



VSI

BULLETIN

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Foreword

Foreword ...

As I present this bulletin of the first quarter of this year, the country has produced 23.05 million tonnes of sugar at the end of February 2018 as compared to 16.26 million tonnes in the corresponding period of last season. The current trend of sugar production indicates that India will going to set a record sugar production of 29.50 million tonnes over previous season's production of 20.30 million tonnes because of a substantial increase in sugarcane yield in Maharashtra, Karnataka and Uttar Pradesh. As per the estimates, sugar production of Uttar Pradesh is expected to increase to 10.51 million tonnes in 2017-18 from 8.77 million tonnes in previous season. Karnataka's sugar production may rise to 3.54 million tonnes from 2.16 million tonnes in previous season and in Maharashtra, it is estimated that state is likely to produce 10.6 million tonnes as against 4.20 million tonnes in 2016-17. The crushing season will stretch well up to the end of April if the entire sugarcane is to be crushed.

Domestic sugar prices have fallen by 11% in the past four months as mills were aggressively selling the sweetener to make cane payments to farmers. There is a need of sugar export for reducing the burden of surplus sugar in the country and the Government is considering scrapping 20% export duty on sugar to boost export of sugar. Further, Central Government doubled the import duty on raw and refined sugar to 100%. This move was to prevent dumping of heavily subsidized sugar from Pakistan to protect domestic farmers at a time when Indian production is expected to exceed consumption.

Fuels dependency can't be avoided but its effect on environment be altered by blending ethanol extracted from sugarcane in petrol. According to the Government norms, 10 per cent of

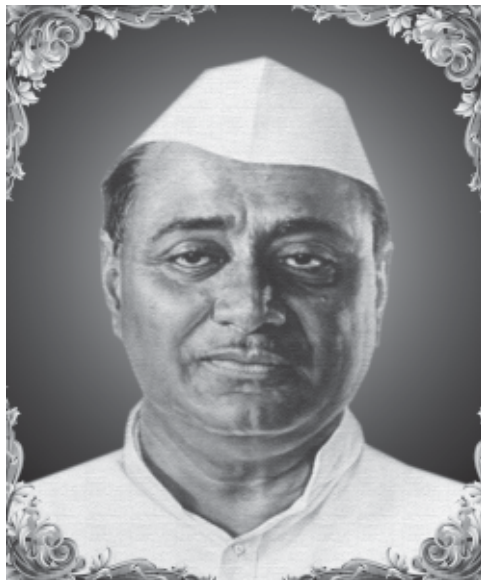
ethanol extracted from sugarcane can be mixed with petrol. However, the Government till now was not able to achieve the target due to a steady supply. In this year, the increased production of ethanol in 2017-18 (139.5 crore litres) will help the nation to achieve 4 percent blending target than previous year with the supply of 66.5 crore litres of ethanol in 2016-17, India had 2.1 percent blending in petrol. Apart from this, Government is allowing setting up of commercial plants based on advanced biofuels. To attract investments from other potential investors, oil marketing companies have agreed to provide guaranteed offtake of 2G ethanol from suppliers for a period of 15 years. Oil PSUs were also exploring possibilities of commercial production of bio-CNG from municipal solid waste, sewage water and crop residue etc. As recently, reported the Government is going to announce a policy, for 15 percent blending of methanol in petrol. Methanol gets made from coal and costs only Rs 22 per litre as against the prevailing price of about Rs 80 per litre petrol to make it cheaper and also to reduce pollution.

A look at the news and events reported in this issue will once again showcase the potential role of VSI in capacity building through training both on the domestic and international front. The sheer number and different one day workshops, training programmes held by VSI in this quarter shows the strength of VSI in this field. Visitors to VSI also do not fail to be impressed by its function in research, extension and training, as VSI's work has always related to sugarcane growers and sugar Industry's needs by trying to reduce the distance between the laboratory and field.


(RM Devarumath)
Editor



EVENTS EVENTS



Shankarrao Mohite-Patil

(14 January 1918 – 10 February 1979)

The Birth Centenary Celebration of Sahakar Maharshi late Shankarrao Mohite-Patil was held in VSI on 14th January 2018. The Director General and all staff members of the Institute were present and floral tribute was performed to him by the Director General. He was founder member and the first President of the Governing Council of VSI formerly known as Deccan Sugar Institute from 14th October 1975 to 10th February 1979.

