumar High Density Planting of Cotton Variety AKH – 081 under Rainfed Condition of Vidharbha	1065-1074		
A. N. Paslawar, A. S. Deotalu and P. W. Nemade	1075-1077		
Impact of Front Line Demonstration of Management Practices on Wheat ( <i>Triticum aestivum</i> ) under Irrigated Conditions			
B. K. Tiwari, K. P. Tiwari, K. V. Sahare and P. N. Tripathi	1079-1082		
Utilisation of Jamun Juice by Making Blended RTS Beverage N. Priyanka, A. V. D. Dorajeerao and V. Sudhavani	1083-1088		
Managements of Stem Borer, <i>Coelosterna scrabrator</i> Fabr. in Grapevine  D. Anitha Kumari and D. Vijaya  An Assessment of Blooding the price of Malace Blood	1089-1091		
An Assessment of Physico-chemical Water Quality of Kolong River, Nagaon District (Assam), North East India  K. K. Medhi, S. Borkataki and M. P. Choudhury	1093-1096		
Effect of different Tree Canopy Soils on Growth and Quality of Orange Seedlings Rootstock	1093-1090		
Pooja P. Deotale, Ommala D. Kuchanwar, Neha Chopde and Rashmi Urkude	1097-1099		
Influence of Growth Regulators on the Shelf Life of Sweet Orange cv. Sathgudi			
V. Hemalatha, J. Dilip Babu and A. Siva Sankar	1101-1106		
Genetic Diversity in Brinjal (Solanum melongena L.) under Temperate Hills of Uttarakhand, India	440= 4440		
N. Madhavi, A. C. Mishra, Y. Pushpavathi and V. L. P. Kumari	1107-1110		
Studies on Simple Correlation Matrix of Mesta ( <i>Hibiscus subdariffa</i> L.) of two Years in a Location  Sk. Samsuddin and Jagatpati Tah	1111-1115		
Histological Changes in Liver and Kidney of Cat fish, <i>Heteropneustes fossilis</i> , Exposed to Pentachlorophenol (PCP)	1111 1110		
Abhay Kumar Pandey and Sunanda Dubey	1117-1120		
A Study on Physiological Attributes and Yield in Developed Rice Genotypes			
M. Chandrika, A. Siva Sankar, C. H. Surender Raju, S. Narender Reddy and R. Jagadeeshwar	1121-1125		
Influence of Organic and Inorganic Fertilizer on Nutrient Content in Broccoli ( <i>Brassica oleracea</i> var. <i>Italica</i> )  Swagatika Srichandan, Alok KU Mangaraj, Aneeta Mohanty, Kamala Kanta Behera	1127-1130		
Precision Nutrient Management for Soil Spatial Variability  B. T. Nadagouda and P. S. Tippannavar	1131-1137		
Life Table Studies of Green Semilooper on Soybean  Madhuri S. Laute, Nikita V. Patil and U. P. Barkhade	1139-1145		
Growth and Yield Attributes, Yield, Fibre Quality and Economics of HirsutumCotton as Influenced by Foliar Application of KNO <sub>3</sub>			
Jagdish Kumar and S. K. Srivastava	1147-1149		
Molecular Characterization of Aromatic Rice, Oryza sativa L. using Simple Sequence Repeats (SSR) Markers	4454 4450		
Nirmala Bharti Patel, Namrata Dhirhi, Rajeev Shrivastava and Mayuri Sahu Performance of Ash gourd Genotypes for Earliness and Yield under Chhattisgarh Plains, India	1151-1156		
Parmeshwar Kumar Sahu, Dhananjay Sharma and Sunil Kumar Nair	1157-1160		
Genetic Variability, Interrelationship and Path Analysis for Yield and Yield Related Traits in Onion (Allium cepa L.) under Temperate	1100		
Condition in Kashmir Valley M. A. Chattoo, Angrej Ali and Kamaluddin	1161-1165		
Assessment of Cotton Seed Deterioration During Accelerated Ageing: Changes in Physiological Aspects			
Nishtha Yadav and R. S. Brar	1167-1173		
Genetic Divergence Studies in Bottle gourd [Lagenaria siceraria (Mol.) Standl.]  Vaibhav Kant Visen, Padmakshi Thakur, D. Sharma and S. K. Nair	1175-1178		
Antimicrobial Activities of <i>Carica papaya</i> L.  Valonav Kant Visen, Padmaksni Trakur, D. Snarma and S. K. Nair  J. Lohidas, S. Manjusha and G. Glory Gnana Jothi	1179-1176		
Effect of different Levels of Sulphur and FYM on Yield and Soil Nutrient Status of Chickpea	11.5 1100		
Vedhika Sahu, V. N. Mishra, L. K. Shrivastava and Purnendra Kumar Sahu	1187-1189		
Correlation Studies in Temperate Maize ( <i>Zea mays</i> L.) Inbred Lines			
Z. A. Dar, A. A. Lone, B. A. Alaie, G. Ali, A. Gazal, S. Gulzar and N. Yousuf	1191-1194		
Infestation of an Endoparasitic Migratory Rice Root Nematode, Hirschmanniella oryzae - A Serious Threat to the Paddy Growers of Western U.P. – A First Report  B. K. Goswami, Archana Singh, Neetu Singh and Satyendra Singh	1195-1196		
contninued on page 1201			

1197-1200

Development Of Protocol In Banana For Mass Propagation

Rajvir Singh, Sushil Kumar, R.S. Yadav and R.B. Yadav