



**GARGI EDUCATION INSTITUTE'S  
GARGI AGRICULTURE RESEARCH AND TRAINING  
INSTITUTE NASHIK.**



**Asia's First Wine, Brewing and Alcohol Technology College**

Affiliated to Savitribai Phule Pune University (Institute Id No. PU/NS/C/149/2009)

Approved by Government of Maharashtra, Accredited By NAAC

ISO 9001:2015 Certified

**3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge**

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<b>Sr. No</b>	<b>Evidence</b>
1.	Innovative Student Wine, Brew and Alcohol beverage Production Projects
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5.	Competition Participation Records





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**INNOVATIVE STUDENT WINE, BREW AND ALCOHOL  
BEVERAGE PRODUCTION PROJECTS**

The GARTI Institute motivates research and innovation by fostering a culture of exploration in alcohol production and beyond. Students are empowered with financial aid and encouraged to pioneer novel alcoholic beverages, nurturing a research-driven ethos among peers and faculty.

We prioritize a culture of exploration in alcohol production and beyond, empowering students with financial aid and encouraging pioneering endeavours in beverage innovation. Our initiatives are strategically designed to promote sustainability, innovation, community engagement, and social responsibility. Through sustainable innovation grants, students receive funding to research eco-friendly brewing and wine making practices, focusing on water conservation and waste reduction. Our experimental Flavors incubator provides a creative space for students to experiment with unconventional ingredients and flavour combinations under faculty mentor-ship, driving innovation within the industry.

Entrepreneurship support is central to our mission, offering resources and mentor-ship for students interested in transforming their projects into viable businesses. We facilitate partnerships with local producers to source sustainable ingredients, emphasizing the unique regional characteristics of our beverages. Our community engagement events series invites participation from the wider community through public tastings, panel discussions, and workshops. Cross-disciplinary collaboration is encouraged, enabling students to tackle complex challenges together, while industry immersion experiences provide practical skills and insights.

Social impact initiatives are integrated into student projects, promoting responsible drinking habits, and addressing social issues related to alcohol consumption. Additionally, our digital innovation hub equips students with tools for effective marketing and distribution in the digital marketplace.

By incorporating these elements into our approach to research and innovation, the GARTI Institute cultivates a dynamic ecosystem that fosters creativity, collaboration, and entrepreneurship in alcohol production and beyond.







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**Name of Students :-** Siddhant Mohite & Atharv Tambade

**Title: -** Vinification From Sapindaceous Fruit.

**Product Details:-** Vinification from Sapindaceous fruit offers a unique exploration in wine making. Ripe fruit is crushed for juice, fermented with selected yeast, and aged to craft distinctive wines showcasing the fruit's Flavors.



**Name of Students: -** Akshay Bediskar & Tushar Dhole

**Title: -** Pineapple-Infused Beetroot Wine.

**Product Details:-** "Pineapple-infused beetroot wine combines the earthy richness of beetroot with the tropical sweetness of pineapple for a uniquely flavourful and aromatic beverage."



**Name of Students: -** Kiran Shinde & Hrutiket Khaire & Bhagwat Tambe

**Project Title: -** Muskmelon Wine.

**Project Details: -** "Muskmelon wine captures the refreshing essence of ripe melons, offering a subtly sweet and aromatic experience with every sip."



**Name of Students: -** Akshay Awkale & Aniket Arakh

**Title: -** Indian Pale Ale.

**Project Details: -** Indian Pale Ale (IPA) is a hop-forward beer style known for its strong hoppy flavor, originally brewed with higher alcohol content to survive long voyages to India during the British colonial era.







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## COLLABORATIVE AGREEMENTS FOR KNOWLEDGE TRANSFER

The general objective of MOU is to facilitate and stimulate collaborative and mutually beneficial programme for both campuses. MOU with MES Mampad college, Kerela.

एक सौ रुपये  
Rs. 100  
ONE HUNDRED RUPEES  
INDIA NON JUDICIAL  
DL 747003  
KERALA  
MORANDUM OF UNDERSTANDING  
On this 10th day of November 2022  
Between  
Department of Wine, Brewing and Alcohol Technology  
Gargi Agriculture Research & Training Institute, Nashik,  
Maharashtra State  
and  
Department of Food Technology  
MES Mampad College (Autonomous), Kerala  
The general objective of this memorandum of understanding is to stimulate and facilitate the development of collaborative and mutually beneficial programs especially for the production of short-term certificate online programmes in "Wine, brewing and alcohol" which serve to enhance the Intellectual life and cultural development of both campuses. Gargi Agriculture Research & Training Institute, Nashik, MS and Department of Food Technology, MES Mampad College (Autonomous) has agreed in support of their mutual interests in the field of education.

