JOURNAL PUBLICATIONS

- Deguchi, M., Kane, S., Potlakayala, S., George, H., Proano, R., Sheri, V., Curtis, W. R., & Rudrabhatla, S. (2020). Metabolic Engineering Strategies of Industrial Hemp (*Cannabis sativa* L.): A Brief Review of the Advances and Challenges. *Frontiers in Plant Science, 11*(580621), 11.
- Ogden, A. J., Bhatt, J. J., Brewer, H. M., Kintigh, J., Kariuki, S. M., Rudrabhatla, S., Adkins, J. N., & Curtis, W. R. (2020). Phloem Exudate Protein Profiles during Drought and Recovery Reveal Abiotic Stress Responses in Tomato Vasculature. *International Journal of Molecular Sciences, 21*(12), 4461.
- Deguchi, M., Bogush, D., Weeden, H., Spuhler, Z., Potlakayala, S., Kondo, T., Zhang, Z. J., & Rudrabhatla, S. (2020). Establishment and optimization of a hemp (*Cannabis sativa* L.) agroinfiltration system for gene expression and silencing studies. *Scientific Reports, 10*(3504), 1-11.
- Soliman, M., Potlakayala, S., Millar, D., Weeden, H., Bogush, D., Deguchi, M., & Rudrabhatla, S. (2019). Comparing A Review of Heavy Metal Uptake and Their Toxicity on Plant and Human Health. *International Journal of Plant, Animal and Environmental Sciences, 9*, 182-189.
- Husain, R., Weeden, H., Bogush, D., Deguchi, M., Soliman, M., Potlakayala, S., Katam, R., Goldman, S., & Rudrabhatla, S. (2019). Enhanced tolerance of industrial hemp (*Cannabis sativa* L.) plants on abandoned mine land soil leads to overexpression of cannabinoids. *PlosOne, 14*(8).
- Soliman, M., Potlakayala, S., Desai, D., Weeden, H., Husain, R., Lookfong, N., Trite, T., Spagnola, J., Amin, S., & Rudrabhatla, S. (2019). Function of the Endocannabinoid System in Neurodegenerative Diseases and Cancers. *American Journal of Plant Sciences, 10*(10), 1839-1854.
- Shukla, V., Upadhyay, R. K., Tucker, M. L., Giovannoni, J. J., Rudrabhatla, S. V., & Mattoo, A. K. (2017). Transient regulation of three clustered tomato class-I small heat shock chaperone genes by ethylene is mediated by SIMADS-RIN transcription factor *Scientific Reports, 7*(6474), 12.
- Morales, D., Potlakayala, S., Soliman, M., Daramola, J., Weeden, H., Jones, A., Kovak, E., Lowry, E., Patel, P., Puthiyaparambil, J., Goldman, S., & Rudrabhatla, S. (2017). Effect of Biochemical and Physiological Response to Salt Stress in *Camelina sativa*. *Communications in Soil Science and Plant Analysis, 48*(7), 716-729.
- Kakuturu, J., Josekutty, P. C., Potlakayala, S., Reitzel, M., Salim, K., Charyulu, S., Adeyiga, R., Menon, S., Goldman, S. L., Patel, P., Chorney, M. J., & Rudrabhatla, S. (2014). Callus induction and RAPD analysis of *Simarouba glauca* DC. *African Journal of Biotechnology, 13*(53), 4766-4774.
- Abou-Alaiwi, W. A., Potlakayala, S. D., Goldman, S. L., Josekutty, P. C., Karelia, D. N., & Rudrabhatla, S. V. (2012). *Agrobacterium*-mediated transformation of the medicinal plant Centaurea montana. *Plant Cell Tissue and Organ Culture, 109*(1), 1-8.
- Alaiwi, W. A., Sairam, R. V., Josekutty, P. C., Potlakayala, S. D., Karelia, D., & Goldman, S. L. (2012). *In vitro* regeneration, flowering, and cell culture of Centaurea species. *African Journal of Biotechnology, 11*(9), 2296-2302.
- Josekutty, P., Potlakayala, S. D., Templin, R., & Rudrabhatla, S. (2011). *In Vitro* Flowering Studies with Nine Cultivars of Perennial Ryegrass (*Lolium perenne* L.). *Floriculture and Ornamental Biotechnology, 5*(1), 45-49.
- Nada, S., Chennareddy, S., Goldman, S., Rudrabhatla, S., Potlakayala, S. D., Josekutty, P., & Deepkamal, K. (2011). Direct Shoot Bud Differentiation and Plantlet Regeneration from Leaf and Petiole Explants of *Begonia tuberhybrida*. *HORTSCIENCE, 46*(5), 759-764.
- Alaiwi, W. A., Josekutty, P. C., Goldman, S. L., Potlakayala, S. D., & Sairam, R. V. (2011). Efficient *in vitro* propagation of *Centaurea montana* L. *Propagation of Ornamental Plants, 11*(1), 40-43.
- Sadia, B., Josekutty, P. C., Potlakayala, S. D., Patel, P., Goldman, S., & Rudrabhatla, S. V. (2010). An efficient protocol for culturing meristems of sorghum hybrids. *Phyton, International Journal of Experimental Botany, 79*(34), 177-181.

