S. No.	Research article	NAAS Rating
	2022	
1	Kumar, B., Rakshit, S., Kumar, S., Singh, B. K., Lahkar, C., Jha, A. K., Kumar, K., Kumar, P., Choudhary, M., Singh, S. B., *et al.,* (2022). Genetic diversity, population structure and linkage disequilibrium analyses in tropical maize using genotyping by sequencing. *Plants* 11:799. doi:org/10.3390/plants11060799	9.94
2	Kumar, B., Choudhary, M., Kumar, P., Kumar, K., Kumar, S., Singh, B. K., Lahkar, C., Meenakshi, Kumar, P., Dar, Z. A., Devlash, R., Hooda, K.S., Guleria, S. K., and Rakshit S. (2022). Population structure analysis and association mapping for *Turcicum* Leaf Blight resistance in tropical maize using SSR markers. *Genes* 13: 618. doi: org/10.3390/genes13040618	10.10
3	Prasanna, B. M., Burgueño. J., Beyene, Y., Makumbi, D., Asea, G., Woyengo, V., Tarekegne, A., Magorokosho, C., Wegary, D., Ndhlela, T., ZamanAllah, M., Matova, P. M., Mwansa, K., Mashingaidze, K., Fato, P., Teklewold, A., Vivek, B. S., *Zaidi*, P. H., Vinayan, M. T., Patne, N., Rakshit, S., Kumar, R., Jat, S. L., Singh, S. B., Kuchanur, P. H., Lohithaswa, H. C., Singh, N. K., Koirala, K. B., Ahmed, S., Vicente, F. S., Dhliwayo, T. and Cairns, J. E. (2022). Genetic trends in CIMMYT's tropical maize breeding pipelines. *Scientific Reports* 12(1), p.20110.	10.38
4	Aggarwal, S. K., Hooda, K. S., Bagaria, P. K., Kaur, H., Gogoi, R., Chauhan, P., and Singh, R. P. (2022). Multiple modules for the management of banded leaf and sheath blight of maize in India. *Indian Phytopathology* 75(4):1065-1073.	5.95
5	Aggarwal, S. K., Malik, P., Neelam, K., Kumar, K., Kaur, R., Lore, J. S., and Singh, K. (2022). Genome-wide association mapping for identification of sheath blight resistance loci from wild rice (*Oryza rufipogon*). *Euphytica* 218(10):1-20.	7.90
6	Haque, M., Marwaha, S., Deb, C. K., Nigam, S., Arora, A., Hooda, K. S., Soujanya, P. L., Aggarwal, S. K., Lall, B., Kumar, M., Islam, S. (2022). Deep learning-based approach for identification of diseases of maize crop. *Scientific reports* 12(1):1-4.	10.38
7	Kumar, S., Das, A. K., Naliath, R., Kumar, R., Karjagi, C. G., Sekhar, J. C., Vayas, M., Yathish, K. R., Singh, A., Mukri, G., Rakshit, S. (2022). Potential use of random and linked SSR markers in establishing the true heterotic pattern in maize (*Zea mays*). *Crop and Pasture Science* 73(12):1345-53.	

