

7.2 BEST PRACTICES

1. Title of the Practice: Solid waste management by vermicomposting

Objective of the Practice

- Vermi-composting activity is of immense importance in solid waste management which is beneficial for society and also keep college campus clean.
- It creates awareness among the students about clean environment and best from waste. Analysis will help to know concentration of nutritive elements present in variety of cast generated by different waste for carbon and other important element present in different type of casts
- To provide experiential knowledge of subject

The Context: Vermi-composting activity is of immense importance in solid waste management which is beneficial for society and also keep college campus clean. It will also create awareness among the students about clean environment and best from waste. Vermicast (also called worm castings, worm humus or worm manure) is the end-product of the breakdown of organic matter by an earthworm. These castings have been shown to contain reduced levels of contaminants and a higher saturation of nutrients than do organic materials before vermicomposting. Vermicompost contains water-soluble nutrients and is an excellent, nutrient-rich organic fertilizer and soil conditioner. Vermi-composting is a part of applied Zoology. To create an awareness among the students about environment Department of Zoology has taken an initiative and started this activity since 2017-18. We use pit method for vermicomposting. We prepared variety of vermicasts from different wastes. Analysis was done for carbon and other important element present in different type of casts during session 2020-21.

The Practice: Uniqueness of this activity is that we made this project research oriented through which variety of vermicasts generated from different type wastes. Analysis of carbon and other important element present in different type of casts. The practice intended to produce low cost vermicompost with simplified method looking at the Vidarbha farmers for who are suffering since long and also committing suicide. We are planning to hand over the method to all possible farmers.

Evidence of success: Research paper published with students in international journal

https://drive.google.com/file/d/1OdlGKu39wpa56IWzZxL5pHph5H21tev/view?usp=drive_sdk

Problems encountered and resource required- Corona Pandemic situation is the main problem encountered.



International Journal for Environmental Rehabilitation and Conservation

 essence

ISSN: 0975 6272
XI (SP2): 38 — 41
www.essence-journal.com

Original Research Article

Comparative study of vermi-cast generated from flower waste and leaf waste

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ARTICLE INFO

Received: 28 July 2020 | Accepted: 15 August 2020 | Published Online: 30 September 2020

EOI: 10.11208/essence.20.11.SP2.125

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ABSTRACT

This study evaluates concentration of essential elements (Mg, N, S, P, Ca, Zn, Fe, K, Organic carbon, C:N ratio) for plant growth present in the vermi-cast generated from flower waste and leaf waste. The flower waste from holy places and leaf waste from college yard was collected separately and cast generated from these waste analysed for the comparative study of different trace elements in cast generated from flower and leaf waste using IS and APHA method. Out of all the detected element N, the essential element for plants was found in high concentration in cast generated from flower waste (134.6mg/L) than in leaf waste cast (86.16 mg/L) while potassium (108.30mg/L) and zinc (415mg/L) is in higher concentration in leaf waste cast than the flower waste cast (potassium 94.33mg/L, Zinc 2.805mg/L). This implies cast generated from flower waste and leaves waste separately will be beneficial in overcoming deficiencies of particular essential element in plants.

KEYWORDS

Vermi-cast | Essential elements | Flower waste | Leaf waste | Deficiencies

CITATION

Paturkar, Kirti; Kulkarni, Prasad and Shambharkar, Sahil (2020): Comparative study of vermi-cast generated from flower waste and leaf waste. ESSENCE Int. J. Env. Rehab. Conserv. XI (SP2): 38 — 41. <https://eoi.citefactor.org/10.11208/essence.20.11.SP2.125>

2. Title: English Literature Gateway

Objectives:

To enhance the creative writing skills of the students / intended outcomes: Students created quotes, poems and other creative writings of their own. A whatsapp Group was formed and an invite to join the group was forwarded to all the students of the college.

The Context: The students were initially apprehensive about sharing their views. Regular motivation was required to increase their participation.

