

Contents

S. No.	Title	Page No.
Research Articles		
1.	Unravelling seed oil, protein and fiber density in lintless-fuzzless upland cotton (<i>Gossypium hirsutum</i>. L) through combining ability estimates and association studies L. Ananda Lekshmi, M. Kumar, S. Rajeswari, M. Raveendran, D. Uma and S. Manickam	768-774
2.	Site regression and multivariate analysis for genetic diversity in <i>Gossypium barbadense</i> accessions K. Baghyalakshmi, S. Manickam, M. Amutha, A. Sampathkumar, M. G. Yamuna and A. H. Prakash	775-786
3.	Genetic analysis of yield attributing traits in F₂ generation of greengram [<i>Vigna radiata</i> (L.) Wilczek] T. Nivethitha, C. Babu, P. Jayamani, N. Senthil and K. Bhuvaneswari	787-793
4.	Diallel analysis in sorghum for forage yield and attributes by Griffing and Hayman's approaches R. A. Gami, K. G. Kugashiya, R. S. Solanki and R. N. Patel	794-802
5.	Designing and validation of a rapid and reliable protocol for screening anaerobic germination tolerance in rice A. Vinitha, D. Vijayalakshmi, M. Raveendran, V. Ravichandran and T. Parthipan	803-810
6.	Variability and association analyses of powdery mildew disease scores, seed yield and component traits in blackgram [<i>Vigna mungo</i> (L.) Hepper] P. Punithavathy, D. Kumaresan, N. Manivannan, N. Manikanda Boopathi and G. Senthilraja	811-817
7.	Assessing the genetic diversity and association of traits among the rice (<i>Oryza sativa</i> L.) landraces and varieties from Tamil Nadu K. Sherina Jebakani, D. Aishwarya, J. Lydia Pramitha, S. Ramchander, N. Devasena, D. Wilson, P. Dinesh Kumar and R. Samundeswari	818-832
8.	Genetic analysis of fibre quality and yield related traits in desi cotton (<i>Gossypium arboreum</i> L.) U. Nikhil Sagar, B.V. Ravi Prakash Reddy, K. Mohan Vishnuvardhan, A. Prasanna Rajesh, E.S.V. Narayana Rao, N. Sabitha, D. Lakshmi Kalyani, Y. Rama Reddy and G. Suresh	833-840
9.	Multi trait genotype-ideotype distance index - A tool for identification of elite parental inbreds for developing heterotic hybrids of fodder maize (<i>Zea mays</i> L.) S. Palaniyappan, K. N. Ganesan, N. Manivannan, V. Ravichandran and N. Senthil	841-849
10.	Evaluation on genetic variability and trait association in naturally coloured cotton (<i>Gossypium hirsutum</i> L.) R.P. Santhosh Jeyaraj , P. Anantharaju , A. Subramanian , S. Somasundaram , N. Chitra and N. Premalatha	850-856
11.	Exploring the phenotypic diversity of rice: A multivariate analysis of local landraces and elite cultivars of Tamil Nadu and Exotic Lines V. Allan, N. Meenakshi Ganesan, R. Saraswathi, R. Gnanam and C. N. Chandrasekhar	857-866
12.	Characterization of mother palms and novel techniques to produce elite seedlings of coconut var. Chowghat Orange Dwarf S. Rohith, S. Kavibalan, K. Thangaraj, J. Suresh, M. Ananthan and R. Renuka	867-875