He was born in a small village, Akluj in Solapur District on 14th January, 1918. He started his career as a freedom fighter and participated in India's freedom movement along with other youth leaders. He was actively participated the movement of co-operative farming and was co-opted as a member into the co-operative society and its executive body in August 1944. He was unanimously elected leader of Gram Panchayat and became the Sarpanch of Akluj village. He was also elected as a Member of Maharashtra Legislative Assembly (MLA) in 1952 as independent candidate and later on joined in Congress party. He was MLA continuously for 4 terms. He had established the Yashwant Co-operative Sugar Factory at Akluj and its first crushing season was inaugurated in 1962 by

Yashwantrao Chavan, the then Union Minister for Defence. He was Chairman of District Land Development Bank. He started a School, Shikshan Prasark Mandals, Housing Societies, devised irrigation projects to irrigate sugarcane fields in Malshiras taluka, Rajhans Co-operative Poultry farm, co-operative spinning mill, co-operative dairy, co-operative cement factory, etc. Under his leadership, the closed Chitalenagar sugar factory was purchased through Mumbai High Court and made functional on December 1968 under the name of Sri Shankar Co-operative Sugar Factory. He also started an English medium residential school and Green Fingers School on 15th July 1975. He established the Govt. recognized Shivamrit Dairymen's Co-operative Society on 27th January 1976. On 28th January 1976 he established Gaurishankar Women's Co-operative society to set up small business enterprises, a sports organization called Pratap Kreedha Mandal and a farmers' co-operative Bank.

The Government of Maharashtra organized Agricultural Exhibition at District level throughout state on the occasion of his birth centenary celebration.

69th Republic Day of India



The 69th Republic Day of India was celebrated on 26th January 2018. On this occasion the Director General, Mr. Shivajirao Deshmukh hoisted the National flag in the Institute in presence of staff members.



Management Committee Meetings

Four Management Committee Meetings were held during the January, February and March 2018. During this period, Purchase Committee meeting was held on 11th February 2018; Investment Committee meeting on 25th February 2018; Governing Council meeting on 2nd March 2018 and Selection Committee meeting on 29th and 30th March 2018.

CONGRATULATIONS CONGRATULATIONS

Ph.D. Award



Ms. Forough Jomeh Farsangi, Ph.D. student of Molecular Biology & Genetic Engineering Laboratory, VSI was awarded Ph.D. under the Faculty of Science in the subject Biotechnology by Savitribai Phule Pune University, Pune for the thesis entitled “**Assessment of Genetic Diversity in Sugarcane Germplasm Using DNA Markers**” on 12th January 2018 under the guidance of Dr. R. M. Devarumath, Scientist, MB & GE Laboratory, VSI.



Mrs. Hemangi S Kolte, Ph.D. student of Dept. of Environmental Sciences, VSI was awarded Ph. D. under the Faculty of Science in the subject of Environmental Science by Savitribai Phule Pune University, Pune for the thesis entitled “**Treatability Study of Anaerobically Digested Spent Wash Through Selective Oxidation Processes**” on 08th February 2018 under the guidance of Dr. Deepali Nimbalkar, Sr. Scientist and Head, Department of Environmental Sciences, VSI and Dr. SV Patil, Technical Adviser & Head, Department of Alcohol Technology VSI as a Co-guide.



Mr. PN Tawar, Sr. Scientist, Head, Tissue Culture Section, VSI was awarded Ph.D. under the Faculty of Science in the subject Biotechnology by Bharati Vidyapeeth Deemed University, Pune for the thesis entitled “**Development of Sugarcane Variety from CoC 671 by Using Callus Culture Techniques**” on 20th March 2018 under the guidance of Dr. Neelambika Meti, Associate Professor, Department of Biotechnology, Rajiv Gandhi Institute of Information Technology and Biotechnology, Pune.

Recognition as Guide for M.Phil./Ph.D.



Dr. K Harinath Babu, Sr. Scientist & Head, Molecular Biology and Genetic Engineering Laboratory, has been granted recognition as a guide for M.Phil./Ph.D. in the subject of Biotechnology by Savitribai Phule Pune University.



Dr. SG Dalvi, Scientific Officer, Tissue Culture Section, has been granted recognition as a guide for M.Phil. /Ph.D. in the subject of Biotechnology and Environmental Science by Savitribai Phule Pune University.

WORKSHOPS WORKSHOPS

Fertigation in Sugarcane

One day workshop on “**Fertigation in Sugarcane**” was held on 27th January 2018 for the Agricultural Officers, Cane Development Officers and Agricultural Graduates working in the sugar mills of Maharashtra State. Total 60 participants from 32 sugar mills attended the Workshop.

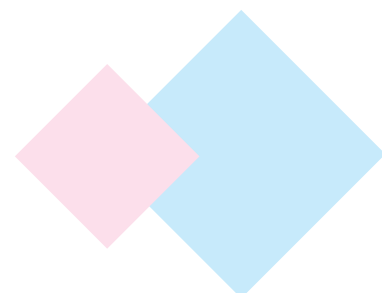
The workshop was inaugurated at the hands of Mr. Anant Kulkarni, Sr. General Manager, Smartchem Technologies Ltd. Pune and Mr. Swapnil Ingole, India Country Manager, Galcon Computerized Control Systems, Pune, Cane Development officers of sugar mills and Head of the sections of Agricultural sciences & technology division, VSI.