- Both educational institutions by their mutual centers will be:
  - Conducting study through online platforms and online workshops that facilitate learning activity.
  - Collaborate to offer online Webinars and international conferences of mutual interest.
- The MoU shall aim to achieve a broad balance in the respective contribution and benefits and this shall be subject to periodic review by both campuses.
- Both the institutions agree to assist in the seeking of appropriate facilities with human resources through virtual mode, teaching aids etc. only by their mutual consent. If any Institute is not willing to share details of any confidential facility, they are free to do so.
- Establish a mutually beneficial MoU between colleges that show a flexible and creative response to the organizational missions of both institutions.
- Perform the collaborative activities without any financial burden from both institutions. (No financial burden of any fees from students and staff).
- All the above online activities will be conducted on Gargi Institute's own developed LMS Software "GYANADA & SAMWAD".
- The above MoU will come in effect once the list of Webinar programmes will be finalized.

### Reporting requirements and time frame

This MoU will commence on 30/11/2022 for 1 year (Renew every year). This MoU is the complete agreement between Gargi Agriculture Research & Training Institute, Nashik, MS and Department of Food Technology, MES Mampad College (Autonomous) and may be amended only by written agreement signed by all the parties involved.

In witness whereof, the parties here to have offered their signatures:

<b>DR. SHINDE M P</b> PRINCIPAL GARGI EDUCATION INSTITUTE'S GARGI AGRICULTURE RESEARCH & TRAINING INSTITUTE (AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY) NASIK, MAHARASHTRA STATE Signature: _____ Principal Gargi Agriculture Research & Training Institute NASHIK	<b>DR. MANZUR ALI PP</b> PRINCIPAL MES MAMPAD COLLEGE (AUTONOMOUS) MAMPAD COLLEGE P.O MALAPPURAM DISTRICT, KERALA Signature: _____ Principal Dr. Manzur Ali PP MES Mampad College (Autonomous)
---	---

Each institution shall designate a liaison officer for this Memorandum of Understanding are:

<b>GARGI EDUCATION INSTITUTE'S</b> GARGI AGRICULTURE RESEARCH & TRAINING INSTITUTE (AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY) NASIK, MAHARASHTRA STATE	<b>MES MAMPAD COLLEGE (AUTONOMOUS)</b> MAMPAD COLLEGE P.O- 676542.MALAPPURAM DL, KERALA
--	--

**Prof Sonam R Bachhuo**  
IQAC Coordinator,  
Gargi Agriculture Research & Training  
Institute, Nashik  
Signature: \_\_\_\_\_  
IQAC CO-ORDINATOR  
Gargi Education Institute's  
Gargi Agriculture Research & Training Institute, Nashik

**Ms. Ciba George**  
Head, Department of Food Technology  
MES Mampad College  
Signature: \_\_\_\_\_  
A. JAWAHAR  
ASST. PRINCIPAL  
DEPT. OF FOOD TECHNOLOGY  
MES MAMPAD COLLEGE (AUTONOMOUS)  
MALAPPURAM DISTRICT, KERALA-676542

Notification of any change in liaison officers may be made by letter without amending this MoU Agreement.

Witness 1:

Witness 2:

A. JAWAHAR  
ASST. PRINCIPAL  
DEPT. OF FOOD TECHNOLOGY  
MES MAMPAD COLLEGE (AUTONOMOUS)  
MALAPPURAM DISTRICT, KERALA-676542







# GARGI EDUCATION INSTITUTE'S GARGI AGRICULTURE RESEARCH AND TRAINING INSTITUTE NASHIK.



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## MOU WITH BOROTON RESEARCH CENTRE PVT. LTD.

### MEMORANDUM OF UNDERSTANDING (MoU)

This Memorandum of Understanding (herein after called as the "MoU") is entered into on this the 1<sup>st</sup> DAY OF January MONTH 2020, by and between

GARGI AGRICULTURE RESEARCH AND TRAINING INSTITUTE (GARTI), Plot. No.29, Sector-45, Naik Farm, Patil Nagar, Near Trimurti Chowk, CIDCO, Nashik-422008, referred as "First Party". the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors—in office, administrators and assigns)

AND

Boroton Research Centre Pvt.Ltd., 9, Shivsunder Park, Jagtap Mala, Untwadi, Nashik-422008

SECOND PARTY, and represented herein by its CEO, Dr.Yogesh R.Bhadane(hereinafter referred to as "Second Party", company which expression, unless excluded by or repugnant to the subject or context shall include its successors—in office, administrators and assign). (First Party and Second Party are hereinafter jointly referred to as 'Party') as

WHEREAS:

- A) First Party is a Higher Education Institution named:  
(i)GARGI AGRICULTURE RESEARCH AND TRAINING INSTITUTE (GARTI), Nashik
- B) First Party & Second Party believe that collaboration & co-operation between themselves will promote more effective use of their resources, and provide each of them with enhanced opportunities.
- C) The Parties to cooperate and focus their efforts on cooperation within area of Skill Based Training, Education and Research.
- D) Both Parties, being legal entities in themselves desire to sign this MOU for advancing their mutual interests.
- E) Boroton Research Centre Pvt.Ltd., the Second Party is engaged in Business, Skill Development, Practical Education & R & D Services in the field of Wine Technology and related fields.
- F) Give related information, its branches, and dimensional information about the industry concerned with which MoU is sworn.