13.	Heterosis, character association and path analysis for grain protein content in rice (<i>Oryza sativa L.</i>) G. Kiruba, S. Geetha , R. Saraswathi, R. Santhi, D. Uma and R. Pushpa	876-883
14.	Selection criteria and multivariate analysis for identification of Turkey berry (<i>Solanum torvum</i>) genotypes for genetic improvement by using correlation and principal components analysis Nitish Kumar Jena, P. Irene Vethamoni, T. Saraswathi, N. Senthil and D. Uma	884-892
15.	Comparative patterns of principal components and cluster analysis under sodicity and normal soil conditions in rice (<i>Oryza sativa L.</i>) M. Akilan, P. Jeyaprakash, M. Shanmuganathan, S. Meena, V. Rajanbabu and C. Vanniarajan	893-901
16.	Diversity assessment of groundnut genotypes for pod and kernel traits through multivariate analysis S. R. Mythili, N. Manivannan and A. Mahalingam	902-911
17.	Estimation of narrow sense heritability in early segregating generations of rice introgressed with <i>Sub1</i> QTL S. Viswabharathy, T. Kalaimagal, S. Manonmani, P. Jeyakumar and M. Raveendran	912-922
18.	Genetic variability and association studies in BC₃F₁ population of sunflower (<i>Helianthus annuus L.</i>) B. Anuradha, N. Manivannan, R. Sasikala, S. Harish and M. Senthivelu	923-927
19.	Variability studies and genetic divergence in chilli (<i>Capsicum spp.</i>) genotypes using multivariate analysis B. Swetha, H. Usha Nandhini Devi , A. Sankari, S. Geethanjali and M. Sudha	928-937
20.	Targeted editing of <i>OsSWEET11</i> promoter for imparting bacterial leaf blight resistance in rice D. Bhagya Sree, A. Shanthinie, P. Vignesh, S. Varanavasiappan, K. K. Kumar, L. Arul, E. Kokiladevi, S. Manonmani, N. Saranya and D. Sudhakar	938-947
21.	Variability and association analyses in F₂ populations of groundnut (<i>Arachis hypogaea L.</i>) P. Ajith, R. Kanchana Rani, M. Kumar, R. Brindavathy and S. Thiruvarassan	948-953
22.	Validation for the major fertility restorer genes, Rf3 and Rf4 of F₄ generation of CBSN 25/ WRM 21-24 and CBSN 25/WRM 93-20 crosses in rice (<i>Oryza sativa L.</i>) H. Naveen, D. Kumaresan, S. Manonmani, N. Manikanda Boopathi, N. Sritharan and R.Saraswathi	954-964
23.	Biochemical analysis of metabolites in cotton (<i>Gossypium hirsutum L.</i>) conferring resistance to Leaf hopper <i>Amrasca biguttula biguttula</i> (Ishida) Banoth Madhu, Subbarayan Sivakumar, Sadasivam Manickam, Marimuthu Murugan, Sivakami Rajeswari and Narayanan Manikanda Boopathi	965-975
24.	Genotypic and phenotypic analysis of backcross inbred lines for brown plant hopper resistance in rice Garima Pelhania, M. Gokulakrishnan, J. Niranjana Devi, S. Yazhini, V. Balasubramani, S. Manonmani, Sheela Venugopal and J. Ramalingam	976-983
25.	Genetic analysis of excised leaf water loss and relative water content and its association with drought tolerance in TNAU cotton cultures R. Soumya, M. Rajavel, D. Vijayalakshmi, M.K. Kalarani, A. Subramanian, K. Thirukumaran, K. Sakthivel, A. Vinitha and S. Gowsiga	984-990
26.	Genetic variability, association and multivariate analysis for yield and yield parameters in rice (<i>Oryza sativa L.</i>) landraces G. Gayathridevi, P. Shanthi, R. Suresh, S. Manonmani, S. Geetha, K. Sathyabama and P. Geetha	991-999