In technical session, presentation on “**Importance of Fertigation in Sugarcane**” was made by Mr. Anant Kulkarni. He presented the overview of work done on fertigation at global and national level. Mr. PP Shinde, Scientist and Head, Agricultural Engineering, presented the work done on fertigation in sugarcane at VSI. The results of various fertigation trials conducted and the recommendations made through Joint Agresco meetings of four Agricultural universities of Maharashtra State were presented. Mr. Swapnil Ingole addressed on “**Automation of Drip and Fertigation**”. He presented different types of automations used in drip operation and fertigation. The representatives of three sugar mills also narrated their experience of using the drip irrigation and fertigation in sugarcane under the operational area of their sugar mills.

In the concluding session, the sugar mill officers' actively participated and shared their experiences on drip and fertigation. Following recommendations were finalized in the workshop

- ▶ Fertigation should be a mandatory part of drip program for sugarcane in the operational area of sugar mill.

- ▶ Sugar mills should have trained man power for successful implementation of the drip and fertigation program in sugarcane.
- ▶ The prompt after sale service should be provided to the cultivators by the drip manufacturing companies for achieving better results of drip irrigation in sugarcane agriculture.



Management of Important Diseases and Pests in Sugarcane

One day workshop on “**Management of Important Diseases and Pests in Sugarcane**” was organized by Agriculture Sciences and Technology Division on 24th February 2018 at VSI. Mr. BH Pawar, Sr. Scientist & Head, Plant Pathology Section welcomed the participants from different sugar mills of Maharashtra and speakers Mr. Pawar highlighted the importance of the topic of the workshop. The workshop was inaugurated by representatives from the sugar mills by lighting of traditional lamp in presence of Heads of Sections of Agriculture Division. Mr. BH Pawar delivered the lecture on “**Management of important diseases of sugarcane**”. He opined that the change in climate affects the biology of the pests of sugarcane and appealed to the sugar mill staff to monitor the development of the insect pests and diseases of sugarcane on periodical basis in their operational area. He presented the disease wise information as regards to causal organism, symptomatology, spread and integrated management. He warned about occurrence of Yellow Leaf Disease – a viral disease in the State on sugarcane crop and appealed to the representatives from the sugar mill that they should closely monitor the occurrence of the disease in their area and to inform to VSI. He also stressed on preventive measures for the effective management of different diseases of sugarcane.

Mr. RG Yadav, Scientist and Head, Entomology Section delivered talk on “**Management of important pests of sugarcane**”. He said that, due to climate change in Maharashtra, outbreak of Sugarcane Woolly Aphid is noticed in last decade and white grub & white fly is

becoming major insect pest of sugarcane. He presented the details of insect pests and rat infestation in sugarcane crop and emphasize on biological control. He also emphasizes the need of integrated management of insect pests of sugarcane and close monitoring of the occurrence of the pests on sugarcane in the operational area of the sugar mills.

Mr. SN Patil, Cane Development officer, Rajarambapu Patil SSK Ltd., Sangli, presented the success story of the management of white grub in the operational area of the mill by using *Beauveria spp* and *Metarrhizium spp.* the entomopathogenic fungi. Mr. Sandeep Jadhav, Cane Development Officer, Shri Vighnagar SSK Ltd., Pune presented the efforts of their mill for the control of diseases and pests on sugarcane. He categorically discussed the success story of white grub management by collection of beetles.

Besides the main topic of workshop Dr RS Hapase, Principal Scientist and Head, Plant Breeding Section gave talk on ‘**Promotional scheme of awards for cane development programs in the sugar factories of Maharashtra**’. He highlighted the details of the scheme and documentation of required data. He appealed for the maximum participation from sugar mills of Maharashtra in the scheme.

This one day workshop was attended by 64 participants from 31 sugar mills of Maharashtra. The doubts of participants from about diseases & insect pest occurrence and management of the pests of sugarcane and about



promotional award scheme were clarified. The program was concluded with a vote of thanks by Mr. RG Yadav.

The following are the recommendations of the workshop on 'Management of Important Diseases and Pests in Sugarcane' were made ;

- ▶ Regular survey on periodical basis should be carried out for knowing the occurrence and spread of the diseases and insect pests on sugarcane crop in the mill operational area.
- ▶ A new disease on sugarcane *i.e.* Yellow leaf disease is observed in Maharashtra and to check the spread of the disease, the Agriculture Department of sugar mills should monitor the disease in their area specifically and report to VSI.
- ▶ Field demonstrations on IPM of major pests of sugarcane should be conducted and arranged the visits of farmers to the demonstration plots.