8	epat, Seema., Pavuluri, K., Singh, V., Kumawat, A. and Kumar, D. (2022). Effect of irrigation and nitrogen management on yield, nutrient uptake and water productivity of direct–seeded rice in India, *Journal of Plant Nutrition* DOI: 10.1080/01904167.2021.2020819	7.71
9	Sepat, Seema., Bana, R. S. and Kumar, D. (2022). Effect of tillage on productivity and soil quality on diversified maize (*Zea mays* L.) based cropping system. *Indian Journal of Agronomy* 67(2):148-151.	9.42
10	Arora, K., Bana, R. S., and Sepat, Seema. (2022). Potassium management and residue recycling effects on wheat (Triticum aestivum) under maize (*Zea mays*)-wheat rotation Indian Journal of Agricultural Sciences 92 (12):1517- 1519.	#
11	Yadava, P., Dayaram, V., Agarwal, A., Kumar, K., et al. (2022). Fine-tuning the transcriptional regulatory model of adaptation response to phosphate stress in maize (Zea mays L.) Physiol Mol Biol Plants 28:885–898	9.94
12	Kumar, K., Jha, A. K., Kumar, B., Karjagi, C. G., Abhishek, A., Gambhir, G. Aggarwal, C., Tyagi, A., Sharma, P., Pandey, P., and Rakshit, S. (2022). Development of an efficient and reproducible in vitro regeneration and transformation protocol for tropical maize (*Zea mays* L.) using mature seed-derived nodal explants. Plant Cell Tissue and Organ Culture, 148: 557–571.	8.71
13	Singh, P., Kumar, K., Jha, A. K., Yadava, P., Pal, M., Rakshit, S., and Singh, I. (2022). Global gene expression profiling under nitrate stress in contrasting inbred lines identify key genes involved in nitrate stress adaptation in maize (*Zea mays* L.). *Scientific Reports* 12:4211	10.38
14	Kumar, P., Longmei, N., Jat, B. S., Choudhary, M., Yathish, K.R., Bhushan, B., Goyal, M. and Rakshit, S. (2022). Heterotic grouping of Indian baby corn lines based on combining ability. Indian Journal of Genetics and Plant Breeding 82 (02):161-166.	7.83
15	Wadhwa, M., Hundal, J. S., Kaur, H., Singh, A.S., Bakshi, M.P.S., Kumar, P., Choudhary, M. and Rakshit, S. 2022). Effect of sowing time on production potential of maize fodder and its nutritive value before and after ensiling. Indian Journal of Animal Research 1:5.	6.44
16	Gupta, M., Choudhary, M., Singh, A., Sheoran, S., Singla, D., and Rakshit, S. (2022). Meta-QTL analysis for mining of candidate genes and constitutive gene network development for fungal disease resistance in maize (*Zea mays* L.). The Crop Journal 11 (2), pp.511-522.	10.41
17	Sheoran, S., Gupta, M., Kumari, S., Kumar, S. and Rakshit, S. (2022). Meta-QTL analysis and candidate genes identification for various abiotic stresses in maize (*Zea mays* L.) and their implications in breeding programs. Molecular Breeding 42(5):1-26.	8.59

18	Ramya, Parakkunnel., Bhojaraja Naik, K., Girimalla,Vanishree., Susmita, C., Supriya, Purru., Bhaskar, K. U., Bhat, K.V., and Kumar, Sanjay. (2022). Gene fusions, micro-exons and splice variants define stress signaling by AP2/ERF and WRKY transcription factors in the sesame pan-genome. *Frontiers in Plant Science* 13:1076229.	10.73
19	Parakkunnel, R., Bhojaraja Naik, K., Susmita, C., Girimalla, V., Bhaskar, K. U., Sripathy, K. V., & Bhat, K. V. (2022). Evolution and co-evolution: insights into the divergence of plant heat shock factor genes. *Physiology and Molecular Biology of Plant*s 1-19.	9.94
20	Chaudhary, D. P., Singh, A., Sekhar, J. C., Kaul, Jyoti, Yadav, S., Tufchi, Mahak., Sethi, M., Devi, V., Kumar, R., and Rakshit, S. (2022). Analysis of maize populations for developing quality protein maize. *Maize Journal*. 11(1): 1-9.	3.72
21	Akanksha, Kaur, C., Devi, V., Singh, A., Das, A. K., Rakshit, S., and Chaudhary, D. P. (2022). A rapid single kernel screening method for preliminary estimation of *amylose* in maize. Food Analytical Methods 15:2163–2171	8.90