The Practice: The practice gives science learning students an opportunity to think about ethics, human values as an integral part of their lives. The students lacked vocabulary to put up their ideas.

Evidence of Success: Few students were able to create quotes and reviews of poems in their own words. Guidance on vocabulary, presentation of ideas was given and revised quotes were produced.

Problem Encountered: Students were busy in their regular classes so they faced problems in participating in this activity. Feedback of students claimed they are interested however due to time constraints it is difficult to follow the notifications on the group.

Notes: Regular sharing of the quotes should be inculcated.

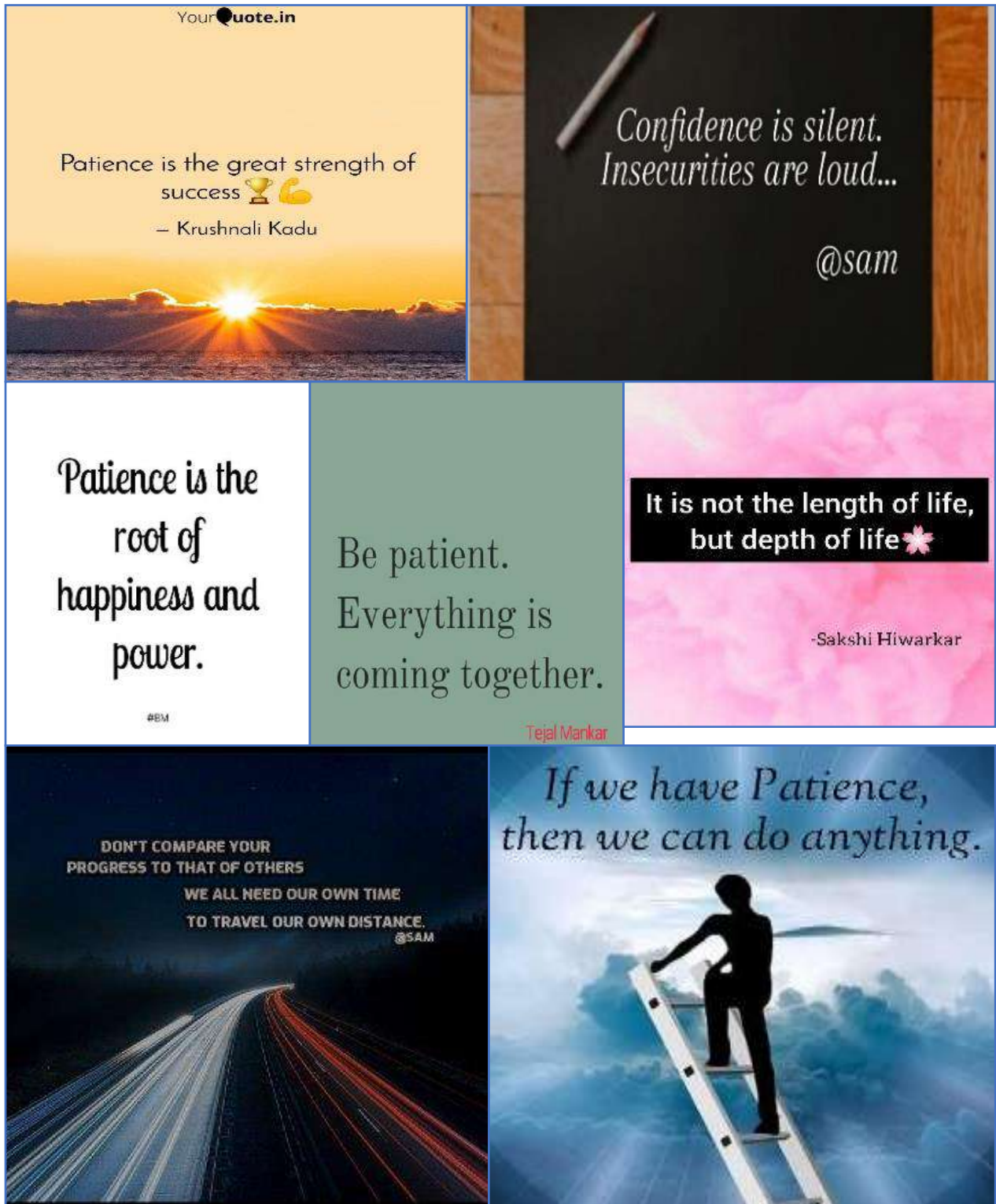
Background: Students who are interested in enhancing their creative writing skills, especially for advance learners

