Registration Form:

VIDYAVARDHINI'S NATIONAL CONFERENCE ON TECHNICAL ADVANCEMENTS FOR SOCIAL UPLIFTMENT VNC - 2020 TASU

Name: .....

Email ID: .....

Title of paper: .....

Registration Category: .....

Mailing Address: .....

.....

Contact No: .....

Payment Details: Net Banking

Amount in Rs.: .....

Date: Signature of Participant

HEAD
Dept. of Mechanical Engg.
Vidyavardhini's College of
Engineering & Technology
Vasai Road-401202.

Net Banking:

Account Name: Vidyavardhini's College of Engineering and Technology
Bank Name: Union Bank of India
Branch: Vidyavardhini College Branch, Vasai Rd (W)
Account Number: 320602011001031
IFSC: UBIN0562556
MICR: 400026153

Chief Patron
Shree Vikas Vartak, President, Vidyavardhini.

Patrons
Shree Arun Vartak, Chairman, Vidyavardhini.
Shree Shantaram Jadhav, Vice President, Vidyavardhini.
Shree Pandurang Naik, Vice President, Vidyavardhini.
Shree P. D. Kodolikar, Vice President, Vidyavardhini.
Shree Hasmukhlal Shah, Treasurer, Vidyavardhini.
Shree Udhav Gharat, Secretary, Vidyavardhini.
Shree Bhausaheb Mohol, Secretary, Vidyavardhini.

Honorary Conference Chair
Dr. Harish Vankudre, Principal.

Conference Chair
Dr. Vikas Gupta, Dean Academics,
HOD, Electronics and Telecommunication Engg.

TPC Co-Chair
Dr. Uday Aswalekar - HOD, Mechanical Engg.
Dr. Deepak Gawali - HOD, Instrumentation Engg.
Dr. Megha Trivedi - HOD, Computer Engg.
Dr. Ashish Vanmali - HOD, Information Technology.
Dr. Sunil Kirloskar - HOD, Civil Engg.

Publication Chair: Dr. Ashish Chaudhari.
Finance Chair: Dr. Amrita Ruperee.
Publicity Chair: Mrs. Kanchan Sarmalkar.
Web Administration Chair: Mr. Yogesh Pingle.

National Advisory Committee
Dr. M. N. Hoda, Director, BVICAM, New Delhi
Dr. Vishal Jain, BVICAM, New Delhi
Dr. Suresh K. Ukarande, Associate Dean, Faculty of Science and Technology, University of Mumbai
Dr. J.W.Bakal, President, IETE, New Delhi.
Prof. Kiran Talele, IEEE, Mumbai Section.
Mr. Pramod Laxman Fegade, Manager L&T Ltd, Mumbai.
Dr. Ketan Kotecha, Director Symbiosis Institute of Technology, Pune
Dr. Mukesh Patil, Principal, RAIT, Mumbai
Dr. Arvind Nema, IIT Delhi
Dr. G.N. Jadhav, Earth Sci. Dept. IIT Bombay
Prof. Dr. P.P. Date, IIT Bombay
Dr. V. R. Kalamkar, VNIT Nagpur
Dr. Tansen Chaudhari, CEO, M/s Fluid Controls Pvt. Ltd., Mumbai
Prof. P. Padmanathan, VIT, Vellore
Dr. D.G. Thakur, Defence Institute of Advance Technology, Pune
Dr. V.B. Tungikar, SGGS IE&T Nanded
Dr. Bindu Garg, Bharti Vidyapeeth University College of Engg., Pune
Mr. Vikram Murthy, Director, Univac Environment Systems Pvt Ltd, National President, ISHRAE

VNC - 2020 TASU

VIDYAVARDHINI'S NATIONAL CONFERENCE ON TECHNICAL ADVANCEMENTS FOR SOCIAL UPLIFTMENT

VNC - 2020 TASU

4TH APRIL, 2020

Organized by:
Vidyavardhini's College of Engineering & Technology
K.T. Marg, Vasai (W) - 401202
Affiliated to University of Mumbai
Approved by AICTE
Accredited by NAAC

In Association With:
BJIT - BVICAM's International Journal of Information Technology. BJIT is now indexed at DBLP, INSPEC & UGC - CARE List. ISSN: 2511-2104 (Print Version), ISSN: 2511-2112 (Electronic Version)
IJERT - International Journal of Engineering Research & Technology ISSN: 2278-0181

Conference Website: www.vcet.edu.in/vnc2020/

Technically Sponsored By:

IEEE BOMBAY SECTION

ISA VCET ISA SC

ISHRAE

158_Design and development of mango grafting machine

About us:

Vidyavardhini means a Body committed to enhancement of Knowledge. Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering in six branches.

Objective of VNC 2020 TASU

Technology has always been potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment, sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, Industrialist and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements.

