SRR & CVR GOVT. DEGREE COLLEGE (A) VIJAYAWADA

DEPARTMENT OF MICROBIOLOGY

2021-2022

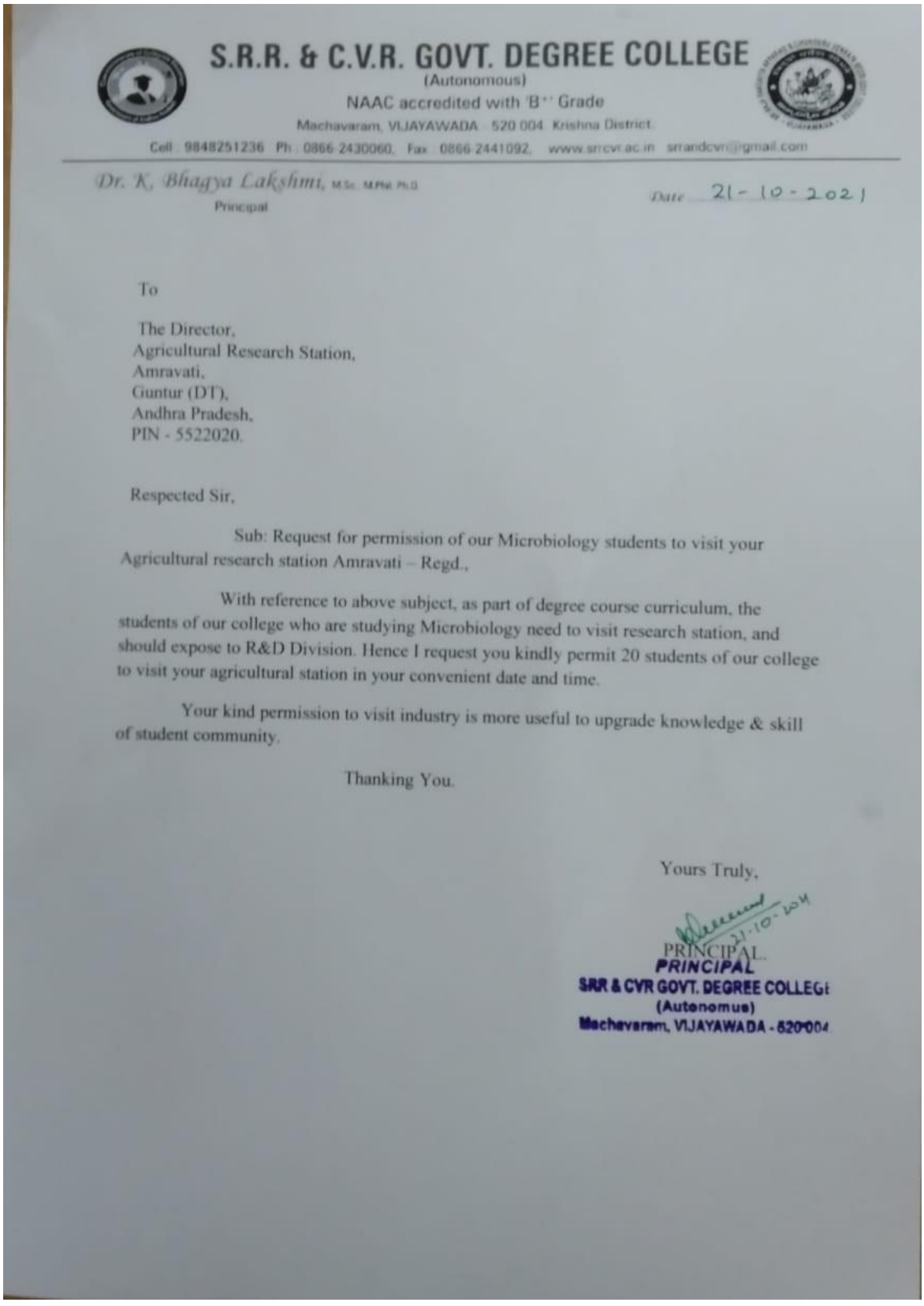
Field Visit

To

Biofertilizer Laboratory, ARS, ANGRAU, Amaravati, Guntur, Andhra Pradesh.

