"Paraspar Deo Bhav"

Shri Gurudeo Shikshan Prasarak Mandal, Yeola's

SWAMI MUKTANAND COLLEGE OF SCIENCE YEOLA. DIST. NASIK 423401 DEPARTMENT OF BOTANY

Project Report on

BIOFERTILIZER: APPLICATION, USES AND

BENEFITS IN AGRICULTURE

Year 2018-2019

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

Goal:

- 1. To change the attitude of farmers for using the bio fertilizers.
- 2. To popularize the use of bio fertilizers among the farmers
- 3. 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:

1. Teachers of Department of Botany are involved in creating awareness among farmers to use bio fertilizers.

2. 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.

3. 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 has been encountered.

ACCREDITED BY NAAC C+ Ph.: (02559) off.(1):266193 off.(2):266766 Fax: 266193	" Paraspar Deo Bhav " Shri Gurudeo Shikshan Prasarak Mandal, Yeola's Swami Muktanand College Of Science Yeola - 423401 - Dist.Nashik (Maharashtra) Pune University Affiliated (ID No.PU/NS/S/041(1991)	Dr.Datir R.B. (I/C Principal
College No.224	Email.smcs_yeola@yahoo.com Centr	e No.044

NOTICE

All the Students of 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.) **wis** arranged on 29/10/2018 on the farm of Mr. Kotame Manohar Kacheshwar of Kotamgaon Tal.Yeola. All should present at 10.00 am on the same day.

Department of Bota Venia S

1) Dr. Patale S.W. 4 2) prof. Bhagwat. VC. - () (T.7/B.SC.) Bot)

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 Kotamgaon Tal- Yeola Dist-Nasik on 29/10/2018.

The demonstration is given in the field of farmer Mr. Kotame M.K...

Treatment to the Gram seeds.

Name of farmer	: Shri. Manohar kacheshwar Kotame
Name of village	: Kotamgaon Tal-Yeola.
Name of crop	: Gram (<i>Cicer ariatinum</i> L.)
Name of Treatment	: Rhizobium to the gram seeds
Time of Treatment	: 29/10/2018 at 10.00am onwards on the same day
Participation	: The farmers of Kotamgaon, T.Y.B.Sc. Botany students and Faculty of botany.

All the faculty members of department of botany and T.Y.B.Sc. Botany students arrange Programme of demonstration of treatment of biofertilizers (Rhizobium) to the Gram seeds in the field of shri.M.K. Kotame .where the field was ready for sowing.

First of all our faculty member r. Datir R.B., Dr.Pachore M.V. and prof. Bhagwat V.C. explained the all valuable information regarding applications ,use and benefits of different biofertilizers such as Rhizobium, Azotobacter,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. He explained that why only the rhizobium biofertilizers is used to treat the gram seeds, how these bacteria forms the root nodules on the roots of gram and fix the atmospheric nitrogen and provides the to the crop and the increase in the yield.

Prof. Bhagwat V.C has given the demonstration i.e. actual treatment of Rhizobium to the gram seeds is given in the following steps

- 1. He took 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 Rhizobium biofertilizers is taken and mixed with slurry homogeneously in a plastic flat bottom pot.
- 4. The seeds are mixed with slurry thoroughly and slowly, the slurry sticks to seeds with microbes. And forms a coating around the seeds.
- 5. The seeds are dried under shade for half an hour and then are sown separately for comparison with controlled for taking observations in future. And for keeping the record.



Dr. Datir explaining the benefits of biofertilizers to the farmars & students with Faculty



Dr. Pachore, Dr. Datir and Prof. Bhagwat along with students & farmer showing the preparation of jaggary slurry for rhizobium Biofertilizer



Prof. Bhagwat V.C. showing the demonstration of Rhizobium Biofertilizer to the farmers with students & Faculty



The students of botany are doing the plantation of rhizobium treated gram seeds in the field of Mr. Kotame M.K.



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Shree Gurudeo Shikshan Prasarak Mandal Yeola's Swami Muktanand College of science Yeola Dist-Nashik 423401 Department of Botany

Demonstration Programme On

Use of Biofertilizers in Agriculture – Guidance to Farmers AT- Kotamgaon Tal-Yeola. Dist-Nashik

Sr.No	Name of The Farmer	Mobile Number	Signature
1	Amol Deoram Lone	9028192087	- Pole
2	Gauray Gautan Kale	7620067275	Getter:
3	Krushna Sharad kotme	94225000106	Khoton
4	Deepak Manahar Kotme	89422526837	OKun
5	Balath Punjaran Lone	8698520215	BPICK
6	Saunabh Babasaheb Ushir	9860419564	S.B. Ushir
7	Prakash Ashok Satalkaz	8975953681	P. A. Satal
8	Sharad kacheshwaz kotme	9421563801	/puts 14.
9	Lahnu Narayan Shinde	9850647509	THESAL
10	Gauten Sopan kale	9881169381	Colo Here
11	Aabasabeb Sitaran Gravhane	9822704217	Ale
12	Shankar Vishny Somvanshi	842172304	Sharten
13	Sarika Rushiress Kotne	9422526814	SR-KOtome
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Department of Botany Demonstration Programme On

Use of Biofertilizers in Agriculture – Guidance to Farmers

Sr.No	Attendance S Name of The Student	Mobile Number	Signature
1	khanderae shubbangi Haribbau.	7498632623	taxa
2	Wakchaure Pranali Babasah	and the second se	Bukchene.
3	passage Dipali Sugabhan	and the second se	Deac -
4	Khizad Jazti Badzinath	9637226478	Astread
5	Nawale Divya Jitendra	7350421483	Brunde
6	Tidake sonali sudhakar	78895187-59	R
7	Chavan Asha Ramkruhna	8112815136	ashilar.
8	Shinde Shital Arjun	7057766089	Sele.
9	Gaikwad Smehal Owacks nath.	9657585209	Graikwad
10	Bornaze Maya Balu	8530727613	Brayler.
11	Gailwad Shubham Dwarkana	955202185	· Carrisco
12	Tamboli Azam Latif	8788829893	
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