Technical articles published:

1. Sheelamary, S and **K. Lakshmi** (2020). Polyamines forms, biosynthesis and metabolism in plants. Indian Farmer 7(05): 404-407.
2. S. Sheelamary, **K. Lakshmi** and G. K. Sujayanand (2020). Biofortification of Crops to Address Global Zn Deficiency. Biotica Research Today 2(11): 1215-1217. www.bioticainternational.com
3. **K. Lakshmi,** V.P. Rabisha, K. Keerthana, A Selvi, S.Vasantha, S. Sheelamary and S. Karthigeyan (2021) **Identification of Differentially Expressed Transcripts in *Saccharum Spontaneum* Subjected To Salinity Stress through Suppression Subtractive Hybridization. Paper presented in** "International Plant Physiology Virtual Symposium on Physiological Interventions for Climate Smart Agriculture "IPPVS 2021".
4. A. Selvi, K.Devi, R.Manimekalai, P.T. Prathima, **K. Lakshmi** , V.P. Rabisha[1] and R. Gomathi. **Transcription factors identified for drought stress tolerance in sugarcane through RNA Seq.** "International Plant Physiology Virtual Symposium on Physiological Interventions for Climate Smart Agriculture "IPPVS 2021".
5. **BP07**: Gomathi Raju, Kohila S and **lakshmi Kasirajan**, Differential transcript expression profiling of sugarcane (Co 99004) for elevated temperature stress, In National seminar on abiotic stress management challenges and opportunities" held during October 25 and 26th 2018 at TNAU, Coimbatore. Pg No. 147.
6. R. Gomathi, S. Kohila and **Lakshmi** 2019. Participated and presented lead paper on "Climate change in sugarcane Agriculture: Metabolic and molecular mechanism of thermo-tolerance" in "International Conference on 'Plant Science Research", USA (04 March, 2019 to 06 March, 2019)"
7. **Lakshmi, K** and Suresha, G.S. Molecular cloning and sequence analysis of novel aerobic cyclase system, Fe-containing subunit (ACSF) coding gene from *Erianthus arundinaceus*. **International Symposium on "New Paradigms in Sugarcane Research**" held on **October 15-18, 2012**, at ICAR Sugarcane breeding Institute.
8. Appunu, T. Manjunatha, K. Mohanraj, A. Anna Durai, G. Suresha, Adhini S. Pazhany**, Lakshmi K.** (2013) Metabolic Engineering of Compatible Solutes Biosynthesis Pathways to Impart Abiotic Stress Tolerance in Sugarcane. *Biotechnology, Bioinformatics and Bioengineering journal*

List of papers presented in conferences

1. **L Kasirajan,** PP Thirugnanasambandam, A Furtado, FC Botha, RJ Henry **(2020)** Isolation and Characterization of Full-Length Phenylalanine Ammonium Lyase and Cinnamyl Alcohol Dehydrogenase Genes Involved in Lignin Biosynthesis of Erianthus Arundinaceus. Multidisciplinary Digital Publishing Institute Proceedings 36 (1), 174
2. PP Thirugnanasambandam**, L Kasirajan,** A Furtado, FC Botha, RJ Henry (2020) Control of Sugar and Fibre: Insights from Sugarcane Transcriptome Analyses Multidisciplinary Digital Publishing Institute Proceedings 36 (1), 204
3. **K. Lakshmi** Transcriptome and expression profiling of the highly polyploid sugarcane genome highlights key genes involved in cellulose and lignin biosynthesis. (2018)

International conference on Next Gen Crops for sustainable Agriculture held on July 19-20, 2018 in Chandigarh, India.