Best paper award for each track

Call for paper

We welcome submission in following area

1. Sustainable Computing
2. High Performance Computing
3. High Speed Networking and Information Security
4. Software Engineering and Emerging Technologies
5. Mathematical, Experimental, Computional and AI, IoT Techniques in Mechanical Engg.
6. Industrial Engg., ERP, MRP, SCM
7. Renewable Energy Technologies
8. Pollution control and Waste Management
9. Advances in Structural engineering
10. Present geotechnical practices
11. Present practices in construction management
12. Recent developments in Instrumentation, control and automation
13. Embedded Systems, IoT and VLSI Design
14. Optical and Wireless Communication for NGN
15. Antenna and Microwave Devices

Any other relevant topics

Publication Information

Proceedings of VNC - 2020 TASU will be published with ISBN number

1. Selected Papers will be published in International Journal of Information Technology, Published by Springer Nature, ISSN: 2511-2104 (Print Version), ISSN: 2511-2112 (Electronic Version)
2. All papers will be published in IJERT, ISSN: 2278-0181

Important Dates:

Submission of full length paper
15TH Feb 2020
Paper Acceptance Notification
22ND Feb 2020
Submission of Final Version of Paper
29TH Feb 2020
Registration Deadline
5TH March 2020
PPT Submission
20TH March 2020
Conference
4TH April 2020

Registration Fee Details:

Category of Delegates / Authors	Indian Authors & Delegates (in INR)
Full Time Students (UG)	1,500.00
Teachers/ Research Scholars/ PG students	2,500.00
Industry	3,500.00

Paper Submission:

Paper submission should be made strictly via Easy Chair the submission link for VNC 2020 "TASU":
www.easychair.org/conferences/?conf=vnc2020

Download paper template from:

https://www.ycet.edu.in/vnc2020/Template_For_Full_Paper%20VNC%202020.doc

Contact Us:

Mr. Yogesh P. Pingle
Vidyavardhini's College of Engineering & Technology
K.T. Marg, Vasai (W) - 401202

2020 2nd National Conference on "Technical Advancements for Social Upliftment", 04th April, 2020
Proceedings of the 2nd VNC; VNC-2020;
Vidyavardhini's College of Engineering & Technology (VCET), Vasai (INDIA)

Design and Development of Mango Grafting Machine

Prof. Priti Vairagi
Department of Mechanical Engineering
Vidyavaradhini's College of Engineering and Technology
: Vasai, India
priti.vairagi@vcet.edu.in

Rohit chavan
Department of Mechanical Engineering
Vidyavaradhini's College of Engineering and Technology
Vasai, India
rohitchavan41098@gmail.com

Tanmay Hemade
Department of Mechanical Engineering
Vidyavaradhini's College of Engineering and Technology
Vasai, India
tanmay1120@gmail.com

Manish Mohite
Department of Mechanical Engineering
Vidyavaradhini's College of Engineering and Technology
Vasai, India
mohitemanish10@gmail.com

Nikhil Karadkar
Department of Mechanical Engineering
Vidyavaradhini's College of Engineering and Technology
Vasai, India
nikhilkaradkar27@gmail.com

***Abstract*—Knowing the demand in grafting plant the attention has been made towards the automate the process of grafting. There are numerous research reported in automating the grafting process for various plant like tomato, vine, watermelon etc. but this machines working on hydraulic and robotics control system so initial cost of these machines are around 2-3 lacs which is not affordable by farmers. so our aims to finding a solution for grafting operation which operate automatically and also require less initial cost.**

Looking current demand in India our focus of study to design and develop automatic grafting machine for mango plants. Generally Mango grafting usually done manually, so there is reduction in production and skills requires to perform operation In order to solve the problems of manual grafting and increase the degree of mechanization and low operation efficiency of this machine design a vision base automatic upper and lower seeding devise of grafting machine. To provide the technical support for further design of automatic grafting machine the device is mainly composed of the manipulator and control system, the end clip mechanism. This machine is smaller than the previous automatic machines which include the design of Geneva mechanism, gripper mechanism, punch mechanism, clipping mechanism. This machine assumes to be produce 700 plants per hour. The developed model with experimental facilities will be further tested for its performance.

***Keywords*—Mango grafting, Geneva mechanism, punch mechanism, scion, rootstock**

I. INTRODUCTION

Grafting is a technique of combining two plants or pieces of plants so they grow together. This allows you to combine the qualities of a strong, disease-resistant plant with the qualities of another plant, usually one that produces good fruit or attractive flowers. While there are many methods of grafting, the methods described here should allow you to graft almost any vegetable or fruit seedling, flowering bush, and even certain trees such as citrus trees.

Understanding the purpose of grafting, Fruit plants, including tomatoes and others sometimes thought of as vegetables are bred and cross-bred over many generations to improve their attributes. However, no one variety is perfect. By removing a section of a plant that produces great fruit and grafting it onto

HEAD
Dept. of Mechanical Engg.
Vidyavardhini's College of
Engineering & Technology
Vasai Road-401202.

Vidyavardhini's College of Engineering and Technology

(Approved by AICTE and Affiliated to the University of Mumbai)
(NAAC Accredited)

VNC - 2020 TASU
27th June, 2020

IEEE BOMBAY SECTION

ISHRAE

Certificate of Participation

This certificate is presented to

PRITI SHASHIKANT VAIRAGI

of VIDYAVARDHINI'S COLLEGE OF ENGINEERING AND TECHNOLOGY

for presenting paper titled

Design and Development of Mango Grafting Machine

in the Vidyavardhini's National conference 2020 "Technical Advancements for Social upliftments" organised by Vidyavardhini's College of Engineering and Technology, Vasai held on 27th June, 2020

MUMBAI CENTRE

VCET ISA SC

Dr. Vikas Gupta
Dean Academics
Conference chair

Dr. Harish Vankudre
Principal
Honorary Conference Chair

HEAD
Dept. of Mechanical Engg.
Vidyavardhini's College of
Engineering & Technology
Vasai Road-401202.

CERTIFICATE ID NZSALC-CE000526