

**“EFFECT OF ZINC AND BORAX ON GROWTH, YIELD AND
QUALITY OF CABBAGE (*Brassica oleracea* var. *Capitata* L.)
CV. “GREEN FLASH”**



**THESIS
SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF DEGREE OF**

***Master of Science (Agriculture)*
in
*Horticulture***

**Supervisor
Mr. Ranjan Jadon
Assistant Profesor**

**Submitted By
Chhavi Mohan
M.Sc. Ag. Horticulture**

2023

**DEPARTMENT OF HORTICULTURE
FACULTY OF AGRICULTURE
J.S. UNIVERSITY
SHIKOHABAD, DISTT. FIROZABAD (U.P.)**

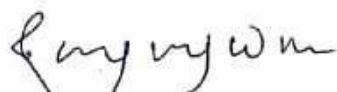
CERTIFICATE – I

This is to certified that **MR. HITESH KUMAR, Roll. No. 212040204007**, student of the college of horticulture, **J. S. University Shikohabad, U.P.**, a candidate for the degree of **Master of Science in Agriculture** with major in **Horticulture**, has been working under my guidance and supervisor during the course of the programme and the present thesis entitled “**EFFECT OF LEVEL OF POTASH AND BORON ON YIELD AND QUALITY OF TOMATO (*Lycopersicon esculentum*)**” which he is submitting in partial fulfillment for the award of degree of Master of Science (Agriculture) in Horticulture is his genuine work.

21/8/23

Place: **Shikohabad**

Date: ~~July~~ **June** 2023



Mr. Ranjan Jadon

Chairman

(Advisory Committee)

Department of Horticulture,
J.S. University Shikohabad, U.P.




**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**
Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled "STUDY ON INTEGRATED NUTRIENT MANAGEMENT IN CAULIFLOWER (*Brassica oleracea* var. *botrytis* L.)" submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE** in **HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **VEERPAL SINGH**, Enrollment No. **J212041046**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place : Shikohabad
Date : 21 / 8 / 2023


Mr. Ranjan Jadon
(Advisory Committee)
(Department of Horticulture)

**Effect of Integrated Nutrient Management
(INM) on vegetative growth and yield of
brinjal (*Solatum melongena* L.)**



THESIS

SUBMITTED TO

**J.S. UNIVERSITY, SHIKOHABAD DISTT. FIROZABAD (U.P.)
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE DEGREE OF
MASTER OF SCIENCE
IN
HORTICULTURE
2023**

Under the supervision of :

Mr. RANJAN JADON

Assistant Professor

Submitted by :

DESHAKSHI MISHRA

M.Sc. (Ag.) Horticulture

Roll No.-212040213008

Enroll. No. J212041042

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD
DIST FIROZABAD-283135 (U.P.) INDIA**



**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**

Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled "**Effect of Integrated Nutrient Management (INM) on vegetative growth and yield of brinjal (*Solatum melongena L.*)**" submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE** in **HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **DESHAKSHI MISHRA**, Enrollment No. **J212041042**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place : Shikohabad

Date : 12/18 /2023

Mr. Ranjan Jadon

(Advisory Committee)

(Department of Horticulture)

**Effect of bio-fertilizer VAM, PSB and
Azotobacter on growth, yield and quality
of turnip, (*Brassica rapa*.)**



THESIS

SUBMITTED TO

**J.S. UNIVERSITY, SHIKOHABAD DISTT. FIROZABAD (U.P.)
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE DEGREE OF
MASTER OF SCIENCE
IN
HORTICULTURE**

2023

Under the supervision of :

Mr. RANJAN JADON

Assistant Professor

Submitted by :

UTKARSH GUPTA

M.Sc. (Ag.) Horticulture

Roll No.-212040213002

Enroll. No. J212041001

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD
DIST FIROZABAD-283135 (U.P.) INDIA**

CERTIFICATE - I

This is to certified that **Mr. Kamal Pal**, Roll. No. 212040204008, student of the college of Horticulture, J.S. University Shikohabad, U.P., a candidate for the degree of **Master of Science** in **Agriculture** with major in **Horticulture**, has been working under my guidance and supervision during the course of the programme and the present thesis entitled “**Effect of zinc sulphate and boron on growth, yield and quality of broccoli (*Brassica oleracea* L. var. *italica*)**” which he is submitting in partial fulfilment for the award of degree of Master of Science (**Agriculture**) in Horticulture is his genuine work.

