

Papers published by VSI scientists & technologists

- **Bhagat DL, Pawar BH, Dalvi SG (2019)**
Ceratocystisfimbriata- a new pathogen causing sett rotting in sugarcane
Proceedings of 77th Annual Convention of STAI; 168-175
- **Dalvi SG, Tawar PN, Suprasanna P (2019)**
Vasant Urja: A versatile nano-chitosan derivative for sustainable sugarcane production
Proceedings of 65th Annual Convention of DSTA; 122-130
- **Deshmukh PS, Kharade JP, Surwase SA (2019)**
Use of STCR technology and bio fertilizer for sustainable soil fertility and sugarcane productivity
Proceeding of 77th Annual Convention of STAI; 112-117
- **Deshmukh Shivajirao (2019)**
How Indian Growers can switch over to another crop
Proceedings of International conference of World Association of Beet and Cane Growers (WABCG),
Riberieo Preto, Brazil; 88-91
- **Gaikwad HD, Hasabnis SN, Dalvi SG (2019)**
Oligochitosan as an effective modulator to manage the yield and productivity of onion infected by
Alternariaporri
Intl J Curr Microbiol App Sci; 8 (5); 555-561
- **Gaikwad HD, Hasabnis SN, Kadam MB, Dalvi SG (2019)**
Antifungal activity of oligochitosan against purple blotch pathogen (*Alternaria porri* (Ellis) Cif) of onion
International Journal of Chemical Studies; 7 (6); 2425-2429
- **Ghodke PV (2019)**
Sugarbeet cultivation in Maharashtra state and its processing
Souvenir of Chaitra Palavi, at Krishi Vigyan Kendra, Baramati, Pune; 34-36
- **Ghodke PV (2019)**
Effect of Plant Growth Regulators (PGRs) for enhanced sugarcane yield and quality
Proceedings of 77th Annual Convention of STAI; 93-99
- **Hapase RS, Repale JM (2019)**
Stability of performance of yield and quality characters in sugarcane
Proceedings of 77th Annual Convention of STAI; 22-27
- **Kamble PK, Lohate SR, Hasabnis SN, Dalvi SG, Choudhari SR (2019)**
Efficacy of Irradiated Chitosan in Management of Powdery Mildew of Pea
Intl J Curr Microbiol App Sci; 8(12); 1879-1885
- **Mirajkar SJ, Devarumath RM, Nikam AA, Sushir KV, Babu KH, Suprasann P (2019)**
Sugarcane (*Saccharum* spp.): Breeding and Genomics (Chapter XI). In 'Advances in Plant Breeding
Strategies: Industrial and Food Crops (Vol. 6) by Al-Khayri, Jameel M., Jain, S. Mohan, Johnson, Dennis
V. (Eds.), Springer; 363-406
- **Mirajkar SJ, Dalvi SG, Ramteke SD, Suprasanna P (2019)**
[Foliar application of gamma radiation processed chitosan triggered distinctive biological responses in
sugarcane under water deficit stress conditions](#)
International Journal of Biological Macromolecules; 139; 1212-1223
- **Patil MA, Pawar MW, Ghodke SD (2019)**
Bio-herbicidal potential of microorganisms against *Parthenium hysterophorus*
Proceedings of 77th Annual Convention of STAI; 160-167
- **Nigade KG, Ghodke SD (2019)**
Isolation & identification of potash mobilizing bacteria and its effect on growth of sugarcane
Proceedings of 77th Annual Convention of STAI; 85-92
- **Repale JM, Hapase RS (2019)**
Evaluation of performance of early and midlate clones for Maharashtra
Proceedings of 77th Annual Convention of STAI; 3-12