November 6th 2021

Permission Letter



S.R.R. & C.V.R. GOVT. DEGREE COLLEGE
(Autonomous)
NAAC accredited with 'B++' Grade
Machavaram, VIJAYAWADA - 520 004. Krishna District.
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Dr. K. Bhagya Lakshmi, M.Sc. M.Phil. Ph.D
Principal

Date 21-10-2021

To

The Director,
Agricultural Research Station,
Amravati,
Guntur (DT),
Andhra Pradesh,
PIN - 5522020.

Respected Sir,

Sub: Request for permission of our Microbiology students to visit your Agricultural research station Amravati – Regd.,

With reference to above subject, as part of degree course curriculum, the students of our college who are studying Microbiology need to visit research station, and should expose to R&D Division. Hence I request you kindly permit 20 students of our college to visit your agricultural station in your convenient date and time.

Your kind permission to visit industry is more useful to upgrade knowledge & skill of student community.

Thanking You.

Yours Truly,

Received 21-10-2021

PRINCIPAL.

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(Autonomous)
Machavaram, VIJAYAWADA - 520004

Acceptance: Through telephonic call accepted the request and permitted the students to visit the laboratory on **November 6th 2021.**

Students Attended

Students Attended

S.No	Redg . NO	Name of the Student	Class	Signature
1	19313201	J. Chandini Priya	III B.Sc (MBC)	J. Chandini Priya
2	19313202	P. Sadhvik	III B.Sc(MBC)	P. Sadhvika
3	19313203	V. Rameswar Reddy	III B.Sc (MBC)	V. Rameswar Reddy
4	19313204	G .Nagavamsi	3rd B.Sc (MBC)	G. Nagavamsi
5	19313205	M. Tulasi	III B.Sc(MBC)	M. Tulasi
6	19313206	T. Teja	III B.Sc(MBC)	T. Teja
7	19313207	P Ravi Teja	III B.Sc (MBC)	
8	19313208	T Durga Amal Prasad	III B.Sc(MBC)	T Durga Amal Prasad
9	19313209	T Bharathi	III B.Sc (MBC)	T. Bharathi
10	19313210	J Venkteswaralu	III B.Sc(MBC)	J. Venkateswarlu.
11	19313211	K Kineera	III B.Sc(MBC)	K kineera
12	19313212	Ch. Lakshmi Harika	III B.Sc(MBC)	Ch. Lakshmi Harika
13	19313217	E. Divya Keerthana	3rd B.Sc	E. Divyakeerthana.
14	19313218	G. Gopal Rao	III B.Sc(MBC)	G. Gopal
15	19313220	M. Ramesh	III B.Sc(MBC)	M. Ramesh
16	1931321	K. Vagdhan Babu	3rd BSc	K. Vagdhan Babu.
17	19313223	S. Prudhvi Nayak	3rd BSc.	S. Prudhvi Nayak.
18	19313224	J. Vijay Babu	3rd BSC	J. Vijay Babu
19	19313225	C. Ramdev	3rd BSc	Ch. Ramdev
20	19313229	B. Aaron Wesly Paul	3rd BSc	B. Aaron
21	19313230	K. Priyakrishna	III B.Sc.	K. Priyakrishna
22	19313226	Sk. Ameena Kousar	III B.Sc	Ameena

Report

Field trip to Biofertilizer Laboratory, ARS, ANGRAU, Amaravati, Guntur, Andhra Pradesh.