Place: Shikohabad

Date: 11./July/ 2023


Mr. Ranjan Jadon
Chairman

(Advisory Committee)

Department of Horticulture,

J.S. University Shikohabad, U.P.



**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**

Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled "EFFECT OF ORGANIC MANURES AND BIOFERTILIZERS ON GROWTH, YIELD AND QUALITY OF KHARIF ONION (*ALLIUM CEPA* L)" submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE** in **HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **VIKAS KUMAR**, Enrollment No. **J212041005**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place : Shikohabad

Date : 21 / 8 / 2023

Mr. Ranjan Jadon

(Advisory Committee)

(Department of Horticulture)

**"Effect of Varieties and Fertility Levels on
Growth, Yield and Quality of Turnip
(*Brassica rapa* L.)"**



**Thesis
Submitted to
J.S. University, Shikohabad Distt. Firozabad (U.P.)**

**In partial fulfillment of the requirements for
the degree of**

**MASTER OF SCIENCE
IN
HORTICULTURE
2023**

Under the Supervision of :

**Mr. RANJAN JADON
Assistant Professor**

Submitted by :

**AMAR KUMAR SHARMA
M.Sc.(Ag.) Horticulture
Roll No. 212040204002
Enrolment No. J212040010**

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD,
DIST FIROZABAD - 283135 (U.P.) INDIA**



**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**
Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled "**EFFECT OF DIFFERENT ORGANIC MANURES ON GROWTH AND YIELD OF RADISH (RAPHANUS SATIVUS L.)**" submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE in HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **ABHISHEK KUMAR TIWARI**, Enrollment No. **J212040004**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place : Shikohabad
Date : 25/ 8 /2023


Mr. Ranjan Jadon
(Advisory Committee)
(Department of Horticulture)

**EFFECT OF ZINC SULPHATE AND BORON ON
GROWTH, YIELD AND QUALITY OF BROCCOLI**

(Brassica oleracea L. var. italica)

THESIS

Submitted to the

J.S. UNIVERSITY, SHIKOHABAD, U.P. INDIA

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

Master of Science Agriculture

In

(Horticulture)

BY

Kamal Pal

Roll. No. 212040204008

Under the Supervision of

Mr. Ranjan Jadon



Department of Horticulture, Collage of Agriculture,

J.S. University, Shikohabad, (U.P.) India

2023



**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**

Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled “Effect of bio-fertilizer VAM, PSB and Azotobacter on growth, yield and quality of turnip, (*Brassica rapa.*) submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE** in **HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **UTKARSH GUPTA**, Enrollment No. **J212040213002**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been dulyacknowledged.

Place : Shikohabad

Date : 12 / 8 / 2023

Mr. Ranjan Jadon
(Advisory Committee)
(Department of Horticulture)

**“EFFECT OF MICRONUTRIENT APPLICATION ON
GROWTH, YIELD AND QUALITY OF ONION (*Allium cepa* L.)
AT (Firozabad District)”**



Thesis

Submitted to

J.S. UNIVERSITY SHIKOHABAD, FIROZABAD (U.P.)

In partial fulfillment of the requirements for

The degree of

MASTER OF SCIENCE

IN

HORTICULTURE

(2023)

Under the Supervision of:

MR. RANJAN JADON

Assistant Professor

Submitted by:

DILEEP KUMAR

M.Sc. (Ag.) Horticulture

Roll no. 212040204013

Enrolment No. J212040037

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD,
DIST FIROZABAD 283135 (U.P.) INDIA**




DEPARTMENT OF
HORTICULTURE J.S. UNIVERSITY

Shikohabad, Dist, Firozabad (U.P.)

This is to certify that the thesis entitled “**EFFECT OF MICRONUTRIENT APPLICATION ON GROWTH, YIELD AND QUALITY OF ONION (*Allium cepa* L.)**” submitted to the Faculty of Agriculture, J.S. University, Shikohabad Dist, Firozabad (U.P.) in partial fulfillment of the requirements for the degree of Master of Science in **Horticulture** embodies the result of a piece of Bonafede research carried out by **Mr. Dileep Kumar**, Enrollment No-J2120400037 under my supervision. and no part of the thesis has been submitted for any other degree or diploma.