- **Shinde PP (2019)**
Increasing sugarcane productivity through subsurface drip irrigation
Proceedings of 77th Annual Convention of STAI; 198-204
- **Shaikh T, Dalvi SG, Suprasanna P, Pawar BH (2019)**
Effect of chitosan-silver nano-composit with *Trichoderma viridaeon Ceratocystis paradoxa*
Proceedings of 77th Annual Convention of STAI; 149-159
- **Dani RV, Sidanale VP, Patil RR (2019)**
Technological advancements in sugar processing
Proceedings of 65th Annual Convention of DSTA; 293-308
- **Panda S, Bhosale RN, Dani RV (2020)**
Essentials of food safety in production of white sugar
Proceedings of STAI all India one-day seminar on “Advances in sugar grading and food safety standards to produce Quality Sugar”, at Belgavi, Karnataka; 30-36
- **Panda S, Patil RR, Dani RV (2020)**
Adoption of HACCP in sugar mill for quality production with enhanced efficiency (Part-1)
Proceedings of STAI all India one day seminar on “Advances in sugar grading and food safety standards to produce Quality Sugar” at Belgavi, Karnataka; 53-62
- **Panda S, Bhosale RN, Patil RR, Dani RV (2019)**
Post harvesting management and microbial contamination control
Proceedings of 77th Annual Convention of STAI; 403-416
- **Panda S, Patil RR, Dalvi LS, Dani RV (2019)**
Effective control of microorganisms - Tool for revenue gain
Proceedings of 49th Annual Convention of SISSTA; 236-248
- **Sapkal N, Deshmukh P, Dani RV, Sapkal DB (2019)**
Innovations for water saving in cogeneration plant at Dr. Patangrao Kadam Sonhira SSK Ltd.
Proceedings of 65th Annual Convention of DSTA; 199-211
- **Sidanale VP (2019)**
Effect of SO₂ content on keeping quality of sugar
Proceedings of 77th Annual Convention of STAI; 452-460
- **Sidanale VP, Dani RV (2019)**
Monitoring and certification of ethanol production from sugarcane juice or BH Molasses
Proceedings of STAI seminar on “Optimizing ethanol production in distilleries attached with sugar mills- Experiences gained and way forward” at Goa; 1-15
- **Sidanale VP, Dani RV, Patil PS, Shendre KV (2019)**
Implementation of A₂ massecuite boiling scheme - A Case Study at Kumbhi Kasari SSK
Proceedings of 49th Annual Convention of SISSTA; 232-235
- **Chandgude RA, Patil PG (2019)**
Enhancement of mill performance by adopting Low-Speed Milling in Sugar Industry’
Proceedings of 30th ISSCT Congress, Tucuman, Argentina; 1014-1023
- **Patil PG, Chandgude RA (2019)**
Implementation of variable frequency drive for fibrizer to achieve the ideal preparatory index
Proceedings of 30th ISSCT Congress, Tucuman, Argentina; 921-927
- **Patil PG, Chandgude RA, Sidanale VP (2019)**
Advance drive system with new accessories for Batch of machine
Proceedings of 49th Annual Convention of SISSTA; 168-174
- **Shripatnala SS, Chandgude RA, Patil PG, Kulkarni UA (2019)**
Efficacy of Planetary Gearbox in sugar plant
Proceedings of 77th Annual Convention of STAI; 313-326
- **Shripatnala SS, Kulkarni UA (2019)**
Monitoring Steam Turbine losses to enhance efficiency
Proceedings of 49th Annual Convention of SISSTA; 145-155