As a part of the curriculum, students of **III B.Sc (MBC)** Microbiology visited Biofertilizer Laboratory ARS, ANGRAU, Amaravathi, and Guntur on 6/11/2021. It is one of the most important producers of biofertilizers in the State under the Department of the Agriculture with a capacity to produce20 to 25 metric tons of different types of Biofertilizers annually to supplement the use of chemical fertilizers considerably**.**

Experiences of Students about Field Trip

My experience on field trip to Biofertilizer Laboratory ARS, ANGRAU, Amaravathi.

I am Keerthana studying III BSc Microbiology in SRR and CVR Govt. Degree College (A) Vijayawada. As a part of our course we have to attend some field trips, On behalf of that we have visited Biofertilizer laboratory ARS, ANGRAU, Amaravati, Guntur on 6th November 2021.

Dr K Lakshmipathy , Senior Scientist , In charge Biofertilizer laboratory guided us to learn the aim and objectives of the laboratory . Different types of Biofertilizers produced in the lab and benefits and usage of Biofertilizers.Sir explained about isolation and mass multiplication of various biofertilizers *viz Rhizobium, Azatobacter, Azospirillum,* YAM and Phosphate solubilizing bacteria.

Aim and Objectives of the Laboratory:

Realization of the adverse effect caused by using excessive and continuous use of chemical fertilizers and other synthetic agricultural inputs that which leads to depletion or degradation of soil fertility status, environmental pollution, human health hazards at the same time destruction of natural ecosystem.

This laboratory produces different types of biofertilizer for increasing crop production level, to improve soil fertility status to minimize human health hazards problems, to minimize the use of chemical fertilizers to provide organic forming/ organic agriculture and to minimize environmental pollution and to conserve natural eco systems in an eco-friendly way.

Biofertilizers:

Biofertilizers are carrier-based preparation containing live or latent cells of effective strains of bacteria or fungi. They help in fixing or solubilizing the nutrients present in air or in the soil which is then made available to the plants.

Different types of biofertilizers produced in the laboratory

1. **Rhizobium:** It is a Nitrogen fixer. It uses for legume crops like pulses and oil seed crops like soya beans and groundnut. Rhizobium is crop specific.

2. **Azatobacter: I**t uses for cereal crops vegetables crops, oil seed crops, plantation crops, fruit crop and flowers.
3. **Azospirillum: I**t uses for cereal crops vegetables crops, oil seed crops, plantation crops, fruit crop and flowers.
4. **Phosphate Solubilizing Microorganisms**: It uses in all crops, along with nitrogenous biofertilizers

Benefits of biofertilizers:

1. Biofertilizers reduce the use of synthetic fertilizers and pesticides
2. Biofertilizers provide protection against drought and some soil borne diseases.
3. Biofertilizers also promote healthy soil, leading to greater forming sustainability.

Outcome of the trip:

We understand that Biofertilizers are living organisms of bacteria, fungi and algal origin, which can help plants to absorb nutrients, fix atmospheric nitrogen in the soil and solubilize the in solvable forms of phosphates into available form and mineralization.

Dr K Lakshmipathy, Senior Scientist, ARS, ANGRAU, Amaravati, Guntur Addressing the Students dated November 6th 2021

Fermentor for Mass multiplication of Biofertilizers

Biofertilizer Laboratory, ARS, ANGRAU, Amaravati, Guntur, Andhra Pradesh

ACKNOWLEDGEMENTS

We express our deep sense of gratitude to Dr. K. Bhagya Lakshmi, Principal SRR & CVR Govt. Degree College Autonomous, Vijayawada for her support and constant encouragement to upgrade the knowledge and skills of students

WE indebted to **Biofertilizer Laboratory, ARS, ANGRAU, Amaravati, Guntur, Andhra Pradesh for** permitting the students III BSc (MBC), **SRR & CVR GOVT**. Degree College Autonomous, **VIJAYAWADA**

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In Charge Dept of Microbiology PRINCIPAL

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D. Jyothi

In Charge Dept of Microbiology

12-11-2014

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