

Book Chapter

No.	Title of the chapter	Author (s)	No. Page	Year of Publication / Name of Edited Book Editors & Publisher names
1.	Impact of temperature extremes on sugarcane growth and development.	R.Gomathi, and S. Kohila	346	In .Biotechnological and conventional tools for biotic and abiotic stresses management in sugarcane. 2016. Pg. 162-170 Edited & Compiled by Dr. Bakshi Ram, P.Govindaraj, A.Ramesh Sundar and A.Bhaskaran Published by The Director, Sugarcane Breeding Institute. Coimbatore. <i>ISBN No. 978-93-85267-07-9</i>
2.	Screening methodologies for drought and salinity tolerance in sugarcane.	R.Gomathi, S.Vasantha and R. Arunkumar.	346	2016.In .Biotechnological and conventional tools for biotic and abiotic stresses management in sugarcane. Pg. 272-76. Edited and compiled by Dr. Bakshi Ram et al. Published by The Director, Sugarcane Breeding Institute. Coimbatore <i>ISBN No. 978-93-85267-07-9</i>
3.	Water induced stresses in sugarcane: Responses and Management.	R. Gomathi,	450	2018. In. Sustainable Sugarcane Production. Edited by Priyanka Singh and Ajay Kumar Tiwari, UP. Council of Sugarcane Research, Shahjahanpur, Published by Apple Academic Press USA. <i>ISBN 928-1-77188-702-1</i> Pg.189-216.
4.	Climate Change in Sugarcane Agriculture: Temperature Extremes Response on Growth and Development.	Gomathi, R. and S.Kohila.	385	2018.In. Abiotic stress management in sustainable Agriculture. pg.194- 209. Edited by P.Jeyakumar et al. Published by Dept. of Crop Physiology, TNAU, Coimbatore. <i>ISBN.No. 978-93-87317-77-1</i>
5.	Evaluation of promising	Gomathi, R. P.Govindaraj, Bakshi	450	2018.In: International STAI conference on "76th Annual

	sugarcane clones (Saccharum spp.) for drought tolerance.	Ram and K.Ramachandiran		convention and International Sugar Expo” pg. 112-138. Edited and published by The President STAI association of India, New Delhi, <i>ISBN. No.81-85871-90-6</i>
6.	Physiology of ratooning in sugarcane.	Gomathi, R.	145	2008, 2009, 2010, 2011, 2012 & 2013. In. Sugarcane Physiology. Edited by Plant Physiology Department, Sugarcane Breeding Institute, Coimbatore Published by Directorate of open and distance learning, TNAU, Coimbatore, Tamil Nadu.
7.	Physiological basis of waterlogging resistance in sugarcane physiology.	Gomathi, R.	145	2008, 2009, 2010, 2011, 2012 & 2013. In. Sugarcane Physiology. Edited by Plant Physiology Department, Sugarcane Breeding Institute, Coimbatore Published by Directorate of open and distance learning, TNAU, Coimbatore, Tamil Nadu.
8.	Physiology of ratooning in sugarcane	Gomathi, R.	189	2010. In. Improving Resource Use Efficiency in Sugarcane Production System. Edited by Rejula Shanthi, et al.2010 Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India.
9.	Estimation of proteins through HPLC”	Vasantha, S. and R. Gomathi	356	2009. In: Laboratory Manual-Winter School on “Application of Molecular Tools for Crop Improvement”. Edited By A.Selvi & N.Vijayan Nair. Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India.pp.80-81.

10.	Effect of waterlogging in sugarcane and its management	Gomathi, R.	245	2011. In. Sugarcane production technologies – Planting to Harvest. Edited by T.Rajula Shanthly, N.Vijaya Nair and C.Karpagam Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India. pp.
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12	Screening method for drought tolerance	Gomathi, R.	245	2011. In. Sugarcane production technologies – Planting to Harvest. Edited by T.Rajula Shanthly, N.Vijaya Nair and C.Karpagam: Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India. pp.
13.	Effect of waterlogging in sugarcane and its management	Gomathi, R.	245	2011.In. Sugarcane production technologies –Planting to Harvest. Edited by T.Rajula Shanthly, N.Vijaya Nair and C.Karpagam . Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India.pp.
14.	Sugarcane Physiology	Gururaja Rao, P.N., S. Venkataramana, S. Vasantha and R. Gomathi.	465	2012. In Hundred years of research in Sugarcane Breeding Institute. Edited by P. Govindaraj, K. Mohanraj, C. Appunu, V. Jayakumar, Ravinder Kumar, and T. Manjunatha, K. Sivaraman Published by Dr. N. Vijayan Nair, ICAR-SBI, Coimbatore. Publication No. 21.