Methodology: A whatsapp Group was formed and an invite to join the group was forwarded to all the students of the college.

Possible outcomes: Students created quotes, poems and other creative writings of their own.

Participants: approx. 89

QUOTES WRITTEN BY STUDENTS



YourQuote.in

Patience is the great strength of success 🏆💪

— Krushnali Kadu

Confidence is silent.
Insecurities are loud...

@sam

Patience is the
root of
happiness and
power.

#BM

Be patient.
Everything is
coming together.

Tejal Mankar

It is not the length of life,
but depth of life 🌸

-Sakshi Hiwarkar

DON'T COMPARE YOUR
PROGRESS TO THAT OF OTHERS
WE ALL NEED OUR OWN TIME
TO TRAVEL OUR OWN DISTANCE.
@SAM

If we have Patience,
then we can do anything.

3. Title: Needs and Wants Activity

Background: Students were taught about the difference between needs and wants in their life to achieve their goals.

Methodology: Students were asked to make separate boxes of Needs and Wants and were asked to analyse about it. They were asked to keep the things they need and donate the things they wanted.

Possible outcomes: This activity helped them to declutter and at the same time imbibe the concept of community service through them without involving direct money.

Participants: approx. 50-70



4. Poster Making Activity

Background: Students were asked to make posters based on topic of their syllabus

Methodology: The basic concept behind poster making is shared and students make posters on the basis of the topics discussed in the class

Possible outcomes: Students displayed their creativity through ideas and presented it in the form of posters.

Participants: 50-70



Title of the Practice:

Development of Online Portal for the submission of Assignments and Conducting Online Test Examinations

Objective of the Practice:

- ❖ A portal is made for both Teacher and Student.
- ❖ A huge syllabus based question bank can be generated for online tests and assignments.
- ❖ Working of Department will be paper less for evaluation of students.
- ❖ Separate Log in for Teacher for maintaining student's data.
- ❖ Students will receive all notification for uploading assignments and online test through the portal.
- ❖ Test score generated immediately after submission of online test.
- ❖ A detail Students Report generated at the end of the academic session.

The Context:

To overcome the COVID-19 pandemic situation, there was need of Online portal to conduct online test examination as well as for submission of assignments. The students of computer science department were guided to develop such online portal so that test and submission of assignments can be undertaken in online mode.

The Practice:

The portal contains a separate login for Teacher and Student. Students have access to submit their assignment and also appear for Online Test. The portal has facility of auto submitting the test immediately if student move on another tab. Teachers can create Assignment, Test, Question Bank and Student Report. PAPERLESS Data Maintenance is possible due to this portal.

Evidence of Success:

Online Portal URL: - www.dsccsedproject001.in

Problems Encountered and Resource Required: -

Project Developed in:

- ❖ HTML, CSS, PHP, JAVASCRIPT

Backend Used:

- ❖ PHPMYADMIN

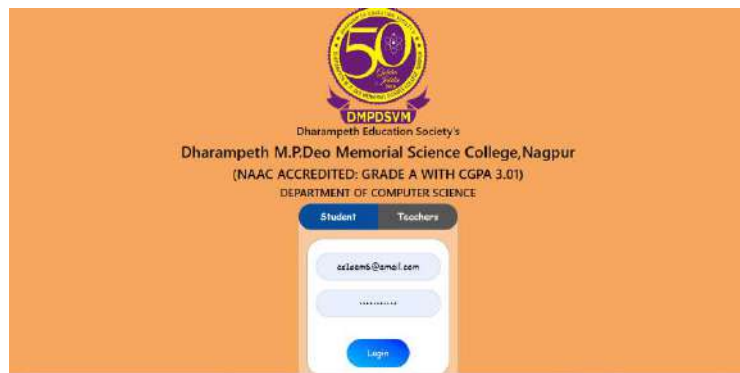
To implement the project following Resources were required:

- ❖ Server
- ❖ Domain Name
- ❖ Disk Space
- ❖ Bandwidth
- ❖ MYSQL Databases
- ❖ Cpanel
- ❖ SSL Certificate

Notes:

This online portal has been developed by the students of B.Sc III of Computer Science Department in connection for maintenance of departmental record with reference to Student Centric Activities such as Assignment Submission, Online Exams, Online Quiz & various other classroom activities.

In the backdrop of covid-19 pandemic, as emphasis is on online & paperless working this will prove to be a boon to the department for maintenance of academic records as this portal is developed by the students as per department need.



STUDENTS	VIEW	UNCHECK
POJIA KEPTA		
NIKHA BOOBAR		
DEEPIKA BHADRA		
NIKHIT DATTADEY		
ADARSH CHAVAN		
SUSMANT SHIRAPPE		

Online Portal Developing Team: -

Sr.No	Name of Student	Semester	Group
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2	Abhishek Muley	SEM- VI	PCOM
3	Kanishk Patil	SEM- VI	PCOM
4	Prathmesh Acharya	SEM- VI	PCOM

Title of the Practice:

Digital Poster Making on “Safety Major to curb the spread of Covid19 for 3rd wave”

Objective of the Practice:

- ❖ Students learn how to use Online Software which are available for making poster.
- ❖ Enhances the knowledge of students regarding software
- ❖ Students are able to understand and handle online software available.
- ❖ Students are able to express themselves creatively
- ❖ Awareness will be spread amongst the students regarding Covid-19 safety and precautionally measures

The Context:

COVID-19 has become a global pandemic by infecting people of almost all the world. Two waves were faced by everyone and third wave was on its path. So to make students aware about the safety majors to stop the spread of Covid-19 was the aim of the practice. In addition to this, student also learn the use of online software was idea behind this practice.

The Practice:

Students used online software for preparation of the poster which enhance their knowledge of using online software which is not a part of syllabus. Through this practice student were able to express themselves creatively and also gauge their knowledge and awareness on the given current topic of the COVID-19.

Evidence of Success:



Problems Encountered and Resource Required: -

Resource Required: Online Software for making Poster

Title of the Practice: Student Centric Project: Floristic Studies

Objectives of the Practice

The students of Botany are expected to aware about composition of the flora, then only they and understand the importance of Environment, its conservation and sustainable development. The project includes the survey in nearby are of the institute as well as the places of NSS Camp. During the survey in Ambazari area, Neri Mankar, and Bramhni, many Angiosperm plants were studied by the Botany students

The Context

As a student and teacher of Botany, field-based study was found difficult to the students, but is practical based and very much important for the subject students. Motivation of the students for field study as well as teaching them botanical names, plant identification is a challenging job. Also use of flora in field is not possible hence, its use in identification were taught in laboratory. This practice is utmost necessary for the Botany students and hence all the problems were overcome for implementation of this activity.

The Practice

Such student centric projects like field visits to explore Angiosperm flora of different places is uncommon in UG classes, hence students entering in PG after involvement in such activities, are more knowledgeable and well-versed about the basic things in the subject. Also the research attitude is developed among the students with participation in such activities.

Evidence of Success

Data regarding the flora studied in students centric projects were collected and stored in the department. Many photographs were also taken during the survey, which help the upcoming students to guide them in identification and actual pictures of the plants. Also this data will be useful in compilation of this work in the form of field guide for the students in near future. Such type of practices definitely assist the students in enhancing their interest in the subject as well as to inculcate research attitude among them.