I further certify that help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place: Shikohabad
Date: 12/08/2023


Mr. Ranjan Jadon
(Advisory Committee)
(Department Of Horticulture)

**EFFECT OF LEVEL OF POTASH AND BORON ON YIELD AND
QUALITY OF TOMATO (*Lycopersicon esculentum*)**

THESIS

Submitted to the

J.S. UNIVERSITY, SHIKOHABAD, U.P. INDIA

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF**

Master of Science Agriculture

In

(Horticulture)

BY

HITESH KUMAR

Roll. No. 212040204007

Under the Supervision of

MR. RANJON JADON



DEPARTMENT OF HORTICULTURE

FACULTY OF AGRICULTURE

J.S. UNIVERSITY

SHIKOHABAD, (U. P.) INDIA

JUNE, 2023

**“Effect of Different Organic Manures on
Growth and Yield of Radish
(*Raphanus sativus* L.)”**



**Thesis
Submitted to
J.S. University, Shikohabad Distt. Firozabad (U.P.)**

**In partial fulfillment of the requirements for
the degree of**

**MASTER OF SCIENCE
IN
HORTICULTURE
2023**

Under the Supervision of :

**Mr. RANJAN JADON
Assistant Professor**

Submitted by :

**Abhishek Kumar Tiwari
M.Sc.(Ag.) Horticulture
Roll No. 212040204001
Enrolment No. JF12040004**

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD,
DIST FIROZABAD - 283135 (U.P.) INDIA**



**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**

Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled “**EFFECT OF ORGANIC MANURES AND BIOFERTILIZERS ON GROWTH, YIELD AND QUALITY OF KHARIF ONION (*ALLIUM CEPA* L)**” submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE** in **HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **VINAY KUMAR**, Enrollment No. **J212041043**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this investigation have been duly acknowledged.

Place : Shikohabad

Date : 20/8/2023

Mr. Ranjan Jadon

(Advisory Committee)

(Department of Horticulture)

**Effect of Foliar Feeding of Micronutrients
on Growth and Yield of Cauliflower
(*Brassica oleraceae* var. *botrytis* L.)**



**Thesis
Submitted to
J.S. University, Shikohabad Distt. Firozabad (U.P.)**

**In partial fulfillment of the requirements for
the degree of**

**MASTER OF SCIENCE
IN
HORTICULTURE
2023**

Under the Supervision of :

**Mr. RANJAN JADON
Assistant Professor**

Submitted by :

**PRIYA VERMA
M.Sc.(Ag-) Horticulture
Roll No. 202040204009
Enrolment No. J212040059**

**DEPARTMENT OF HORTICULTURE
J.S. UNIVERSITY, SHIKOHABAD,
DIST FIROZABAD - 283135 (U.P.) INDIA**



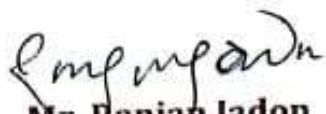
**DEPARTMENT OF
HORTICULTURE J. S. UNIVERSITY**

Shikohabad, Dist. Firozabad (U. P.)

This is to certify that the thesis entitled "EFFCET OF FOLIAR FEEDING OF MICRONUTRIENTS ON GROWTH AND YIELD OF CAULIFLOWER (*Brassica oleracea var. botrytis L.*)" submitted to the Faculty of agriculture, J. S. University, Shikohabad Dist. Firozabad (U. P.) in partial fulfillment of the requirements for the degree of **MASTER OF SCIENCE in HORTICULTURE**, embodies the result of a piece of bonafide research work carried out by **PRIYA VERMA**, Enrollment No. **J212040059**, under my supervision and guidance. No part of this thesis has been submitted for any other degree or diploma.

I further certify that such help or sources of information as has been availed of during the course of this in vestigation have been duly acknowledged.

Place : Shikohabad
Date : 26 / 8 / 2023

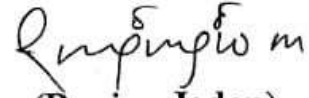

Mr. Ranjan Jadon
(Advisory Committe)
(Department of Horticulture)

CERTIFICATE – I

This is to certify that the thesis on “**Effect of Zinc and Borax on Growth, Yield and Quality of Cabbage (*Brassica oleracea* var. *Capitata* L.) cv. “Green flash”** submitted for the degree of **M. Sc. (Ag.)** in the subject of **Horticulture** to the Department of Horticulture faculty of Agriculture J.S. University Shikohabad, Distt. Firozabad (U.P), is a bonafide research work carried out by **Mr. Chhavi Mohan, Roll No. 212040204014** under my supervision and that no part of this thesis has been submitted for any other degree.

The assistance and help received during the course of investigation has been duly acknowledged.

26/8/23
Shikohabad, Kanpur
July, 2023


(Ranjan Jadon)
Major Advisor