- ▶ The field demonstration for control of white grub and white fly by using Entomo-Pathogenic Fungi (*Beuveria/Verticillium/Metarrhizium*) should be arranged.
- ▶ It is suggested to avoid the spraying / dusting of insecticides for the control of sugarcane woolly aphid.
- ▶ To supply good quality disease and pest free seed material of sugarcane, sugar mill should implement three tier seed nursery program. The breeder seed in the form of tissue culture plantlets/ settlings/ setts should be taken for the raising of foundation seed.
- ▶ Maximum number of sugar mills should take part in promotional scheme of award for cane development in the sugar mills of Maharashtra launched by VSI.

Review of Cane Development Activities in Sugar Mills

One day workshop on “**Review of Cane Development Activities in Sugar Mills**” was held on 24th March, 2018. The workshop was inaugurated by the factory Officers invited for the lectures and HOD/ HOS of the agriculture department. Total 51 delegates from 31 sugar mills including one individual member from Maharashtra participated in this workshop.

In this workshop, Dr. RS Hapase, Head & Principal Scientist (Plant Breeding) gave his presentation on “Review of VSI’s Promotional Award Scheme for Cane Development Program for the year 2018-21”. He explained the importance of this activity. Sugar mills officers should grasp the recent advances in sugarcane cultivation & use of recent technology and transfer this knowledge in the farmer’s field. The Agriculture Officers should be made self sufficient to the sugar mills in cane production and work for doubling the sugarcane grower’s income. Dr. DB Phonde, Sr. Scientist & Head (Soil Science) gave his presentation on “Awards For Excellence:

Oos Bhushan and Cane Development”. He highlighted the changes made in the application forms for Oos Bhushan and Cane Development award. He also stressed upon the proper collection of farmers true data base along with documents required to VSI.

Dr. JM Repale, Sr. Scientist (Plant Breeding) gave the presentation on the “Review of trainings of one day workshops organized by VSI during the year 2017-18”. He explained the recommendations of the six workshops conducted and advised to Agriculture Officers of sugar mills to transfer their knowledge on new technology to farmer’s field for increasing their cane yield.

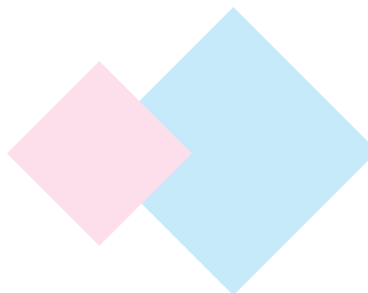
Three other speakers from the sugar mills viz., Mr. Dilip Jadhav, CDO, Shree Datta Shetkari SSK, Kolhapur; Mr. SS Morde, CDO, Bhimashankar SSK, Pune and Mr. MR Bhadule, CDO, Vitthalrao Shinde SSK, Solapur shared their experiences on cane development activities undertaken by them for Promotional Award Scheme by VSI. Following recommendations were made and the event

was concluded with vote of thanks by Mr. PP Shinde, Scientist & Head (Agriculture Engg.).

1. The Agriculture Officers from each sugar mill should grasp the technology and transfer it in the farmer's field. They should be made self sufficient to the sugar mills in cane production and work hard for doubling the farmer's income.
2. During cane development programmes, the main focus should be given on sugarcane seed, productivity in ratoon crop and intercropping in sugarcane.
3. The sugar mills should follow the proper procedure for selection of participating farmers

and collection of their database for the Oos Bhushan/Cane Development award before submission of forms.

4. Those mills participated in VSI's Promotional Award Scheme, the creation/ strengthening of separate Cane Development wing is mandatory before the initiation of this scheme.
5. The participating mills for VSI's Promotional Award Scheme, should keep all the database computerized for easy monitoring.



TRAINING

Modern Technologies in Sugarcane Agriculture

VSI organized two days residential training program on “**Modern Technologies in Sugarcane Agriculture**” for the officers/staff working in Agriculture Department of Maharashtra under National Food Security Mission (NFSM), Govt. of India and Agriculture Technology Management Agency (ATMA) sugarcane growers deputed by Taluka Agriculture Officer of Miraj and Tasgaon Tahsils of Sangli District of Maharashtra State during 11th - 12th January 2018. Details of participation are as given below;

The event was inaugurated on 11th January, 2018 by participants of respective organizations with lighting of traditional lamp in presence of Heads of Sections of

Agriculture Sciences and Technology Division of VSI. Mr. BH Pawar, Sr. Scientist and Head, Plant Pathology Section, welcomed all the participants and VSI faculties and highlighted the importance of the training. He thanked all the sponsored partners for giving an opportunity to VSI for training the officers and staff at VSI. Lectures and practicals on various topics related to sugarcane agriculture like sugarcane varieties and their importance, Sugarcane disease and pests management, sugarcane agronomic practices Sugarcane nutrient management, sugarcane mechanization etc. were conducted by staff of the different disciplines of Agriculture department of VSI. Total 85 trainees took the benefit of the two days residential training. Mr. BH Pawar has coordinated this activity of training.