Problems Encountered and Resources Required

Management of time in academic time table for field visit is an important thing in implementation of this activity. Also identification of interested students for field study is necessary during this activity. Accordingly, the method was followed and students were taken for fiend visits in near by area of the institution as well as during NSS Camp.

1. Title of the practice

Disposal of biomedical waste generated in the microbiology laboratory.

2. Objectives of the practice

The objective of biomedical waste disposal is to ensure its safe disposal to avoid any hazardous impact on human health and environment.

3. The Context

- The biomedical waste is defined as any waste, that is generated during -
 - The diagnostic procedures,
 - Microbial sub culturing process
 - After molecular biology experiments
 - Syringes, needles etc.
- Poor medical waste management causes environmental pollutions, unpleasant smell, growth and multiplication of not only microbes but also worms, insect etc. and may lead to the transmission of diseases like *typhoid*, *cholera* and other common source epidemics.
- Hence proper disposal of biomedical waste is of utmost importance in reducing the incidences of spread of infectious diseases.

4. The Practice

- The disposal of biomedical waste generated in microbiology laboratory comprises used microbial cultures and nutrient media, syringes, needles, molecular biology experimental kits etc. are disposed off by taking proper precaution and ensuring safety of all stakeholders.
- The college has contract with the Professional company which collects the biomedical waste generated in the laboratory twice a week, thus ensuring safety to all.
- During the academic year 2020-21 due to covid-19 pandemic online theory and practical classes were conducted, hence the question of biomedical waste generation and disposal did not arise.

5. Evidence of Success

The certificates issued by the company are maintained in the department.

6. Problems Encountered and Resources Required

Sometimes there is delay in collecting the biomedical waste by the company from the laboratory. In such situations difficulty may be encountered due to inadequate man power.

7. Notes (Optional)

During the year 20-21 due to complete lockdown in view of corona pandemic the contract with the company could not be renewed as no offline practical's were conducted.

Title of the Practice: Annual Blood Donation Camp

2. Objectives of the Practice

- Organization of blood donation camp in memory of Late. Vinayakrao Phatak, on 8th August in every year
- To inculcate the importance and need of blood donation as a social responsibility
- To take care the supply of blood to every needy person in the society in emergency.
- Organization of rallies To spread the awareness about the blood donation benefits and its future prospects.

3. The Context

- Blood and blood components are not generated in the laboratory and hence it must be donated by the individual
- Many misconceptions among the society which leads to collection of less amount of blood
- Inability to fulfill the need of blood for different patients by existing blood banks

4. The Practice

- Organization of blood donation camp in memory of Late Vinayakrao Phatak in the institute, making this practice frequent repetition every year
- The blood is collected by Hedgewar Blood Bank during the blood donation camp and certificates are given to every donor.
- Many students after knowing the importance of blood donation, come forward to donate the blood, this helps them to understand the importance of blood donation and social responsibility.
- Since last many years, this practice made 1000s units of blood were collected during the camp, that definitely helped the society to save the lives.

5. Evidence of Success

- The list of blood donors and photographs are preserved with NSS Unit of the college.
- Also, the list of blood donors from the blood donation camp is available with Hedgewar Blood Bank

6. Problems Encountered and Resources Required

- Though there is urgent need of blood to the society in every medical emergency, there is crunch of blood in blood banks, because of less number of blood donors.
- Misconceptions about the blood donation and its importance is one of the most important reasons responsible for availability of less number of blood donors
- Spreading awareness among masses is very much important to overcome this problem in future.

7. Notes (Optional)

- If this practice is undertaken by every institute through its NSS Unit, every year, then

definitely the collection of blood will be drastically increased. Also, this will help to overcome the misconception among the society as well as to enhance to blood donors in near future.



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