CLAUSE 1







GARGI EDUCATION INSTITUTE'S  
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**CO-OPERATION**

- 1.1 Both Parties are united by common interest and objectives, and they shall establish channels of communication and co-operation that will promote and advance their respective operations within the institution and its related wings. The Parties shall keep each other informed of potential opportunities and shall share all information that may be relevant to secure additional opportunities for one another.
- 1.2 First Party and second party co-operation will facilitate effective utilization of the intellectual capabilities of the faculty of First Party providing significant inputs to them in developing suitable teaching/ training systems, keeping in mind the needs of the industry, the Secondary Party.

**CLAUSE 2  
SCOPE OF THE MOU**

2.1. The budding graduates from the institutions could play a key role in technological up-gradation, innovation and competitiveness of an industry. Both parties believe that close co-operation between the two would be of major benefit to the student community to enhance their skills and knowledge.

2.2. Curriculum Design: Second party will give valuable inputs to the first party in teaching / training methodology and suitably customize the curriculum so that the students fit into the industrial scenario meaningfully.

2.3. Industrial training & Visits: Industry and Institution interaction will give an insight in to the latest development / requirements of the industries; the second party to permit the faculty and students of the first party to visit its group companies and also involve in Industrial Training Programs for the first party. The industrial training and exposure provided to students and faculty through this association will build confidence and prepare the students to have a smooth transition.

2.4. Research and Development: Both parties have agreed to carry out the joint research activities in the fields of good Quality Wine making.

2.5. Skill Development Programs: Second Party to train the students of First Party on the emerging technologies in order to bridge the skill gap and make them industry ready.

2.6. Guest Lectures: Second Party to extend the necessary support to deliver guest lecturers to the students of the First Party on the technology trends and in house requirements.



*Handwritten signature*  
02/04







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2.7. Faculty Development Program: Second Party to train the faculties of First Party for imparting training as per the industrial requirement considering the National / International Occupational Standards in concerned sector, if available.

2.8. Placement of Trained students: Second party will actively engage to help the delivery of the training and placement of students of the First Party into internship/ jobs; and will facilitate placements The Second Party will itself absorb the trained students.

2.9. Both parties to obtain all internal approvals, consents, permissions, and licenses of whatsoever nature required for offering the programmes on the terms specified herein.

2.10. There is no financial commitment on the part of the Gargi Agriculture Research and Training Institute, the First party to take up any programme mentioned in the MoU. If there is any financial consideration, it will be dealt separately, time to time

**CLAUSE 3  
INTELLECTUAL PROPERTY**

3.1 Nothing contained in this MOU shall, by express grant, implication, Estoppels or otherwise, create in either party and right, title, interest or license in or to the intellectual property (including but not limited to know-how, inventions, patents copy rights and designs) of the other party.

**CLAUSE 4  
VALIDITY**

4.1 This Agreement will be valid until it is expressly terminated by either party on mutually agreed terms, during which period Boroton Research Center Pvt Ltd. the second party as the case may be, will take effective steps for implementation of this MOU. Any act on the part of training partner or Good drop Wine Cellar, the second party after termination of this agreement by way of communication, correspondence etc. shall not be construed as an extension of this MOU.

**CLAUSE 5  
RELATIONSHIP BETWEEN THE PARTIES**

5.1. It is expressly agreed that First Party and Second Party are acting under this MOU as independent contractors, and the relationship established under this MOU shall not be construct as a partnership. Neither party is authorized to use the other party's name in any way, to make any representations or create any obligation or liability, expressed or implied, on behalf of the other party, without the prior written consent of the other party. Neither party shall have, nor represent itself as having, any authority under the terms of this MOU to make



*Handwritten signature and date 02/04*







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agreements of any kind in the name of or binding upon the other party, to  
pledge the other Party's credit, or to extend credit on behalf of the other Party.

First Party: *[Signature]*

Second Party: *[Signature]*

Any divergence or difference derived from the interpretation or application of  
the MoU shall be resolved by arbitration between the parties as per the  
Arbitration act, 1966. The place of the arbitration shall be at Nashik. This  
undertaking is to be construed in accordance with Indian Law with exclusive  
jurisdiction in the Courts of Nashik.

## AGREED:

Gargi Agriculture and Training

Boroton Research Center Pvt Ltd.