27.	Genetic dissection of heterosis and combining ability in castor (<i>Ricinus communis</i> L) S. Nivedha, S. R. Venkatachalam, P. Arutchenthil, S. Lakshmi Narayanan, S. Manickam and R. Vijayan	1000-1007
28.	Association studies for yield and bruchid resistance in mungbean (<i>Vigna radiata</i> (L.) Wilczek) T.J. Shree Bhavatharani, D. Malarvizhi, S. Geetha, N. Senthil and P.R.Renganayaki	1008-1015
29.	Performance of qDTY QTL introgressed lines of rice (<i>Oryza sativa</i> L.) under target production environment M. A. Meena Shankari, R. Suresh, S. Manonmani, M. Raveendran, V. Babu Rajendra Prasad and S. Muthuramu	1016-1025
30.	Assessment of genetic variability and association studies for yield related traits in soybean V. Vasanth, K. Anandhi, S. Geetha, G.Senthilraja and P. Meenakshi	1026-1034
31.	Development of biotic stress resistant version of CO 51 Rice cultivar through Marker Assisted Introgression of major genes, <i>Pi9</i> and <i>Xa21</i> Samuthirapandi Subburaj. Thiagarajan Thulasinathan, S. Viswabharathy, Bharathi Ayyenar, Rohit Kambale, Veera Ranjani Rajagopalan, Sudha Manickam, C. Gopala Krishnan, T. Kalaimagal, S. Manonmani and M. Raveendran	1035-1043
32.	Unraveling the genetics of trait associateship and nutrient significance of determinate horse gram mutants V. Vaishnavi, J. Sumaiya Sulthana, K. Ananthi, R. Sivakumar, Balaji Kannan, N. A. Saravanan and Rajaprakasam Sudhagar	1044-1054
33.	Genetic variability and diversity analysis in sesame (<i>Sesamum indicum</i> L.) germplasm K. Rahna, R. Kalaiyarasi, M. Umadevi, A. Senthil and M. Sudha	1055-1062
34.	Elucidating the genetic potential of rice germplasm for anaerobic germination tolerance in rice (<i>Oryza sativa</i> L.) A. Muvendhan, R. Manimaran, S. Radhika, V. Rajanbabu and R. Suresh	1063-1073
35.	Studies on genetic variability, trait contribution for improved green fodder yield in lucerne (<i>Medicago sativa</i> L.) A. Aruna , T. Ezhilarasi, K.N. Ganesan, S. Kavitha and M. Thirunavukkarasu	1074-1080
36.	Revealing genetic variability and character association for yield and yield- attributing traits of rice (<i>Oryza sativa</i> L.) under water-limited condition S. Swathi, N. Aananthi, M. Gunasekaran, S. Muthuramu, T. Sivakumar and R. Renuka	1081-1089
37.	Exploring the genetic variability and association for yield and its integrant traits in sunflower (<i>Helianthus annuus</i> L.) M. Vivek, R. Sasikala, K. Thangaraj, S. Harish and M. Sudha	1090-1096
38.	Unearthing the genetic potential of drought resilient rice (<i>Oryza sativa</i> L.) landraces through multipronged approaches P. Dharani, T. Nivethitha, S. Manju Devi, B. Selsiya, S. M. Indhu, D. Sritharan, S. Manonmani, D. Sudhakar and A. JohnJoel	1097-1104
39.	Genetics of sterility behaviour in Thermo Sensitive Genic Male Sterility system in rice (<i>Oryza sativa</i> L.) M. Vishvapriya, Asish K. Binodh, S. Manonmani, D. Kumaresan, A. Senthil and G. Senthil Kumar	1105-1110
40.	Unravelling genetic variability and trait association studies in red sorghum (<i>Sorghum bicolor</i> L. Moench) Genotypes Tanisha Nayak, R.Chandirakala, D. Kavithamani, N. Manikanda Boopathi, K. Chandrakumar	1111-1117
41.	Genetic variability and association studies for yield and quality characters in BC₃F₂ generation of rice (<i>Oryza sativa</i> L.) A. Kalaivani, R. Pushpam, R. Suresh, M. Raveendran and A. Senthil	1118-1126

42.	Genetic variability, trait association and diversity study in proso millet (<i>Panicum miliaceum</i> L.) C. Santhoshkumar, M. Vaithiyalingan, E. Murugan, R. Renuka and G. Hemalatha	1127-1134
43.	Studies on variability and heterosis for yield and nutritional traits in rice (<i>Oryza sativa</i> L.) K. Deepika, R. Manimaran, R. Pushpa, K. Sathya Bama, C. Umamageswari and R. Suresh	1135-1146
44.	Morpho-physiological characterization of barnyard millet mutants for salt tolerance L. Vigneshwari, C. Vanniarajan, M. Vetriventhan, A. Thanga Hemavathy, T. Ramesh and S. Meena	1147-1157
45.	Genetic diversity studies and identification of donors for lodging resistance in rice (<i>Oryza sativa</i> L.) Vaishnavi Pravin Gupte, S. Manonmani, R. Nivedha, R. Suresh, G. Senthil Kumar and M. Raveendran	1158-1166
46.	Assessment of the genetic diversity of groundnut (<i>Arachis hypogaea</i> L.) genotypes for kernel yield N. Vinothini, M. Umadevi, T. Kalaimagal, R. Rajeswari and P. Shanthi	1167-1173
47.	Genetic analysis of quality traits in non-aromatic rice varieties for export potential P. Harshitha, P. Jeyaprakash, K. Geetha, S. Selvam, C. Vanniarajan	1174-1184