Sr. No.	Sponsorship	Office	No. of participants
1	National Food Security Mission (NFSM)	Divisional Joint Director of Agriculture (DJDA), Aurangabad	Officers and staff : 23
2	National Food Security Mission (NFSM)	Divisional Joint Director of Agriculture (DJDA), Latur	Officers and staff : 3
3	Agriculture Technology Management Agency (ATMA)	Taluka Agriculture Officer of Miraj Tahsil	Sugarcane growers : 41
4	Agriculture Technology Management Agency (ATMA)	Taluka Agriculture Officer of Tasgaon Tahsil	Sugarcane growers : 18



Advance Practices of Sugarcane Cultivation



The training program on “**Advance practices of sugarcane cultivation**” for the farmers from ITC Ltd., was conducted, Pune during 22nd- 24th January 2018. The aim of the training program was capacity building of the farmers for increasing water use efficiency in Ghod river basin. Total 124 farmers took part in training program

from Junnar & Shirur tahsils of Pune district and Shrigonda & Parner tahsils of Ahmednagar district. The topics covered in training program were sugarcane varieties and varietal planning, three tier seed nursery program in sugarcane, tissue culture techniques for seed production, Modern cane cultivation practices, irrigation water management practices for increasing water use efficiency, soil fertility and fertilizer management in sugarcane, use of bio-fertilizers in sugarcane, farm mechanization, crop growth stages of sugarcane, ratoon management, economics of cane cultivation and integrated disease and pests management in sugarcane. Mr. PP Shinde, Head, Agriculture Engg., Co-ordinated the training program.

Advanced Technologies in Sugarcane Agriculture

Special training program on “**Advanced Technologies in Sugarcane Agriculture**” was organized for progressive sugarcane growers from Uttar Pradesh during 29th January to 3rd February 2018 by Agricultural Sciences and Technology Division. This programme was sponsored by Lal Bahadur Shastri Ganna Kisan Sanstha (LBSGKS), Lucknow, UP and deputed 22 selected progressive sugarcane growers from different districts of Uttar Pradesh. The program was inaugurated on 29th January 2018 by Mr. Ram Naresh Verma, Assistant Director, LBSGKS, in presence of participating sugarcane growers and HODs of the Sections & staff of Agriculture Sciences and Technology Division, VSI. Mr. Verma in his

inaugural speech welcomed all the participants, thanked VSI for accepting the task of training, briefed the sugarcane agriculture situation and highlighted the constraints before the sugar sector in Uttar Pradesh. He also emphasized the need of training to the sugarcane growers for improvement in the sugarcane and sugar productivity in Uttar Pradesh. Mr. BH Pawar, Senior Scientist & Head, Plant Pathology Section and Training Coordinator welcomed all the participants on behalf of VSI and briefed the activities of VSI in terms of education, training, short-term courses, research, consultancy and extension.

Lectures and practicals on various topics like sugarcane varieties and varietal planning, three-tier seed nursery





program, tissue culture in sugarcane agriculture, modern planting methods, settling transplanting (STP), soil fertility & nutrient management, irrigation water management, use of bio-fertilizers, farm mechanization, ratoon management, economics of sugarcane and integrated disease & pest management were conducted by scientists of VSI. More emphasis on practicals and field demonstrations was given during the training. As a part of the training, the exposure visit was arranged to the Sanjivani (Takli) SSK Ltd., Ahmednagar, Bhimashankar SSK Ltd., Pune and farms of progressive sugarcane growers in the operational area of the mills. The officials of both the sugar mills briefly

highlighted the Cane Development Projects and harvesting planning followed by their mills. During the farm visit to the progressive growers, the participating farmers learned the modern technologies of sugarcane cultivation for the yield maximization.

The Participants expressed satisfaction about the training and expected help in future from VSI. During farewell function, farmers were advised for implementation of modern technologies sugarcane cultivation and emphasized the need of training to the sugarcane growers for improvement in the sugarcane productivity of cane & sugar. The event was concluded with vote of thanks.

Oos Sheti Dnyanyag and Oos Sheti Dnyanlaxmi

Every year VSI is conducting a five days residential training programme on “***Oos Sheti Dnyanyag and Oos Sheti Dnyanlaxmi***” for men and women sugarcane growers of Maharashtra. Under this scheme the special batch training for farmers from Bhimashankar SSK Ltd., Pune and Padmashree Dr. D. Y. Patil SSK Ltd., Kolhapur was conducted at VSI on ‘**Modern Technologies in Sugarcane Agriculture**’ the details were given as below; Training programme comprising modern & scientific sugarcane cultivation technologies covering the lectures on various topics like sugarcane varieties & varietal

management. More emphasis was given on practical aspect of each subject and field demonstrations. In the discussion session of every batch, the trainees got their doubts cleared from the concerned experts. Mr. Shivajirao Deshmukh, Director General, VSI interacted with the farmers regarding their sugarcane farming difficulties and facilities availed at VSI campus during training period. In the concluding function, the representative trainee farmers expressed satisfaction about the training, lodging and boarding facilities and suggested for improvement in the programme. The certificates along with group photos were