- **Arora R, Behera S, Sharma NK, Kumar S (2019)**
Evaluating the pathway for co-fermentation of glucose and xylose for enhanced bioethanol production using flux balance analysis
Biotechnology Bioprocess Engineering; 24; 924-933
 - **Burase RV, Patil SV, Joshi RD (2019)**
Isolation of *Thiobacillus* species from distillery spent wash and its sulfide oxidation activity
International Journal of Pharmacy and Biological Sciences 9 (2); 152-158
 - **Burase RV, Patil SV, Joshi RD (2019)**
Minimization of sulfide content of spent wash during biomethanation using isolated consortia of sulphur oxidizing microorganisms
Journal of Advances in Applied Sciences and Technology; 4 (1); 8-17
 - **Jagatee S, Rout JR, Behera S, Ram SS, Sudarshan M, Pradhan C, Sahoo SL, Mohanty RC (2020)**
Effect of enzymatic hydrolysis on structural, chemical and elemental properties of sweet potato flour
Waste and Biomass Valorization; 1-11
 - **Patil SV (2019)**
Optimizing ethanol production from sugarcane juice/syrup, B-Heavy molasses and sugar
Proceedings of STAI seminar on “Optimizing ethanol production in distilleries attached with sugar mills- Experiences gained and way forward”; 36-50
 - **Patil SV, Konde KS, Patil SD, Burase RV (2019)**
2G lactic acid production from sugarcane bagasse using *Bacillus coagulans* NCIM 5648
Proceedings of 30th ISSCT Congress, Tucuman, Argentina; 30; 1853-1859
 - **Alhat EA, Uphade K, Chauhan SS, Nimbalkar DS (2019)**
A case study of injection channel / spray pond overflow treatment plant at UPSCL
Proceedings of 77th Annual Convention of STAI; 529-535
 - **Urduke A, Dalvi SG, Nimbalkar DS (2019)**
Treatment of spray-pond overflow wastewater of sugar mills using microalgae
Proceedings of 30th ISSCT Congress, Tucuman, Argentina; 30; 234-241
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Paper Presentations

- **Dalvi SG (2019)**
Chitosan based chitinase induction for mitigating multiple stresses adopting climate change sustainably
International conference on “Advances in agriculture under changing climate scenario for sustainable global development” at University of Alahabad, Prayagraj, Uttar Pradesh
- **Dalvi SG (2019)**
Bio-polymers waste and its application for sustainable agriculture
State level Conference on “Interdisciplinary Advances in Applied Biotechnology” (IAAB- 2019) at Dr. DY Patil College of Science, Commerce & Arts, Pimpri, Pune
- **Patil SV (2019)**
Perfecting recoveries from distillery waste water
Global Water Summit at London, UK
- **Patil SV (2019)**
Optimizing cost-economics of ethanol production from sugarcane juice/syrup, B heavy molasses and sugar”
Seminar organized by All India Distillers’ Association (AIDA) at Jaipur

- **Patil SV, Konde KS, Godage RV, Patil DA (2019)**
A Case Study- Optimizing fuel ethanol production from Sugar cane juice, B-heavy Molasses, C-Molasses and Sugar
Presented in the National Seminar on Biofuel Production in India; Potential, Prospect and Technology at CSIR- Indian Institute of Petroleum, Dehradun (Uttarakhand)

Presentations in the workshop on “Use of sugarcane juice/syrup, BH molasses and sugar for enhancement of fuel ethanol production and recent advances” organized by VSI and MRSSK Sangh at VSI on 28th August, 2019

- **Patil SV (2019)**
Cost economics of ethanol production from sugarcane juice/syrup BH molasses and sugar
 - **Konde KS (2019)**
Evaluation of pilot scale plant performance of pre-clarified molasses to improve alcoholic fermentation
 - **Deshmukh AB (2019)**
Potash recovery from incineration boiler ash
 - **Patil SA (2019)**
Ethanol production from white sugar or raw sugar” presented in one-day workshop on
 - **Sidnale VP, Godage RV (2019)**
Monitoring and certification of ethanol production from sugarcane juice and B-Hy molasses
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Poster Presentation