15	Crop Production Technologies for changed climatic scenario.	Rakkiyappan P. and R. Gomathi.	330	2013. In. Breeding climate resilient sugarcane varieties. Edit. by: P.Govindaraj et al. published: Published by The Director, ICAR-Sugarcane Breeding Institute, Coimbatore - 641 007, Tamil Nadu, India.
16	Drought management in sugarcane	Gomathi, R., S.Vasantha and P.Rakkiyappan.	260	2013.In. Valar Thamil Ariveyal: Uzavum Unnavum. <i>Edited by</i> K. Senthil Kumar, M.Muthamil Selvan , S. Kirshnamurthi, P. Senthil Kumar , K.M. Chellamuthu. <i>Published by</i> All India Tamil Science Council, Tanjore.
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18	Physiological perspectives for waterlogging tolerance	Arunkumar, R., R. Gomathi, and K.Chandran. in sugarcane.	374	2016. In. Biotechnological and conventional tools for biotic and abiotic stresses management in sugarcane. Edited & Compiled by Dr. Bakshi Ram, P. Govindaraj, A. Ramesh Sundar and A.Bhaskaran and Published by. Dr. Bakshi Ram, The Director, CAR-SBI Pg. 151-157. ISBN No. 978-93-85267-07-9.
19	A review of climate change aspect of sugarcane physiology	Kohila, S. and Gomathi, R. 2016.	325	2016. In Tamil Book: Velan Ariviyal Tamil Eyakkam. Edited by R. Venodh, V.Uzhaganathan, R.Kalaiyarasi and T. Divya Priya Published by. The Director, Agricultural Science Tamil Association, New Delhi, Payer Marabeyal (Plant Genetics) pp: 251-255
20	Improvement in sugarcane productivity by using seaweed extract –An overview	Gomathi, R., S. Kohila and K. Ramachandran.	320	2017. In. Uzalaviyal. Edited &Published by M. Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No. 389-393. ISBN No. 978-93-87314-04-7

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22.	Response of sugarcane to Abiotic stresses and its management.	Gomathi, R., S. Vasantha, S. Venkataramana P.N. Gururaja Rao and P. Rakkiyappan	211	2015.In Current status of sugarcane Research in India. Edited by A.K.Tiwari, M.L.Lal and A.K.Singh. Published by Nova Publishers. Pg. 55-88. ISBN: 978-1-63463-458-8.
23.	Physiological perspective of sugarcane in response to drought stress.	Gomathi, R.	265	2017.In Crop Physiology (Payer Venaieyal (Tamil Book). Edited and published by Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No. 389-393. ISBN No. 978-93-87314-22-1.
24.	Climate Change in Sugarcane Agriculture: Temperature Extremes Response on Growth and Development.	Gomathi, R. and S.Kohila	382	2018. In. Abiotic stress management in sustainable Agriculture Edited by : P.Jeyakumar et al. 2018. Published by : Department of Crop Physiology, TNAU Coimbatore. ISBN.No. 978-93-87317-77-1.pgs. 194- 209.
25.	Studies on impact of salt stress osmotic Adjustment in sugarcane.	Gomathi, R., and V. Thandapani.	131	2018.In Tamil Book on “Tamilal Eyalum Payer Venayeyal”. Edited by R.Gomathi and K.Ramachandiran. Published by Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No. 19-23. ISBN No. 978-81-939394-0-6.
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27.	Mitigation methods in sugarcane under salinity stress.	Gomathi, R. and V. Thandapani.	131	2018. In Tamil Book on "Tamilal Eyalum Payer Venayeyal". Edited by R. Gomathi and K.Ramachandiran. Published by Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No. 85-89. <i>ISBN No. 978-81-939394-0-6.</i>
28.	Foliar application of sea weed extract on improving productivity of sugarcane ratoon crop.	Gomathi, R., K.Ramachandiran and S. Kohila.	131	2018. In Tamil Book on "Tamilal Eyalum Payer Venayeyal". Edited by R.Gomathi and K.Ramachandiran. Published by Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No: 97-103. <i>ISBN No. 978-81-939394-0-6.</i>
29	Impact of Oxidative stress on Gene expression in sugarcane	Manimekalai, R., Jini Narayanan, M. Gokul, A. Selvi, R. Gomathi and R. Arunkumar	131	2018.In Tamil Book on "Tamilal Eyalum Payer Venayeyal". Edited by :R.Gomathi and K.Ramachandiran. Published by: Muthamizh Sevan. Velan Ariviyal Tamil Eyakkam, New Delhi. P.No:97-103. <i>ISBN No. 978-81-939394-0-6.113-117</i>
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31	De-nova Transcriptomic sequencing and Analysis of Genes Associated with Heat Stress	R. Gomathi S. Kohila and K. Lakshmi	243	2020. Abiotic Stress Agriculture Edited By:Dr.M.Prakash et al.Published by International Books & Periodical Supply (<i>Publisher of Scientific Books</i>)