Sr. No.	Sugar Mill	Period of training	No. of farmers
1	Bhimashankar SSK Ltd., Pune	29 th Jan. to 2 nd Feb. 2018	85
2	Padmashree Dr. D.Y.Patil SSK Ltd., Kolhapur	5 th to 9 th Feb. 2018	145

planning, three-tier seed nursery programme and its implementation, tissue culture, modern planting techniques, weed management, soil fertility and fertilizer management, irrigation water management, use of bio-fertilizers, growth stages of sugarcane crop, farm mechanization, use of STP technology in sugarcane agriculture, sugarcane economics, ratoon management, and integrated disease & pest

distributed to the trainees during the farewell program. Mr. BH Pawar, Senior Scientist & Head, Plant Pathology Section has coordinated the activity with the help of members of different committees.



Bhimashankar SSK Ltd., Pune



Padmashree Dr. D.Y.Patil SSK Ltd., Kolhapur

VISITORS TO VSI

Mr. SR Soni, Vice President, India Glycols Limited, visited Department of Alcohol Technology and Biofuels VSI and made a presentation on **“A Real 2G Ethanol Demonstration Plant in Asia”** on 19th January 2018. Dr. SV Patil, Technical Adviser and Head, Department of Alcohol Technology and Biofuels, VSI, in his welcome speech introduces Mr. Soni and activities of VSI. For this event concerned staff of the institute and students of M.Sc. (Wine Brewing and Alcohol Technology) were present.

Mr. Soni provided brief overview of IGL and has core business in glycols, ethylene oxide derivatives, alcohols, industrial gases etc. Mr. Soni gave brief description of lignocellulosic feed stocks available for 2G ethanol productions and its importance of their structural composition. He further provided cost estimation for installation of 2G ethanol bio-refineries with different capacities. Mr. Soni gave description of overall technology developed by IGL and also discussed unit operations such as pretreatment, fractionation, enzymatic hydrolysis, fermentation and distillation. He stated that the 2G ethanol technology developed by IGL-ICT-DBT can be used for various agricultural feedstock processing. Mr. Soni gave insight of various other chemicals such as monoethylene

glycol, furfural and ethyl acetate derivatives, bioplastic and other sugar based chemicals that can be produced through biomass based bio-refineries.

Dr. SV Patil, in the concluding remarks, thanked Mr. Soni for providing information on various 2G ethanol production technology. Later Mr. Soni visited and discussion with regard to various research projects being undertaken in the Department.



Visitors from Egypt, Kenya, Malawi Nigeria, Tanzani, Tunisia, Uganda and Zimbabwe (Total 20 Nos.) visited VSI on 20th February 2018. This event was organized by Biotech Consortium India Limited (BCIL), New Delhi under sponsorship of Ministry of External Affairs, Govt. of India. During their visit they visited Institutes MB & GE Laboratory and Tissue Culture Section. In this event BCIL has been entrusted with the assignment of organizing an awareness programme for progressive growers in the field of plant tissue culture. This programme focused on creating awareness on advantages of tissue cultured plants

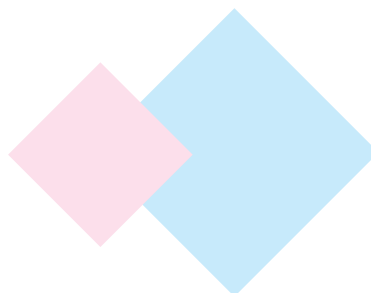
over conventional methods and quality management system for tissue culture sector encouraging them to adopt good



tissue culture plants. In this context, TC section conducted a lecture on “**Advantages of tissue culture raised Sugarcane**” after that they visited TC facility and field visit. During visit participant interacted with technical staff of TC section. This event was coordinated by Dr. RM Devarumath, MB & GE Laboratory along with Tissue Culture Section staff Dr. PN Tawar, Head, and Mrs. RA Sawant, Dr. AANikam, Dr. SG Dalvi, Mr. RB Bhoite.



Mrs. Tanuja Mulik & wives of IAS officers visited VSI on the eve of the women’s day celebration on 8th March 2018. They visited different departments to know the activities of VSI.





Following is the list of visitors who visited to Vasantdada Sugar Institute, Pune.