2nd International Conference and Exhibition at VSI during Jan. 31 - Feb.2, 2020

- **Abhijeet B, Muley A, Aniruddha B, Pandit B, Rekha S, Singhal A, Dalvi SG**
Novel, green approach for hydrolysis whey protein isolates by hydrodynamic cavitation and whey protein induced metabolites and growth enhancement in vitro sugarcane
- **Chavan RB, Chaudhary N, Dalvi SG, Kumar M, Tillu AR, Sarukte H, Gaikwad SS, Harer SH, Rajawat RK, Suprasanna P**
Utilization of indigenously developed *10 mev rf linac* for studies on enhancement of bio-stimulating characteristics of chitosan
- **Deshmukh PS, Kharade JP**
Foliar application of seaweed extract on sugarcane productivity and nutrient availability
- **Deshmukh PS, Kharade JP**
Modeling relationship between soils K, plant K, sugarcane yield and juice quality grown in inceptisols of Maharashtra
- **Gore SB, Tawar PN, Dalvi SG**
Use of chitosan stabilized copper nanoparticles improves germination and seedling vigor in sugarcane single eye buds
- **Ghodke SD, Mali BG, Ghodke PV**
Isolation of Microorganisms from VSI’s Jeevamrut and optimization of substrate for Jeevamrut preparation
- **Ghodke SD, Manjul US, Jadhav DS**
Effect of graded levels of Iron and Zinc solubilizing microbial liquid bio-inoculant on yield and quality of sugarcane
- **Ghodke SD, Patil MA, Patil PM**
Evaluation of effect of toxins of *Fusarium spp.* for control of *Parthenium* weed

- **Hapase PR, Hapase RS**
To raise the sugarcane seedlings of bi-parental crosses by using different substrates
- **Hapase RS, Repale JM**
VSI 12121 (VSI 08005) - A new promising sugarcane genotype for penninsular zone
- **Kharade JP, Deshmukh PS, Sable SK**
Response of soil and foliar application of multinutrient on growth, yield and productivity of sugarcane
- **Kharade JP, Deshmukh PS, Surwase SA**
Soil test crop response based recommendation technology and biofertilizer for desired target of pre-seasonal sugarcane
- **Kotgire GS, Pawar BH, Dalvi SG, Atre GA, Konde KS**
Nano-biotechnological approach with irradiated chitosan and silver nanoparticles for controlling wilt disease of chick pea caused by *F. oxysporum f. sp. ciceri*
- **Mali BG, Ghodke SD**
Isolation, screening and characterization of Exopolysaccharide producing bacteria from sugarcane Rhizosphere
- **Manjul US, Ghorpade MD, Ghodke SD, Jadhav DS, Deokar SR, Lahare SB**
Evolution and evaluation of bio-efficacy of newly isolated fungi as a bio-control agents on sugarcane white fly, *Aleurolobus barodensis* Mask
- **Mayur Saindane, Appunu C, Harinath Babu K**
Sugarcane transformation for abiotic stress tolerance using bet genes
- **Muley AB, Pandit AB, Singhal RS, Dalvi SG**
Novel, green approach for hydrolysis whey protein isolates by hydrodynamic cavitation and whey protein induced metabolites and growth enhancement in vitro sugarcane
- **Nigade KG, Ghodke SG**
Entomopathogenic Nematode for control of white grub
- **Nigade KG, Manjul US, Ghodke SD**
Effect of potash mobilizing bacteria on growth and yield of sugarcane
- **Nikam AA, Devarumath RM, Tawar PN, Suprasanna P**
Enhancement of genetic variation frequencies through *in vitro* mutagenesis using ethylmethane sulfonate (EMS) as chemical mutagen in sugarcane cv. Co 86032
- **Pawar BH, Kotgire GS, Atre GE**
Efficacy of chemical fungicides for the control of pokkah boeng disease of sugarcane
- **Pawar DS, Hapase RS, Repale JM**
Assessment of Promising sugarcane genotypes for their yield potential
- **Pawar MW, Ghodke SD, Jadhav SD**
Effect of foliar application of consortium of endophytic nitrogen fixing bacterial liquid on yield and quality of sugarcane-Recipient of third prize for poster presentation
- **Repale JM, Hapase RS**
Evaluation of promising sugarcane clones for cane and sugar yield for Maharashtra
- **Shinde PP**
Mechanization of sugarcane planting
- **Shinde PP**
Earthing up equipment for sugarcane cultivation
- **Shinde PP**
Subsurface drip irrigation in sugarcane
- **Shinde PP**
Drip fertigation in sugarcane
- **Sawant RA, Meti NT**
The effect of sodium Hypochlorite on nutrient medium sterilization in sugarcane micro propagation
- **Talekar SD, Hapase RS**
Evolution and Evaluation of sugarcane clones for salt tolerance
- **Tawar PN, Pawar MW, Meti NT**
Biochemical and physiological responses of somaclones of sugarcane to moisture stress