- Karelia, N., Desai, D., Hengst, J. A., Amin, S., Rudrabhatla, S. V., & Yun, J. (2010). Selenium-Containing Analogs of SAHA Induce Cytotoxicity in Lung Cancer Cells. *Bioorganic & Medicinal Chemistry Letters, 20*(22), 6816-6819.
- Zhang, S., Rudrabhatla, S. V., Grefer, D., Feasel, J., Ferencak, M., & Goldman, S. L. (2009). Resistance to *Xanthomonas campestris* pv. pelargonii in geranium and diagnosis of the bacterial blight using polymerase chain reaction. *Archives of Phytopathology and Plant Protection, 42*(12), 1109-1117.
- Zhang, S., Grefer, D., Feasel, J., Ferencak, M., Rudrabhatla, S. V., & Goldman, S. L. (2009). Exogenous methyl jasmonate inhibits the spread/multiplication of *Xanthomonas campestris* pv. pelargonii in the leaves of *Pelargonium* x *hortorum*. *Archives of Phytopathology and Plant Protection, 42*(10), 930-939.
- Al-Abed, D., Madasamy, P., Talla, R., Goldman, S., & Rudrabhatla, S. (2007). Genetic Engineering of Maize with the *Arabidopsis* DREB1A/CBF3 Gene Using Split-Seed Explants. *Crop Science, 47*(6), 2390-2402.
- Al-Abed, D., Rudrabhatla, S., Talla, R., & Goldman, S. (2006). Split-seed: a new tool for maize researchers. *Planta, 223*(6), 1355-1360.
- Sairam, R. V., & Prakash, C. S. (2005). OBPC Symposium: maize 2004 & beyond—Can agricultural biotechnology contribute to global food security? *In Vitro Cellular & Developmental Biology - Plant, 41*(4), 424-430.
- Sairam, R., Chennareddy, S., Parani, M., Zhang, S., Al-Abed, D., Abou-Alaiwi, W., & Goldman, S. (2005). OBPC Symposium: Maize 2004 & beyond—Plant regeneration, gene discovery, and genetic engineering of plants for crop improvement. *In Vitro Cellular & Developmental Biology - Plant, 41*(4), 411–423.
- Parani, M., Rudrabhatla, S., Myers, R., Weirich, H., Smith, B., Leaman, D. W., & Goldman, S. L. (2004). Microarray analysis of nitric oxide responsive transcripts in *Arabidopsis*. *Plant Biotechnology Journal, 2*(4), 359-366.
- Franklin, G., Carpenter, L., Davis, E., Reddy, C. S., Al-Abed, D., Abou Alaiwi, W., Parani, M., Smith, B., & Sairam, R. V. (2004). Factors influencing regeneration of soybean from mature and immature cotyledons. *Plant Growth Regulation, 43*(1), 73-79.
- Sairam, R. V., Franklin, G., Hassel, R., Smith, B., Meeker, K., Kashikar, N., Parani, M., Al-Abed, D., Ismail, S., Berry, K., & Goldman, S. L. (2003). A study on the effect of genotypes, plant growth regulators and sugars in promoting plant regeneration via organogenesis from soybean cotyledonary nodal callus. *Plant Cell, Tissue and Organ Culture, 75*(1), 79-85.
- Sairam, R. V, Parani, M., Franklin, G., Lifeng, Z., Smith, B., MacDougall, J., Wilber, C., Sheikhi, H., Kashikar, N., Meeker, K., Al-Abed, D., Berry, K., Vierling, R., & Goldman, S. L. (2003). Shoot meristem: an ideal explant for *Zea mays* L. transformation. *Genome, 46*(2), 323-329.
- Sairam, R. V., Wilber, C., Franklin, J., Smith, B., Bazil, J., Hassel, R., Whaling, D., Frutiger, K., Blakey, C. A., Vierling, R., & Goldman, S. L. (2002). High-frequency callus induction and plant regeneration in *Tripsacum dactyloides* (L.). *In Vitro Cellular & Developmental Biology - Plant, 38*, 435-440.
- Sairam, R. V., Seetharama, N., Shyamala, T., & Devi, P. S. (2000). Plant regeneration from scutella of immature embryos of diverse sorghum genotypes. *Cereal Research Communications, 28*, 279-285.
- Seetharama, N., Sairam, R. V., & Rani, T. S. (2000). Regeneration of sorghum from shoot tip cultures and field performance of the progeny. *Plant Cell, Tissue and Organ Culture, 61*(2), 169-173.
- Sairam, R. V., Seetharama, N., Devi, P. S., Verma, A., Murthy, U. R., & Potrykus, I. (1999). Culture and regeneration of mesophyll-derived protoplasts of sorghum [*Sorghum bicolor* (L.) Moench]. *Plant Cell Reports, 18*(12), 972-977.