Name of Institutions	Visitors	Total
January - 2017		
The Sanjivani (Takli) SSK Ltd., Sahajandnagar,	Framers	8
PD ATMA Office, Dist: Burhanpur, State : Madhpradesh	Officer and Farmer	9
Waghire College Saswad, Saswad, Dist: Pune	Lecturers and Students	58
Maharani Lakshmi Ammanni College for Women Bangalore, State : Karnataka	Lecturers and Students	13
Sahakar Maharshi Shankarrao Mohite-Patil Mahavidyalaya, Natpute. Dist: Kolahapur	Lecturers and Students	84
Joint Director of Agriculture Office, Belgavi Dist: Belgavi, State : Karnataka	Officers and Farmers	52
Sadguguru Gadage Maharaj College, Vidyanagar, Karad Dist: Satara	Lecturers and Students	53
The Sanjivani (Takali) SSK Ltd., Sahajandnagar, Dist : Ahmednagr	Farmers	12
Individual Farmers from Maharashtra State	Farmers	82 (14)
Individual Farmers from out side State	Farmers	18 (3)
February - 2017		
Sinhgad College of Science, Ambegaon (Bk.) Pune	Lecturers and Students	32
Ms. Shewta Hingane, Manipal University, Jaipur, State : Rajastan	Student	1
Kasturbai Walchand College, Sangli	Lecturers and Students	33
Chadrabhabagai Tupe Sadhana Kanya Vidyalaya, Hadapsar Pune	Teachers & students	51
Taluka Agriculture Office, Koregaon, Dist : Satara	Officers & farmers	54
Annasaheb Magar Mahavidyalaya, Hadapsar, Pune	Lecturers and Students	52
Karmyogi Dulaji Sitaram Patil Krishi Vidyalaya, Nasik	Lecturers and Students	18
Baburaoji Gholap College, Sangvi, Pune	Lecturers and Students	34
New Arts Comm. & Science College, Ahmednagar	Lecturers and Students	44
Individual Farmers from Maharashtra State	Farmers	87 (16)
March - 2018		
Yeshwantrao Chavan Institute of Science, Satara	Lecturers and Students	55
Annasaheb Magar College, Hadapsar, Pune	Lecturers and Students	38
Panchayat Samiti, Mangalwedha	Officers and Farmers	32
Shetkari Mahila Gat, Bardoli, Dist : Surat, State : Gujarat	Framers and Officers	88
Framers Development Department, Burhanpur State : Madhpradesh	Officers and Farmers	20
Department of Botany, Shivaji University, Kolhapur	Lecturers and students	18
Krishi Vigyan Kendra (PIRENS) A/P : Bableshtar, Dist : Ahmednagar	Officers and Farmers	80 (2)
Individual Farmers from Maharashtra State	Farmers	96 (22)
Total :		1222

- Bracket figures denote number of visits

PARTICIPATION BY VSI STAFF PARTICIPATION BY VSI STAFF

Kisan Veer Satara SSK Ltd., Exhibition

Vasantdada Sugar Institute participated in the Exhibition, jointly organized by Kisan Veer Satara SSK Ltd., Government of Maharashtra, Agriculture Department Zilha Parishad Satara and Agriculture Dealers Association, Wai, at Kisan Veer Satara SSK Ltd., Bhuinj, Dist., Satara during 23rd – 25th January 2018. VSI exhibited various improved sugarcane agriculture technologies such as tissue culture plantlets of sugarcane & banana, biofertilizers, multinutrients and VSI Microsol in stall. These three days Agri. Expo was inaugurated by Mr. Sambhaji Kadu-Patil, Commissioner of Sugar Maharashtra State

in presence of Mr. Madan Bhosale, Chiarmen Kisan Veer Satara SSK Ltd., Mr. Gajanan Babar, Vice Chairman Kisan Veer Satara SSK Ltd., Dr. Nilima Bhosale, Mr. Shankarrao Gadhave, Chairman Khandala SSK Ltd., Mr. Mahavir Jagante, Jt. Director Kolhapur Region, Dr. CG Bagal, Zilha Parishad, Agriculture Development Officer & etc., About 100 organisation were participated in Exhibition, which includes different agriculture and agriculture related technologies. Mr. Sambhaji Kadu Patil, Mr. Madan Bhosale and Dr. Nilima Bhosale visited VSI Stall. Mr. BJ Takalkar was the Coordinator for Exhibition.



Zilha Krushi Mohostav

Vasantdada Sugar Institute participated in Exhibition organized by Pune Zilha Krushi Mohostav Samiti in co-ordination with project Director ATMA, Pune on the occasion of birth centenary of Sahakar Maharshi Late Sankarrao Mohite-Patil during 09th – 13th March 2018 and exhibited various sugarcane agriculture technologies such as tissue culture plantlets of sugarcane & banana,

bio-fertilizers, multinutrients and Microsol in the stall. About 250 organizations arranged their stalls on different agriculture technology aspects and participated in this event. Mr. Vijaykumar Ingale, Joint Director Agriculre, Pune, Mr. Madandada Mohite Patil, Mr. Vijaysinh Mohite Patil visited VSI Stall. About ~30,000 visitors visited VSI stall. Mr. BJ Takalkar was the Coordinator for Exhibition.