Institute, Nashik

Mr. Deepak K. Kulkarni  
Administrative Officer

*[Signature]*  
Dr. Yogesh R. Bhadane  
CEO

Authorized Signatory

Authorized Signatory

Gargi Agriculture Research and Training Institute	Boroton Research Center Pvt Ltd.
Plot No 29, Survey no. 45, Naik Farm, Patil Nagar, Near Trimurti Chowk, Nashik-422008, Maharashtra, India	9 Shivesunder Park Jagtap Mala Untwadi Nashik 422008
Mobile No.: 7538557851 / 7588557852	9422620068
E-mail: particollege@gmail.com	info@boroton.com
Website: www.gargiedu.com	www.boroton.com

Witness 1

Witness 2:

*[Signature]*  
Birari Nikhil Mukund







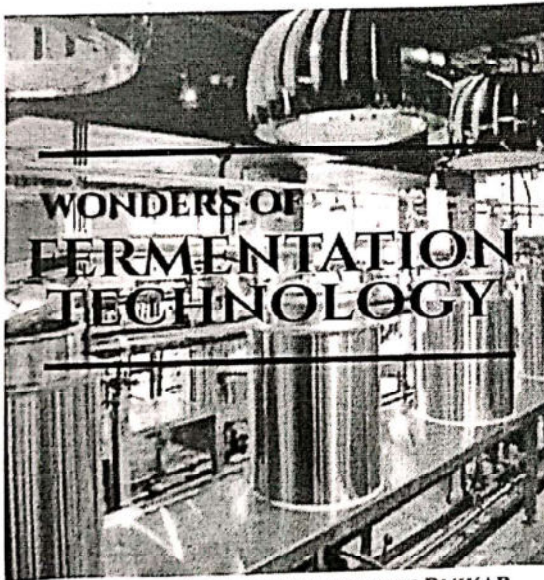
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**PUBLICATION AND RESEARCH PAPER RECORD.**

Research and publication in wine technology are essential for driving innovation and progress in the wine industry, and helping winemakers produce high-quality wines that delight consumers around the world. It inspires students for better tomorrow in research and innovation.



ASST. PROF. SWAMINI PRASHANT RUIKAR

BOOK PUBLISHED BY ASST. PROF.  
SWAMINI RUIKAR (GARTI)

International Journal of Scientific & Engineering Research Volume 12, Issue 10, October-2021  
ISSN 2278-0181

**ISOLATION, CHARACTERIZATION AND ENCAPSULATION  
OF LACTOBACILLUS SPP. TO BE USED AS PROBIOTICS**

Radhika Lahamange<sup>1</sup>, Dr. Krushi Hingurao<sup>2</sup>, Nafise Patel<sup>3</sup>  
<sup>1</sup>Gargi Agriculture, research and training institute, Nashik, Maharashtra, India.  
<sup>2</sup>Department of Microbiology, Narsee Lala College of Professional and Applied Sciences,  
Navsari, Gujarat, India.  
<sup>3</sup>corresponding author email: glahamange55@gmail.com

IJSEER

RESEARCH PAPER OF ASST PROF RADHIKA  
LAHAMANGE (GARTI)



CERTIFICATE OF RESEARCH PAPER BY ASST.PROF. KAVITA BHAVSAR







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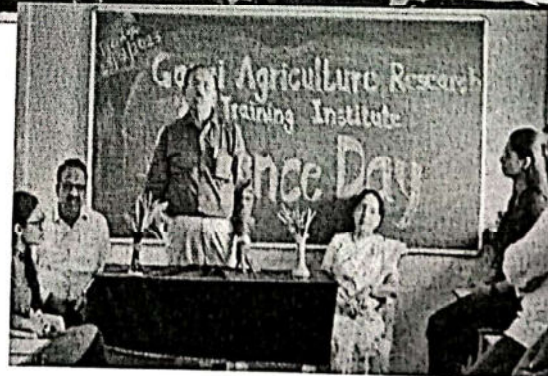
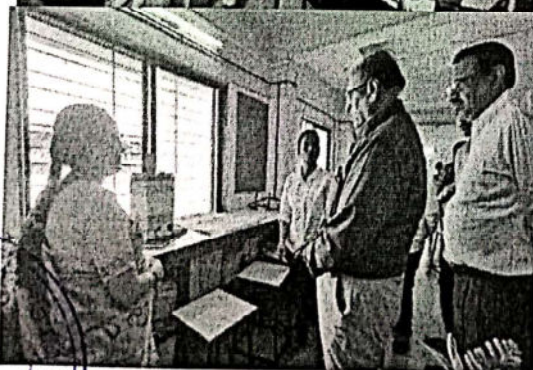
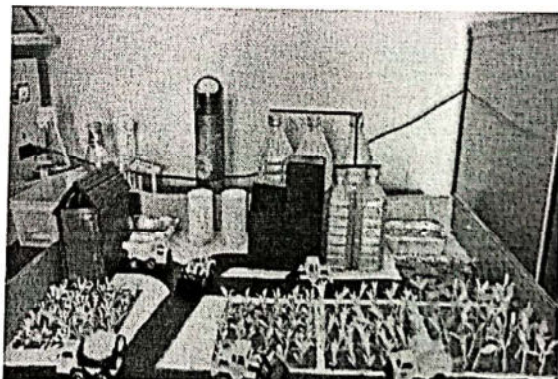
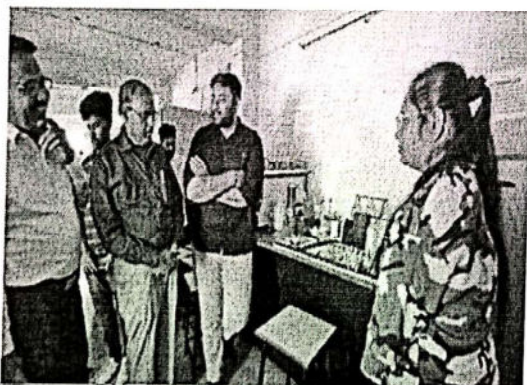
**ISO 9001:2015 Certified**