BOOK CHAPTERS

- Mattoo, A. K., Upadhyay, R. K., & Rudrabhatla, S. (2015). Abiotic Stress in Crops: Candidate Genes, Osmolytes, Polyamines, and Biotechnological Intervention. In Pandey, G.K. (Eds.), *Elucidation of Abiotic Stress Signaling in Plants: Functional Genomic Perspectives.* (2), (pp. 415-437). New York, NY: Springer. Peer-reviewed/refereed.
- Josekutty, P., Potlakayala, S. D., Templin, R., Vaidya, A., Ryan, S., Karelia, D., Karelia, N., Rao, V., Tonapi, V., Tabatabai, B., Fofanah, F., Morales, D., & Rudrabhatla, S. (2012). Genetic Engineering for Bioenergy Crops. In Kole, C., Joshi, C.P., Shonnard, D.R. (Eds.), *Handbook of Bioenergy Crop Plants* (pp. 31-53). Boca Raton, FL: CRC Press. Peer-reviewed/refereed.
- Bhandari, H. S., Ebina, M., Saha, M. C., Bouton, J. H., Rudrabhatla, S. V., & Goldman, S. L. (2011). Panicum. In Kole, C. (Eds.), *Wild Crop Relatives: Genomic and Breeding Resources, Millets and Grasses* (pp. 175-196). Berlin, Heidelberg: Springer. Peer-reviewed/refereed.
- Goldman, S. L., Rudrabhatla, S., Muszynski, M. G., Scott, P., Al-Abed, D., & Potlakayala, S. D. (2010). Understanding and Manipulation of the Flowering Network and the Perfection of Seed Quality. In Kole, C., Michler, C.H., Abbott, A. G., and Hall, T.C. (Eds.), *Transgenic Crop Plants.* (2), (pp. 167-198). Berlin, Heidelberg: Springer-Verlag. Peer-reviewed/refereed.
- Rudrabhatla, S. V., Al-Abed, D., Johnson, J., Raab, M., Muszynski, M. G., Reddy, T. V., & Goldman, S. (2008). Maize. In Kole, C. and Hall, T.C. (Eds.), A Compendium of Transgenic Crop Plants. (1), (pp. 49-82). West Sussex: John Wiley & Sons Ltd.. Peer-reviewed/refereed
- Mythili, P. K., Rani, T. S., Sairam, R. V., Reddy, V. D., Harshavardhan, D., & Seetharama, N. (2004). Sorghum tissue culture and transformation research. In Seetharama, N and Godwin, I (Eds.), *Sorghum Tissue Culture and Transformation* (pp. 51-56). Enfield, NH: Science Publishers, Inc.. Peer-reviewed/refereed.
- Seetharama, N., Sairam, R. V., Nwanze, K. F., & Subramanian, V. (1997). Biotechnology and sorghum improvement for insect resistance. In Sharma, H.C., Singh, F, and Nwanze, K.F. (Eds.), *Plant Resistance to Insects in Sorghum* (pp. 127-131). Patancheru 502 324, Andhra Pradesh, India: International Crops Research Institute for the Semi-Arid Tropics. Peer-reviewed/refereed.

PATENTS

- Rudrabhatla, S. V., Templin, R. E., Potlakayala, S. D., Patent, "*In vitro* flowering/seed set leading to partial or complete male sterility in grasses.", Sponsor/Agency Award number: 8,399,255. (application: March 23, 2011, approved: March 19, 2013, licensed: March 19, 2013).
- Goldman, S. L., Rudrabhatla, S. V., Madasamy, P., Styczynski, M., Raab, M. R., Patent, "Plants expressing environmental stress tolerances having petunia CBF genes therin.", Sponsor/Agency Award number: 8,173,869. (application: June 2007, approved: May 2012, licensed: May 8, 2012).
- Rudrabhatla, S. V., Goldman, S. L., Patent, "Method for producing direct *in vitro* flowering and viable seed from cotyledon, radicle, and leaf explants, and plants produced therefrom.", Sponsor/Agency Award number: 7,547,548. (application: July 2005, approved: June 16, 2009, licensed: June 2009).