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32.	Physiological, Metabolic and Molecular Adaptation for Temperature Extremes in Sugarcane	R. Gomathi and S. Kohila	418	2021. In. Physiological Interventions For Developing Climate Resilient Commercial Crops. Edited by: R.Gomathi , A.H.Prakhas and Bakhsi Ram Published by: Sathish Serial Publishing House, Azadpur, New Delhi, New Delhi, 110033. P.No.75-112 ISBN No.:978-93-90660-537 IISBN: 970-93-90660-544
33.	Physiological Adaptations for Drought, Salinity and Waterlogging Stress in Sugarcane	R. Arun Kumar, S. Vasantha, R. Gomathi , Pooja and V. Krishnapriya	418	2021. In. Physiological Interventions For Developing Climate Resilient Commercial Crops Edited by: R.Gomathi , A.H.Prakhas and Bakhsi Ram Published by: Sathish Serial Publishing House, Azadpur, New Delhi, New Delhi, 110033. P.No.113-137 ISBN No.:978-93-90660-537 IISBN: 970-93-90660-544
34.	Adaptation and Mitigation Strategies of Sugarcane to Climate Change Scenario	R. Gomathi and P. Rakkiyappan	418	2021. In. Physiological Interventions For Developing Climate Resilient Commercial Crops. Edited by: R.Gomathi , A.H.Prakhas and Bakhsi Ram Published by: Sathish Serial Publishing House, Azadpur, New Delhi, New Delhi, 110033. P.No.165-185; ISBN No.:978-93-90660-537.IISBN: 970-93-90660-544
35.	Genomic and Proteomic Approaches for Improving Abiotic Stress Tolerance in Sugarcane	A.Selvi, R. Manimekalai, K. Devakumar, K. Lakshmi P.T. Prathima and R.Gomathi	418	2021. In.Physiological Interventions For Developing Climate-Resilient Commercial Crops. Edited by: R.Gomathi , A.H.Prakhas and Bakhsi Ram Published by: Sathish Serial Publishing House, Azadpur, New Delhi, New Delhi, 110033.

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36.	Heat Tolerance in Cereal Crops: An Overview	R. Gomathi and S. Kohila	415	2021.Physiological Interventions For Developing Climate Resilient Cereals and Fodder Crops. Edited by: R.Gomathi , Viswanathan, C., M. Prakash, M. Maheswari & Ajay Arora Published by: International Books & Periodical Supply (Publisher of Scientific Books) Service, New Delhi, 110034; ISBN No.:978- 93-90428-56-3EISBN: 978-93-90425-57-0; P.No.43-91.
37.	Maize and Drought: Morpho-Physiological Changes – A Review	V. Rajeswari, K.A. Mumithra Kamatchi, A. Senthil M.K. Kalarani and R.Gomathi	415	2021.Physiological Interventions For Developing Climate Resilient Cereals and Fodder Crops. Edited by: R.Gomathi , Viswanathan, C., M. Prakash, M. Maheswari & Ajay Arora Published by: International Books & Periodical Supply (Publisher of Scientific Books) Service , New Delhi, 110034; ISBN No.:978-93-90428-56-3EISBN: 978-93-90425-57-0; P.No.235-279.
38.	Role of Plant Hormones in Flooding Stress Tolerance in Rice	D. Vijayalakshmi, A. Vinitha, R. Jeevitha M. Raveendran and R.Gomathi	415	2021.Physiological Interventions For Developing Climate Resilient Cereals and Fodder Crops. Edited by: R.Gomathi , Viswanathan, C., M. Prakash, M. Maheswari & Ajay Arora. Published by: International Books & Periodical Supply (Publisher of Scientific Books) Service, New Delhi, 110034; ISBN No.:978-93-90428-56-3EISBN: 978-93-90425-57-0; P.No.405-415.
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43.	Management of Post-Harvest Deuteriation and Flowering in Sugarcane	R. Gomathi, R. Arun Kumar V. Krishnapriya, and M. Alagupalamuthirsolai.	240	2023. In. Improved Sugarcane Production Technologies. Editors. D,Puthira Prathap and P.Murali Published by. G.Hemaprabha, The Director, ICAR-SBI, Cbe . 114-129
44.	Co 14012 - A Climate Resilient Superior Variety for Tropical & Sub-Tropical India	R. Gomathi, Pooja, R. Arun Kumar V. Krishnapriya, Elayaraja and M. Alagupalamuthirsolai.	514	2023. In. 81 st STAI Annual Convention and "International Sugar Expo 2023 <i>Edited and Published by</i> The President STAI Association of India, New Delhi." ISBN-81 -85871-02-7. 67-78