**WORKSHOP AND SEMINAR DETAIL**

workshops and seminars are essential in the wine technology industry as they provide a platform for students to learn, network, and stay ahead of the curve in a rapidly evolving field professional way. By participating in these events, Students can enhance their skills, expand their knowledge, and contribute to the advancement of the industry.

1.	Name of Program	National Science Day
	Date	28/02/2023
	Number of Participants	49

We celebrated national science day on 28<sup>th</sup> February, 2023. Program's introduction given by Asst. Prof. Swamini P. Ruikar. Our college principal Dr. M. P. Shinde gave information about why we celebrate Science. On this day students made various type of science project and, we arranged science exhibition. Students participated in exhibition very happily.







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2.	Name of Program	One day skill development workshop
	Date	07/04/2023
	Number of Participants	57

We organized one day skill development workshop on 7<sup>th</sup> april 2023. Program's introduction was given by Asst. Prof. Salunkhe. Mr. A. S. Deore Was chief guest of program he guided to our students about communication skills, soft skills, Interview Skill. He gave speech about better communication point. He interacts with students.

At the end of program vote of thanks given by Asst. Prof. Yogita Kshirsagar.







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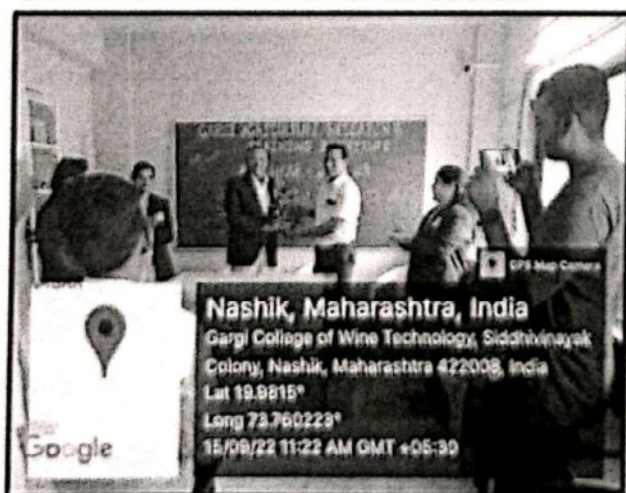
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**AVISHKAR COMPETITION RECORD**

Avishkar is an intercollegiate research competition organized by Savitribai Phule Pune University (SPPU) in Pune, Maharashtra. It is a platform for students to showcase their research and innovation in various fields such as science, engineering, humanities, and social sciences. Participants present their research projects, innovative ideas, and solutions to problems in front of a panel of judges. Institute organized Avishkar Spardha on 15<sup>th</sup> Sept, 2022 at college level as per university circular. We invited to Dr. S. V. Patil Asst. Professor at R.Y.K. College Nashik, as a judge of this program. Dr. S. V. Patil give information about what is Avishkar Spardha. Students performed various project some related to Wine technology some related to commerce.







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**NOTICE : AVISHKAR COMPETITION FOR STUDENTS.**

**GARGI EDUCATION INSTITUTE  
GARGI AGRICULTURE RESEARCH & TRAINING INSTITUTE  
ISO CERTIFIED 9001:2015  
NAAC ACCREDITED 'B' GRADE  
Affiliated Savitribai Phule Pune University  
FOUNDED BY: LATE SHRI ANANDRAO DATTATRAY BACHILAO  
Plot No. 29, Survey No. 45, Nash Farm, Padi Nagar, Near Trimbak Chowk, CIDCO,  
Nashik-422 008 (M.S.), Tel/Fax: 0253-2378474  
Email: gargi@rediffmail.com Phone: 0253-2378474 Mobile: 9880070001**

