

Best Practices in the institution

Practice: I

Title of the Practice: Seed Balls Preparation

1. Objectives of the Practice:

- To protect seeds from wild insects & animals
- To germinate maximum no. of seeds and grow into plants
- To save our mother Earth by creating forest
- To guide the students about the preparation of seed balls

2. The Context

Maximum people in the region have agricultural background who run their livelihood on agriculture. It is experienced that in the modern age, use of chemical fertilizers is in trend tremendously as a result of which the age-old Indian practice of using organic fertilizers is deteriorating. But as the damage caused by chemical fertilizers is often long-term and increasing, it is wiser to consider alternative and sustainable methods of fertilizing the soil. Considering the need of organic farming and awareness about the use of seed ball in the agriculture, department of Botany of the institution has taken the initiative in the preparation of seed ball as model and aware the students in the institution about its use.

A seed ball is a seed that has been wrapped in soil materials, usually a mixture of clay and compost, and then dried. Essentially, the seed is 'pre-planted' and can be sown by depositing the seed ball anywhere suitable for the species, keeping the seed safely until the proper germination. They contain a combination of mineral soil, humus and three types of compost (Vermicompost, Cow dung and Decomposed leaf litter) for all the nutritional requirements of the plants. These are placed around the seeds, at the center of the ball, to provide microbial inoculants.

3. The Practice

During the practical classes, the teachers of the department of Botany put forward the idea of preparation of seed ball among the students. It was convinced to the students that this practical

approach of the preparation of seed ball is not only useful for them in their studies but also proved to be fruitful in using in the farms to avoid the chemical fertilizers. There is need of soil or compost, clay, and seeds that are native to the region. (Non-native species could throw off the local balance and lead to the introduction of invasive species.) Amounts will vary, but a ratio of five parts soil to three parts clay to one part seeds is a good rule of thumb (5:3:1). Balls should be about the size of a quarter to make for easy throwing. To maximize the seeds chances of sprouting roots, spring and summer are the best times to deploy the seed balls. Seed balls are amazingly versatile. They can be tossed over fences into abandoned lots, or out the windows of cars and buses onto median dividers and roadside wasteland. They can be left alongside parking lots and bike paths, in unused planters and gardens that have fallen on hard times. In short, anywhere there is land to grow them – provided that the soil shouldn't too dry, compact, or dense with other vegetation. There are many types of seeds which can be used in the preparation of seed balls. One can try wildflower seeds, necessary for the survival of pollinators (such as bees) on which our ecosystem depends. Such 'companion' plants are chosen because they grow well together, assisting in pollination, pest deterrence, and soil conditioning. Planting is satisfying but hard work. One has to dig holes, weed, water and prune – and most importantly, one needs permission to cultivate the land. But with seed balls, only need to throw them! It's a great way to get people of all ages and backgrounds involved in the greening process, including those who might never have considered themselves gardeners.

4. Evidence of Success

Through this practice, the institution has extended helping hand to the large number of farmers in the vicinity who can enable themselves by the preparation of seed ball as a fertilizer. The institution can become the platform for this novel agricultural practice. The institution has made large number of seed balls and distributed them to the students and the farmers as well, and told them to throw the balls wherever you want. The balls are gifted on the occasions of birthdays too. The result of this was the flora has become rich in the area. The students who participated in this practice of seed ball preparation spread this idea in the vicinity. Some students also promised that they will use this prepare seed ball in their home and this they will use this product in their farms.

5. Problems Encountered and Resources Required

- The problem encountered with this practice is that when the balls are distributed to the students and told them to throw outside, the seeds thrown on barren area and particularly sand platform. Such seeds have to be managed.
- The size of the seed balls should be varied according to their seed viability.



Institutional Re-accreditation
Cycle III – CGPA 3.07

Best Practice I: Seed Ball Preparation



Germinating Seed Ball

Shri Dnyanesh Mahavidyalaya, Nawargaoan

2011-2012 (2011-2012) (2011-2012) (2011-2012)

Best Practices in the institution

Practice: II

1. Title of the Practice: Use of Quick Response (QR) Code

2. Objectives of the Practice:

- ✓ To provide the latest information with the use of technology
- ✓ To make able to the students for using technology specially in the pandemic era
- ✓ To cultivate the habit of using scanning app among students
- ✓ To make good use of smartphone and make them techno savvy

3. The Context

Maximum students in the institution use smartphones. They use the smartphone in all the walks of life including academic purpose. The smartphone has proved to be a boon for them during the lockdown period as a medium of classes. When the institution observed that the students use the smartphones everywhere in the premises then why not they use it for their academic purpose as well as for more information like knowing information like local plant species to help conserve them, adding themselves in the class what's app groups, useful websites, contact data to calendar data, email addresses, phone numbers and geolocation and many more. Department of Zoology, Botany, English, Mathematics, Physics, and other departments used this technique of QR (Quick Response) codes for the upgradation of knowledge among the students. Library of the institution uses the codes for the entry and exit of the students. QR codes also promote sharing and networking. They are far more than just digital barcodes. Their use increases the creativity among the students. The feeling of getting any information under the sun on a single click of the smartphone enriches the knowledge of students and anybody interested in the subjects.

4. The Practice

The information stored in a QR Code is usually URL, i.e. hidden website address. Anyone with a smartphone can use a QR code scanning app to scan the code and see the detailed information like scientific name and family of some particular plant. The institution has a vast scope to use QR codes to different things like plants, species, photos of important writers, poets, Zoologists,

Botanists, Mathematicians and many more. The premises also have Botanical garden with different varieties of plants. Some faculty took initiative in creating the QR code to different plants and species. Department of Zoology also used applied this method in their UG and PG labs in the form of posters. The posters have pictures of the animals and the QR codes are given with the pictures. During lockdown, due to pandemic, the teachers have to engage the students on online classes. This was also useful in getting required data regarding species and plants. The students were suggested to scan the QR codes to get information accordingly. They were also told to join their respective What's App Groups using QR code so that they can be well acquainted with the process of using QR code.

5. Evidence of Success

The institution observed that many students are scanning QR codes for fulfilment of their thirst of knowledge, these days. The students scan the QR codes fixed to the trees using their android phones and gather the required and useful data for their academic development. The codes used in zoology labs are used by the students for getting information regarding the animals and species. Mathematics and Physics departments have provided the QR Codes regarding the information of various mathematicians and useful websites, and these seem very useful in the upgradation of the students' knowledge. The students scan the codes and join the Whats app groups without any hurdles.

6. Problems Encountered and Resources Required

The activity started with the zeal and enthusiasm as the responses from the students is tremendous for this activity. The number of students are using these QR codes for quenching their thirst of knowledge. To scan the codes there is a requirement of android mobile phones, but, as the students in the institution belong to rural and economically backward area and some of them do not have android phones, eventually all of the students were unable to scan the codes and use this activity.



Best Practice II: Quick Response Codes



Q R Codes to join What's App groups
And for library attendance