ISO 9001:2015 Awareness and Auditors Training

VSI has conducted one day awareness programme to all HODs/HOS, Implementation committee members and Internal Auditors as per the ISO 9001:2015 standards on 16th January 2018 and also conducted Internal Auditors Training programme on 28th February 2018 to all the designated Internal Auditors of VSI. Mr. Anil Deshpande, ISO consultant, conducted both these events.

He explained the difference between ISO 9001:2008 to ISO 9001:2015 standards as Institute is going in to the phase of transition from ISO 9001:2008 to ISO 9001:2015. He also talked on introduction to quality management system pertaining to audits. He explained the norms and roles of auditee and auditors.

'Vishwakosh' in Algae

Dr. Amol Deshmane, Scientist, Department of Environmental Sciences VSI, submitted three Marathi articles for 'Vishwakosh', related to algal farming & use of algae for food, nutrition and cosmetics which were accepted for publication and soon made available online. The team of editors of 'Vishwakosh' advised Dr. Deshmane to continue writing on this topic and cover few

more aspects about algae. Marathi 'Vishwakosh' (encyclopedia) is an initiative by Government of Maharashtra, to make the latest knowledge and information available in Marathi. This encyclopedia is web based and also in the form of an application (used by smart phones), which will be easily accessible to users and updated periodically by respective authors/contributors.

LIBRARY UPDATE LIBRARY UPDATE

Library Update (Jan. to Mar. 2018)

1. Lunn, George and E. B. Sansone
Destruction of hazardous chemicals in the laboratory
3rd Ed. (779p.)
John Wiley & Sons Inc., New Jersey.
2. O'hara, Ian M. and Mundree, Sagadevan G.
Sugarcane Based Biofuels and bioproducts (385p.)
John Wiley & Sons Inc., New Jersey.
3. Taxmann Income tax act: as amended by finance
act 2017 (1452p.)
Taxmann Pub. (p) Ltd., New Delhi.
4. Taxmann Income tax rules (vol. 1) 54th Ed.
(1248p.)
Taxmann Pub. (p) Ltd., New Delhi.
5. Taxmann Income tax rules: return forms for
assessment year 2017-18 (vol. 2) 54th Ed. (242p.)
Taxmann Pub. (p) Ltd., New Delhi.
6. Bhushan, C. and Shrinidhi,
A Rising to the call: good practices of climate
change adaptation in India (172p.)
CSE, New Delhi.
7. Narain, Sunita and Sambyal Swati
Not in my back yard: Solid waste management in
Indian cities (192p.)
CSE, New Delhi.
8. Banerjee, S. and Samajdar, P. Building Sense:
beyond the green façade of sustainable habitat
(240p.)
CSE, New Delhi.
9. Centre for Science and Environment
All about paper: the life cycle of the Indian pulp
and paper industry (344p.)
CSE, New Delhi.
10. Bhushan, C.
Challenge of the new balance: a study of the six
most emissions intensive sectors to determine
India's low carbon growth options (149p.)
CSE, New Delhi.
11. Centre for Science and Environment
Good news and bad news: clearing the air in Indian
cities (262p.)
CSE, New Delhi.



Upcoming Events

Sr. No.	Date	Topic	Coordinator
1	28.04.2018	Progress of VSI's Promotional Award Scheme by the Participating Sugar Mills	Dr. RS Hapase
2	26.05.2018	Varietal Planning and Seed Programme	Dr. RS Hapase Dr. PN Tawar Mr. SS Katak
3	June - July 2018	<i>Oos Sheti Dnyanyag and Oos Sheti Dnyanlaxmi (Batch I)</i>	Mr. BH Pawar
4	25.08.2018	Current Scenario of Pests in Sugarcane	Mr. BH Pawar Mr. RG Yadav
5	22.09.2018	Promotion of Pre-seasonal Planting, Intercropping and Integrated Nutrient management	Dr. DB Phonde Mr. PV Ghodke Mrs. SD Ghodke
6	27.10.2018	Quarterly Review of Promotional Award Scheme	Dr. RS Hapase
7	November – December 2018	<i>Oos Sheti Dnyanyag and Oos Sheti Dnyanlaxmi (Batch II)</i>	Mr. BH Pawar
8	25.01.2019	Multi-Ratooning and <i>In Situ</i> Trash Management	Mr. PV Ghodke Mrs. SD Ghodke
9	23.02.2019	Sugarcane Crop Management under Water Stress Condition	Dr. DB Phonde Mr. PP Shinde Mr. PV Ghodke
10	23.03.2019	Quarterly Review of Promotional Award Scheme	Dr. RS Hapase

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VSI Bulletin is published by the Vasantdada Sugar Institute, Pune.

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