दिनांक:- ०१/०९/२०२२

**सूचना  
अविष्कार स्पर्धा  
सर्व विद्यार्थ्यांसाठी**

- महविद्यालयातील सर्व विद्यार्थ्यांना व शिक्षकांना (M.Phil/Ph.D. पत्रिभूतन केले असलेल्या) बळविण्यात देणे वी, संशोधक निर्माण करण्याच्या दृष्टीने २०२२-२०२३ या शैक्षणिक वर्षासाठी सहयोगी कार्य पुढे विद्यार्थी अविष्कार स्पर्धा आयोजित करते.
- या स्पर्धेचे स्तर पुढीलप्रमाणे असतील
- १) प्रथम स्तरीय अविष्कार संशोधन स्पर्धा - महविद्यालयीन स्तर (College Level)
- २) दुसरे स्तरीय विजयतेलचा संशोधक स्पर्धेकडून विद्यार्थी स्तर (Zonal Level) स्पर्धेत भाग घेता येईल.
- ३) Zonal Level स्पर्धेतील अतिशय स्पर्धेकडून Aspire शास्त्राच्या संशोधन प्रोत्साहन सोबतचरी जोडण्यात येईल.
- अगत्या महविद्यालयातील जारीत बाबत विद्यार्थ्यांनी यात सहभाग नोंदवावा.
- आपली यात्रे प्र.एच.आर. यात्रे व मसला पावसाळी पावसाळी दिनांक ७ सप्टेंबर २०२२ पर्यंत नोंदवावीत.

**प्रचारार्थ**  
प्रा.डी.एम.पी.शिंदे  
(प्राणी अर्थीकस्वरूप विषय ओपन ट्रेनिंग इन्स्टिट्यूट)  
Principal  
Gargi Agriculture Research & Training Institute

**GARGI EDUCATION INSTITUTE  
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FOUNDED BY: LATE SHRI ANANDRAO DATTATRAY BACHILAO  
Plot No. 29, Survey No. 45, Nash Farm, Padi Nagar, Near Trimbak Chowk, CIDCO,  
Nashik-422 008 (M.S.), Tel/Fax: 0253-2378474  
Email: gargi@rediffmail.com Phone: 0253-2378474 Mobile: 9880070001**

Date:- 02/09/2022

**Avishkar Research Competition**

**Guidelines for college level/Zonal Avishkar Competition**

- 1) Participant Poster Size should be 1 m X 1m only.
- 2) Name of participant should not be on the poster.
- 3) Name of guide/mentor should not be on the poster.
- 4) Name of the department or its constituent/affiliated colleges or a recognized institute should not be on the poster.
- 5) Only selected entries will be taken further for Zonal level.
- 6) The judges decision will be final.

**Principal**  
Dr.M.P.Shinde  
Gargi Agriculture Research & Training Institute  
Principal  
College Agriculture Research & Training Institute







GARGI EDUCATION INSTITUTE'S  
GARGI AGRICULTURE RESEARCH AND TRAINING  
INSTITUTE NASHIK.



Asia's First Wine, Brewing and Alcohol Technology College  
Affiliated to Savitribai Phule Pune University (Institute Id No. PU/NS/C/149/2009)  
Approved by Government of Maharashtra, Accredited By NAAC  
ISO 9001:2015 Certified

NOTICE OF AVISHKAR GUIDELINE.

GARGI EDUCATION INSTITUTE  
GARGI AGRICULTURE RESEARCH & TRAINING INSTITUTE  
ISO CERTIFIED 9001:2015  
NAAC ACCREDITED 'B' GRADE  
*Affiliated Savitribai Phule Pune University*  
FOUNDED BY: LATE SHRI ANANDRAO DATTATRAY BACHHAO  
Plot No. 20, Survey No. 45, Naik Farm, Patil Nagar, Near Trimurti Chowk, CIDCO,  
Nashik- 422 009 (M.S.), Tel/Fax: 0253-2370474  
Email: [particollge@gmail.com](mailto:particollge@gmail.com) Phone: 0253-2370474 Mob: 9586557851

Ref. No. Garti/871/2021-22/132 Date: 23/09/2022

To,  
Shrikant Gaikward,  
Deputy Register,  
IQAC department,  
SPPU,  
Pune

Subject :- To send hard copies and soft copies of entries for Avishkar research competition  
Respected Sir,  
As per your circular number IQAC/70 dated on 01/09/2022, We have organized avishkar competition in our college. This competition is examined by Dr.S.V.Patil from H.P.T and R.Y.K college and by principal Dr.M.P.Shinde sir.  
As per your letter we are sending following information to you for futher necessary action.

Sr.No	Category	Level
		UG only
1	Pure science	3

Thank you

Avishkar coordinator  
(Asst Prof. R.R.kute)

Enclosed :

- 1) List of participants
- 2) Geotagged photographs
- 3) One min video clip of winners
- 4) A3 size poster of winners
- 5) Abstract copy of winners

Your Faithfully  
  
Principal  
(Dr.M.P.Shinde)  
Principal  
Gargi Agriculture Research  
& Training Institute

*for received*  
*mulojaram*

NOTICE FOR NECESSARY DOCUMENTS SHOUD SUBMIT  
FOR AVISHKAR COMPETITION.







