Shree Gurudeo Shikshan Prasarak Mandal Yeola's

### SWAMI MUKTANAND COLLEGE OF SCIENCE

YEOLA DIST.NASHIK (M.S.) 423401

Accredited by C+ grade

# Department of Botany Sub: Biofertilizer Project

## 1. Agro services: Use of Bio fertilizers, guidance to farmers.

#### Goal:

To change the attitude of farmers for using the bio fertilizers.
To popularize the use of bio fertilizers among the farmers
To familiarize the farmers about hazardous effects of chemical fertilizers.

#### The Context:

Our college is located in the rural area where farming is the main occupation. The farmers cultivate various seasonal crops such as corn, onion, cotton, pulses and cereals along with leafy vegetables. The crops are seriously affected by use of chemical fertilizers and have adverse effect on the growth and productivity of crop. To overcome such problem use of bio fertilizer is helping the farmers to increase the soil fertility and crop productivity.

#### **Practice:**

Teachers of Department of Botany are involved in creating awareness among farmers to use bio fertilizers.
In both Kharip and rabbi season the teacher and final year students arrange the demonstration Programme on application of bio fertilizers in the field of farmers, vicinity to Yeola.
Teacher gives information of adverse effect of chemical fertilizers and thereby importance of bio fertilizers.

#### **Evidences of Success:**

It	has	helped	to	farmers.
Problem	encountered	and	resources	required.
No problem	n has been encountered	d.		



#### NOTICE

All the Students of S.Y and T.Y.B.Sc. Botany and the faculty members of botany are hereby informed that the workshop on demonstration treatment of Biofertilizers (*Rhizobium, Azotobacter, and P.S.B.* etc.) is arranged on 6/1/2020 on the farm of Mr.Dnyaneshwar kisan Kapse, Walmik Kisan Kapse and Subhash Karbhari Kapse of Wadgaon Tal.Yeola. All should remain present at 11.00 am at wadgaon on the same day.

Head

#### **REPORT OF BIOFERTILIZER DEMONSTRATION**

The department of Botany Swami Muktanand College of Science Yeola organized a demonstration practice of use of biofertilizers their applications and benefits to farmers, at Wadgaon Tal- Yeola Dist-Nasik on 6/1/2020.

The demonstration is given in the field of two farmers.

#### 1. Treatment to the onion seedlings

Name of farmer	: 1. Shri. Dnyaneshwar Kisan Kapse
	2. Shri. Walmik Kisan Kapse
Name of village	: Wadgaon Tal-Yeola.
Name of crop	: Onion ( <i>Allium cepa</i> L.)
Name of Treatment seedlings	: Phosphate solubilizing Bacteria (PSB) to the onion
Time of Treatment	: 6/1/2020 at 11.00am onwards on the same day
Participation	: The farmers of Wadgaon, S.Y and T.Y.B.Sc. Botany students

And Faculty of Botany.

Department of Botany has organized a Programme on demonstration of treatment of biofertilizers (PSB) to the onion seedlings in the field of shri. Dnyaneshwar Kisan Kapse (Wadgaon).All the faculty members of department of botany and S.Y and T.Y.B.Sc. Botany students were present.

First of all myself Dr. Pachore M.V. explained the all valuable information about the departmental activity of application, use and benefits of biofertilizers. Then our faculty member Dr. Datir R.B. explained about biofertilizers Such as Rhizobium, Azotobacter, and Phosphate Solubilizing Bacteria (PSB) to the farmers. He also explained the hazards of chemical fertilizers and their bad effect on the health of soil, crop and their yield.

And shown the actual demonstration experiment, he has given the treatment of PSB to the onion seedlings as shown in the following steps.

1. He took the the jgarry about 1 kg and mixed it with warm water and slurry is made in a bucket.

- 2. Then the slurry is cooled down for half an hour.
- 3. Then PSB is taken and mixed with slurry homogeneously in a plastic flat bottom pot.
- 4. The seedling roots are dipped in slurry for about 15 minutes, the slurry sticks to the roots with microbes.
- 5. Then the seedlings are planted in separate beds for comparison with controlled for taking observations in future



Dr. Pachore M.V. explaining about biofertilizers to the farmers & students with Faculty



Giving demonstration of mixing the slurry with PSB biofert (Dr. Datir, Dr. Patale Dr. Pachore, Students and farmer)









The Onion seedlings are dipped into the PSB slurry for treatment.



Dr. Datir, Dr. Pachore and Dr. Patale along with students & farmer showing the treated onion roots with PSB For plantation in the field.





The students planting the PSB treated onion seedlings in the field.