4. **K. Lakshmi** and S Vasantha Gene Expression Studies in Saccharum spontaneum, a wild relative of sugarcane in Response to Salinity" in **International Salinity Conference on "Resilient Agriculture in Saline Environments under Changing Climate: Challenges & Opportunities**" organised by Central Soil Salinity Research Institute, Karnal during 7 – 9 February 2019
5. Robert J Henry, Agnelo Furtado, Nam V. Hoang, Patrick J. Mason, Annelie Marquardt**, Lakshmi Kasirajan,** Prathima P. Thirugnanasambandam,Frikkie Botha and Blake Simmons. (2017) Transcriptomics of the highly polyploidy sugarcane geneome and discovery of important traits. International Symposium on Sugarcane Research since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
6. Prathima Perumal Thirugnanasambandam, Arun Meena S, Suparna T V, **Lakshmi Kasirajan** and A. Selvi. (2017) Comparative transcriptome analysis of the progenitor species of sugarcane for sucrose and fibre genes. International Symposium on Sugarcane Research since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
7. Jini Narayanan, R manimekalai, A selvi, **K. Lakshmi**, R. Gomathi. Development of NAC gene constructs for oxidative stress tolerance in sugarcane. International Symposium on Sugarcane Research since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
8. B. parameshwari, c Chinnaraja, K Bagyalakshmi, **K Lakshmi**, M. L Chhabra and R Viswanathan. Genetic variability of suppressor genes of sugarcane yellow leaf virus and sugarcane streak mosaic virus from india and their genomics. International Symposium on Sugarcane Research since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
9. **Lakshmi Kasirajan**, Nam V Hoang, Agnelo Furtado and Robert J henry. Transcriptome Characterization of Lignin and Cellulose Genes of Sugarcane Genotypes Contrasting For Fiber Content. International Symposium on Sugarcane Research since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
10. Sucrose Synthesis and accumulation in sugarcane in response to elevated temperature. R.Gomathi, S. Vasantha, S. Kohila and **K. Lakshmi**. International Symposium on Sugarcane Research Since Co 205: 100 Years and Beyond (SucroSym 2017) at ICAR SBI, Coimbatore, during the period of 18-21 September 2017
11. G.S. Suresha, **K. Lakshmi**, S.C. Divya, S. Parthiban P. Govindaraj and K. Hari. Profiling high biomass sugarcane clones for cellulose and lignin content National symposium on "Bioenergy for sustainable development-the potential role of sugar crops"23-25th June 2014.
12. **Lakshmi K**., Suresha G. S., and Kalaivaani. Genes identified and cloned for lignin modification in Erianthus a wild relative of sugarcane National symposium on "Bioenergy for sustainable development-the potential role of sugar crops"23-25th June 2014
13. S. Brindha, C. Chinnaraja, K. Bagyalakshmi, B. Parameswari**, K. Lakshmi**, P. Malathi, R. Viswanathan Genetic variability and potential recombination events in the P0 gene of sugarcane yellow leaf virus causing yellow leaf disease in sugarcane. National

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14. G. S. Suresha and **K. Lakshmi** Gene expression profiles of high temperature/ drought induced genes winter school Recent Approaches for Breeding Climate Resilient Sugarcane Varieties during 8-17, October Sugarcane Breeding Institute, Coimbatore. 2013
15. Crop simulation models in climate change studies K. Boomiraj, **K. Lakshmi** C. Appunu A. Christopher Lourduraj and P.K.Aggarwal, Winter School Recent Approaches for Breeding Climate Resilient Sugarcane Varieties during 8-17, October Sugarcane Breeding Institute, Coimbatore 2013
16. Cloning of genes and developing transgenic crops with enhanced tolerance to salinity and drought; K.C. Bansal, V. Chinnusamy, M. Dalal, A. Das, S. Shankar Verma, Parul Singhal, D. Tayal, **K. Lakshmi**, S.K. Lenka and Abhay Kumar International Conference on Biotechnology for Salinity & Drought Tolerance in Plants. 28-31 March, Islamabad, Pakistan 2005
17. Transgenic crops for enhanced yields under abiotic stress environments K.C. Bansal, V. Chinnusamy, M. Dalal, D. Goel, S. S. Verma, P. Singhal, D. Tayal, A. Das, **K. Lakshmi**, S.K. Lenka and Abhay Kumar National Seminar on Physiological and Biotechnological Approaches to Improve Plant Productivity15-17 March 2008, CCSHAU, Hisar, Haryana.