22	Kaur, C., Singh, A., Devi, V., Sethi, M., Chaudhary, D. P., Phagna, R. K., Langyan, Sapna., Bhushan, B., and Rakshit, S. (2022). Optimization of protein quality assay in normal, *opaque*-2 and quality protein maize. Front. Sustain. *Food Syst* 6:743019. doi: 10.3389/fsufs.2022.743019	9.04
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25	Yathish, K. R., Chikkappa, G. K., Gangoliya, S. S., Kumar, A., Preeti, J., Yadav, H. K., Srivastava, S., Kumar, S., Swamy, H. K. M., Singh, A., Phagna, R. K., Das, A. K., Sekhar, J. C., Hossain, F., Rakshit, S., and Gadag, R.N. (2022) Introgression of the low phytic acid locus (lpa2) into elite maize (*Zea mays* L.) inbreds through marker assisted backcross breeding(MABB). *Euphytica* 218:127. https://doi.org/10.1007/s1068102203076y, https:// krishi.icar.gov.in/jspui/handle/123456789/75967	7.90

26	Soujanya, P. L., Sekhar, J. C., Yathish, K. R., Chikkappa, G. K., Rao, K. S., Suby, S. B., Jat, S. L., Kumar, B., Kumar, K., Vadessery, Jyothilakshmi., Subaharan, K., Patil, J., Kalia, V. K., Dhandapani, A. and Rakshit, S. (2022). Leaf damage-based phenotyping technique and its validation against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize. *Frontiers in Plant Science* 13: 906207 doi:10.3389/fpls.2022.906207http://krishi.icar.gov. in/jspui/handle/123456789/75223	10.73
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28	Gowda, M. A. P., Sekhar, J. C., Soujanya, P. L., Yathish, K. R., Rahman, S. J., and Mallaiah, B. (2022). Screening of maize genotypes against fall armyworm, Spodoptera frugiperda (J.E. Smith) under artificial infestation. Biological Forum-An International Journal.14(2a): 249-254 http://krishi.icar.gov.in/jspui/handle/123456789/75539	3.73
29	Kumar, B., Choudhary, M., Kumar, K., Kumar, P., Kumar, S., Kumar, B., Sharma, M., Lahkar, C., Singh, B. K., Pradhan, H., Kumar, A. J., Kumar, S. and Rakshit S. (2022). *Maydis leaf blight of maize*: Update on status, sustainable management and genetic architecture of its resistance. Physiological and Molecular Plant Pathology 121: (2022) 101889. Doi: org/10.1016/j.pmpp2022.101889.	11.66
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20	Aggarwal, S. K., Singh, A., Choudhary, M., Kumar, A., Rakshit, S., Kumar, P., Bohra, A., and Varshney, R. K. (2022). Pangenomics in microbial and crop research: progress, applications, and perspectives. *Genes*. 13(4):598.	10.10
21	Ahangar, M. A., Wani, S. H., Zahoor, A. D., Roohi, J., Bansal, M., Choudhary, M., Aggarwal, S. K., Sabagh, A. E., Hassan, M. M. (2022). Distribution, etiology, molecular genetics and management perspectives of northern corn leaf blight of maize (*Zea mays* L.)" Phyton- International Journal of Experimental Botany 91(10):1-23 (IF 1.03) According to NAAS-7.03 (But not in NAAS list)	7.32

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23	Kumar, P., Choudhary, M., Halder, T., Prakash, N. R., Singh, V., Vineeth, T.V., Sheoran, S., Ravikiran, K. T. Longmei, N. Rakshit, S., and Siddique, K. H. M. (2022). Salinity stress tolerance and omics approaches: revisiting the progress and achievements in major cereal crops. *Heredity*.	9.82
24	Gupta, M., Choudhary, M. Kumar, H., Kaswan, V. Kaur, Y. Choudhary, J. R., and Yadav, S. (2022). Doubled haploid technology in maize (*Zea mays*): Status and applications. The Indian Journal of Agricultural Sciences 92(3):283–291.http://krishi.icar.gov.in/jspui/handle/123456789/75971	6.37
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27	Ramtekey, V., Cherukuri, S., Kumar S, K. V.Sripathy., Sheoran, S., Udaya Bhaskar K, Bhojaraja Naik K, Kumar, S., Singh, A. N., and Singh, H.V. (2022) Seed Longevity in Legumes: Deeper Insights into Mechanisms and Molecular Perspectives. *Frontiers in Plant Science* 13:918206	10.73
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