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PARTICIPANT LIST IN  
AVISHKAR COMPETITION



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Nashik-422 008 (M.S.). Tel/Fax: 0253-2378474  
E-mail: gargicollege@gmail.com Phone: 0253-2378474 Mobile: 9868979491

Avishkar Competition 2022

Date: 15/09/2022

Level - UG

Category - Pure Sciences

Participant List

Sr.No	Participant name	Title of project	Class
1	Nupur Bhardwaj	Production of Dasiffron	T.Y.B.Sc (WBAT)
2	Sumith Dhulam	Production of probiotic beer	T.Y.B.Sc (WBAT)
3	Shreyash Zade	Bumblebee mandarina sparkella production	T.Y.B.Sc (WBAT)
4	Suyash pagare	Extraction of Flavonoid from grape	S.V.B.Sc (WBAT)
5	Gayatri Dhangar	Production of wine from beetroot	S.V.B.Sc (WBAT)

Principal  
Gargi Education Institute Nashik



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E-mail: gargicollege@gmail.com Phone: 0253-2378474 Mobile: 9868979491

Date: 15/09/2022

Avishkar Competition 2022

Level - UG

Category - Pure Sciences

Selected Project of Winners

Sr.No	Participant name	Title of project	Class
1	Nupur Bhardwaj	Production of Dasiffron	T.Y.B.Sc (WBAT)
2	Sumith Dhulam	Production of probiotic beer	T.Y.B.Sc (WBAT)
3	Shreyash Zade	Bumblebee mandarina sparkella production	T.Y.B.Sc (WBAT)

Principal  
Gargi Education Institute Nashik

LIST OF WINNERS OF  
AVISHKAR COMPETITION.







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**PROJECT REPORT OF STUDENTS PARTICIPATED IN  
AVISHKAR COMPETITION**

Gargi Agriculture Research And Training Institute  
(GARTI), Nashik

**PRODUCTION OF DASIFFRON**

**ABSTRACT**

The aim of present work is to establish suitable procedure for production of good quality of wine using dry fruits as main ingredients. Amongst the various dry fruits, by comparing nutritional aspects, availability of raw material, ease of handling we have selected dates and raisins. Individually, juices of date and raisins were extracted followed by mixing in 2:1 proportion. The above blended base was fermented by *Saccharomyces cerevisiae* around 20°C for 8-9 days. The resultant wine can be balanced, medium-heavy bodied with complexity in aroma in sensory characteristic because it retains aroma of date and raisins with additional saffron flavour.

Created by- Miss. Nupur Amol Bhardwaj.

Guided by- Prof. Mrs. Rekha Kute Madam



**GARGI AGRICULTURE  
RESEARCH AND TRAINING  
INSTITUTE [GARTI], NASHIK**

**Bumblebee Mandarina Sparkella  
Production**

**Abstract**

The present project is run to establish a suitable procedure for production of blend sparkling wine by Carbonation method using orange and honey. Carbonation is a value-added process that can affect the mouthfeel, perception of volatile compounds, perception of sweetness enhances its sensory characteristics. Orange juice and diluted honey were mixed to get a base which further fermented by yeast to obtain a wine of the desirable sensory characteristics i.e., balanced medium bodied, semi-sweet wine with moderate alcohol level retaining its natural characteristics of orange and honey with prickling effect.

Created by - Shreyash Zade.  
Guided by - Mrs. Rekha Kute.



**AVISHKAR 2022  
GARGI AGRICULTURE RESEARCH &  
TRAINING INSTITUTE (GARTI).  
PRODUCTION OF PROBIOTIC BEER**

**Abstract**

Many evidences and studies proved that functional foods have large potential in reducing the risk of diseases, which caused an increase in the demand for functional foods. Alcoholic Beverages can be described functional if they do not contain more than 1.2% v/v ethanol (Regulation 2006). The aim is to produce a probiotic beer with increased biological value, with the use of probiotic yeast strain known as *Saccharomyces boulardii* and tangerine essential oil. The research study of *S. boulardii* proved probiotic viability against stomach acids, bile salts and ethyl alcohol tests. Essential oils add certain biological value to the beverage.

SUBMITTED BY,  
SUMITH DHULAA,  
T.Y. BSC WBAT,  
GUIDED BY,  
Mrs. REKHA KUTE







# GARGI EDUCATION INSTITUTE'S GARGI AGRICULTURE RESEARCH AND TRAINING INSTITUTE NASHIK.



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## CHART OF PROJECT REPORT DONE BY STUDENTS FOR AVISHKAR.

**AVISHKAR 2023**  
**DASIFFRON**

This project is being studied to access the possibility of *Phoenix dactylifera*, *Vitis vinifera*, *Crocus sativum* to produce wine of good acceptable quality.