- **Wani KR, Ghawate AN, Gore SB, Tawar PN, Dalvi SG**
Use of an Irradiated chitosan improves the morphology and survival percentage in micropropagated sugarcane plantlets
- **Yadav RG, Shitole TD (2020)**
Field evaluation of IPM Technology against early shoot borer, *Chilo infuscatellus* (Snellen) in sugarcane
- **Yadav RG, Shitole TD (2020)**
Screening of sugarcane genotypes for their reaction against early shoot borer, *Chilo infuscatellus* (Snellen)
- **Borawke SD**
Boiler water treatment
- **Panda S, Bhosale RN, Dani RV**
Hazard free granulated sugar, a need for public health
- **Panda S, Bhosale RN, Dani RV, Patil RR**
Control of sugar losses during post harvesting of sugar cane and poor mill sanitation
- **Sidanale VP**
Sugar production by single sulphitation
- **Sidanale VP, Patil RR, Dalvi LS**
Emission of SO₂ gas from sugar mills
- **Chandgude RA, Kotkar AB**
Selection of planetary gearbox for sugarcane mill drive
- **Shripatnala SS, Thorat SB, Kulkarni UA**
Optimizing imbibition for effective plant performance
- **Havale SM, Naik NM, Patil SV**
Head space solid phase microextraction-gas chromatography mass spectrometry (HS-SPME-GC-MS) technique for determination of volatile compounds in alcoholic beverages
- **More MG, Behera S, Konde KS, Patil SV**
Technology for invert sugar production through sucrose and sugarcane juice hydrolysis
- **Nikam PP, Deshmukh AB, Patil SA, Patil SV**
Pre-clarification of molasses to improve the fermentation efficiency and spent wash quality
- **Patil DA, Godage RV, Gaikwad YB, Patil SV**
A Case Study- Fuel Ethanol Production from Sugarcane juice, B-heavy Molasses and C-Molasses
- **Patil SS, Burase RV, Konde KS, Patil SV**
L (+)- lactic acid production from sugarcane juice using *Bacillus coagulans*
- **Pawar N, Deshmane AB**
Exploring potential of sugar mill effluent to grow *Chlorella* for biofuels production
- **Sutar SA, Patil SA, Konde KS, Patil SV**
Process development for second generation (2G) ethanol production through enzymatic route
- **Yadav SR, Deshmukh AB, Konde KS, Patil SV**
Recovery of Potash from Incineration Boiler Ash
- **Deshmane A, Pawar S, More Y, Shirsat R, Nikam L, Chaskar M**
Exploring Photo-catalytic treatment option for molasses-based distillery spent wash
- **Deshmukh V, Nimbalkar D**
Assessment of workplace air quality in sugar mills
- **Kadam R, Urdukhe A, Nimbalkar D**
Study of impact of spray pond overflow effluent of sugar industry for irrigation by assessing biochemical characteristics of *Vigna radiata* under laboratory conditions
- **Mane N, Alhat E**
Extraction of dietary fibre from sugarcane
- **Panda S, Patil RR, Dani RV (2020)**
Adoption of HACCP in sugar mill for quality production with enhanced efficiency (Part-1)
Poster presented in STAI all India one day seminar on “Advances in sugar grading and food safety standards to produce quality sugar”, Karnataka