Research Notes

48.	Genetic analysis of polygenic traits in maize Rajan Prasad Mishra, Sandeep Kumar, Ashok Kumar and Tarkeshwar	1185-1190
49.	Multivariate analysis in sorghum (<i>Sorghum bicolor</i>) germplasm for yield contributing quantitative traits V. Santhiya, D. Kavithamani, B. Selvi, T. Reavanh and P. Vinoth	1191-1197
50.	Principal component analysis and genetic correlation studies in <i>Lens culinaris</i> Medik. S. Pavithra, A. Sarkar, S. K. Roy and P. M. Bhattacharya	1198-1205
51.	Genetic grouping of selected RILs for yield and attributing traits in determinate type of Indian bean P. Sathuri, A.D. Kyada, B.H. Kale, G.M. Patel, K.G. Modha, D.A. Chauhan and R.K. Patel	1206-1214

AGSC 2023

52.	Utilizing selection indices to enhance genetic gain in turmeric (<i>Curcuma longa</i> L.) Sampath Lavudya, Mukesh P. Patel, Sushil Kumar, Amarjeet Singh, Venna Santhosh, Anvesh Ellandula, B. Sriram Kumar, M. Himakara Datta, Tushar Arun Mohanty and Digvijay Singh	1215-1221
53.	Exploring genetic variability and association in QPM maize (<i>Zea mays</i>) inbred lines Anvesh Ellandula, Ajay Kumar, Satish Kumar Singh, Asish Narayan, Uttej Karla and U.S. Sree Vathsasagar	1222-1229
54.	Genetic analysis for yield and quality contributing parameters in ashwagandha [<i>Withania somnifera</i> (L.) Dunal] Venna Santhosh, B. Prem Kumar, B. Pratibha, L. Sampath and Akarsh Parihar	1230-1237
55.	Decoding the genetic network of F₂ population in naturally coloured cotton: variability, correlation, and path analysis R. Nivedha, S. Rajeswari, N. Premalatha and T. Nivethitha	1238-1245
56.	Exploration of potential donors for machine-amenable traits in desi chickpea (<i>Cicer arietinum</i> L.): towards enhancing agricultural automation and efficiency M. Himakara Datta, Shubham Yadu, Kanushree Nandedkar, Suman Rawte, Ritu R. Saxena and Ravi R. Saxena	1246-1254

57.	Standard heterosis and phenotypic correlation studies on yield contributing traits and quality parameters in tomato (<i>Solanum lycopersicum</i> L.) B. Sriram Kumar, S. C. Mali and A. I. Patel	1255-1262
58.	Studies on physio-chemical attributes of barnyard millet [<i>Echinochloa frumentacea</i> (Roxb.) Link] under sodicity R. Dhanalakshmi, A. Subramanian and S. Nithila	1263-1269
59.	Generation mean analysis study for qualitative and quantitative traits in cotton (<i>Gossypium hirsutum</i> L.) S. Subhashini, S. Rajeswari, N. Premalatha, T. Kalaimagal, M. Muthuswami, P. Jeyakumar and K. Keerthivarman	1270-1275
60.	Assessment of Quality Protein Maize (QPM) inbreds for genetic diversity using morphological characters and simple sequence repeats markers Digvijay Singh, Nitesh Kushwaha, Swapnil, Rabiya Parveen, Tushar Arun Mohanty, Sandeep Kumar Suman, Rajesh Kumar, Ajay Kumar and Mithilesh Kumar Singh	1276-1284