**Dates:**  
Dates, with seeds, washed, dried, ground, sieved, and then used for wine production.

**Raisins:**  
Raisins, with seeds, washed, dried, ground, sieved, and then used for wine production.

**RAISINS:**  
Raisins, with seeds, washed, dried, ground, sieved, and then used for wine production.

**SAFFRON:**  
Saffron, with seeds, washed, dried, ground, sieved, and then used for wine production.

**WHAT?**  
DASIFFRON is a blended wine made using dates and raisins as the main raw materials. The present study was undertaken to produce wine using non-traditional bases with more health benefits.

**WHY?**  
Dry fruits are essential part of our diet as it provides necessary nutrients that contribute overall strength to the human health. Generally, wines are made with different types of fruit. Instead of that we tried to prepare a wine using dry fruits. By comparing nutritional aspects we selected dates and raisins as main ingredients to produce wine.

**CONCLUSION:**  
Aromatic, semi-sweet, medium-heavy bodied good quality of wine using dry fruits can be prepared successfully.

**ABSTRACT:**  
The aim of the present work is to establish a suitable procedure for production of the good quality of wine by using dry fruits as the main ingredients. Amongst the various dry fruits, by comparing the nutritional aspects, availability of raw material, ease of handling we have selected dates and raisins. Individually, the juices of dates and raisins were extracted followed by mixing in 1:1 proportion. The above blended base was fermented by *Saccharomyces cerevisiae* at around 28°C for 8-9 days. The resultant wine can be balanced, medium-heavy bodied with complexity in aroma in sensory characteristic because it retains aroma of date and raisins with additional saffron flavour.

**AVISHKAR 2022**

**PROBIOTIC BEER**

**WHAT IS PROBIOTIC BEER?**  
Probiotic beer is a type of functional drink which is developed with a physiological function to reduce the risk of chronic diseases beyond its nutritional function.

**PROBIOTIC YEAST STRAINS:**  
You've heard it enough, the only way to produce a healthy beverage is by using probiotic yeast strains. The yeast is produced by the fermentation of sugar.

**GOOD FOR YOUR GUT**

**Health Benefits:**  
A functional beverage, known as the "probiotic beer", is a healthy drink that is produced by fermenting natural sugar with a probiotic yeast strain. It is a healthy drink that is produced by fermenting natural sugar with a probiotic yeast strain.

**Abstract:**  
Many evidences and studies proved that functional foods have large potential in reducing the risk of diseases, which is caused an increase in the demand for functional foods. Alcoholic beverages can be described functional if they do not contain more than 12% v/v ethanol (Regulation 2006). The aim is to produce a probiotic beer with increased nutritional value, with the use of probiotic yeast strains known as *Saccharomyces boulardii* and *Lactobacillus acidophilus*. The aim of this project is to make health beneficial citrus (i.e., Orange) wine with the use of honey. To obtain vitamin C in beverage so as to absorb it better by the body than the mega dose of vitamin C you would get from a supplement.

**Raw Materials:**  
Barley malt, water, hops, yeast (*S. boulardii*), lactic acid, essential oil.

**WHAT?**  
A sparkling wine with refreshing aromas contributing to beauty, culture and health because of its naturally active contents. A medium bodied, sweet, balanced sparkling wine with moderate alcohol percentage. The aim of this project is to make health beneficial citrus (i.e., Orange) wine with the use of honey. To obtain vitamin C in beverage so as to absorb it better by the body than the mega dose of vitamin C you would get from a supplement.

**Abstract:**  
The present project is to establish a suitable procedure for production of good sparkling wine by Carbinol method using orange and honey. Carbonation is a vital process that can affect the perceptible perception of volatile compounds, perception of sensory attributes. Orange juice and diluted honey were mixed to get a base which further fermented by yeast to obtain a wine of the desirable sensory characteristics i.e., balanced medium bodied, semi-sweet wine with moderate alcohol level retaining its natural

**HOW?**  
Base preparation: Extraction of Orange juice followed by addition of diluted honey to it in 1:1 proportion.  
To ensure the yeast growth, nutrient adjustment were done in above resultant base.  
Addition of *Saccharomyces cerevisiae* yeast to base to initiate alcoholic fermentation.  
Fermentation duration: at 15°C for 7-9 days.  
Racking of wine followed by its clarification by cold stabilization. Final analysis - pH, acidity, TSS, SO<sub>2</sub>, alcohol, reducing sugars etc.  
Carbonation will be provided to get sparkling wine of desirable sensory characteristics.

**BUMBLEBEE MANDARINA SPARKLING**

**WHY?**  
Medium bodied sparkling wine is refreshing because of its natural and quality of sparkling wine available in Indian wine industry. The aim of this project is to make health beneficial citrus (i.e., Orange) wine with the help of honey. A refreshing wine of Vitamin C and B12 in form of honey. This wine will provide healthy beverage system.  
Prevent skin damage.  
Keep blood pressure under control.  
Lowest risk of cancer.  
Prevent eye health.

**AVISHKAR 2022**

**BUMBLEBEE MANDARINA SPARKLING**

**Principal**  
Gargi Agriculture Research & Training Institute