

# BOARD OF SECONDARY EDUCATION, MADHYA PRADESH

BHOPAL

## HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION

TWO YEAR

INTEGRATED COURSE

1973

S. No 094266

### MARK-SHEET

ROLL NO.	DIVR.	DISTT	CENTER	SCHOOL	DATE OF BIRTH
018777	1	3	142	005	05.06.57.

CANDIDATE'S NAME, FATHER'S NAME, SURNAME

KUM REKHA RAMJI DAS MAHOR

SUBJECTS	MAX. MARKS	MIN. PASS MARKS	TOTAL THEORY	PRACT. MARKS	TOTAL MARKS SECURED
ENGLISH (Special)	150	50	095		095
HINDI (General)	050	15	027		027
PHYSICS	200	66	077	045	122
CHEMISTRY	200	66	093	049	142
BIOLOGY	200	66	084	040	124
	800		GRAND TOTAL		510
RESULT :—			FIRST		

ADDITIONAL SUBJECT(S) IF ANY.

	100	33			
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It is certified that the candidate has obtained desired proficiency in the subjects of Internal Examination i. e. Social Studies/General Science and Craft. (for Regular Candidates only)

#### ABBREVIATIONS :-

- W INDICATES ADEQUATE
- \* INDICATES DEFICIENCY IN THE SUBJECT
- D INDICATES DISTINCTION IN THE SUBJECT
- PR INDICATES PRIVATE CANDIDATE

SEAL OF INSTITUTION

पद्मा बहुदेशीय कन्या उच्च माध्य. विद्यालय

लखनऊ, ग्वाल्हेर (मध्य - प्रदेश)

*(Handwritten Signature)*

For Secretary,

BOARD OF SECONDARY EDUCATION,  
MADHYA PRADESH, BHOPAL.

# BOARD OF SECONDARY EDUCATION, MADHYA PRADESH

S. No. 025606



TWO YEAR  
INTEGRATED COURSE

## CERTIFICATE

### HIGHER SECONDARY SCHOOL CERTIFICATE EXAMINATION 1973

THIS IS TO CERTIFY THAT THE CANDIDATE, WHOSE PARTICULARS ARE GIVEN BELOW HAS PASSED THE ABOVE MENTIONED EXAMINATION HELD IN THE MONTH OF MARCH 1973

ROLL NO.	DIVISION	DISTRICT	CENTRE	SCHOOL
018777	1	3	142	005

CANDIDATE'S NAME IN FULL  
(NAME, FATHER'S NAME & SURNAME)

KUM REKHA RAMJI DAS MAHOR

DATE OF BIRTH

05.06.1957 \*\*\*\*\*

FIFTH JUNE

NINETEEN HUNDRED AND FIFTY SEVEN

DIVISION PLACED IN

FIRST

THE SUBJECTS IN WHICH THE CANDIDATE WAS EXAMINED WERE :—  
( 'D' AGAINST THE SUBJECT INDICATES THE DISTINCTION IN IT )

ENGLISH ( SPECIAL )

HINDI ( GENERAL )

PHYSICS

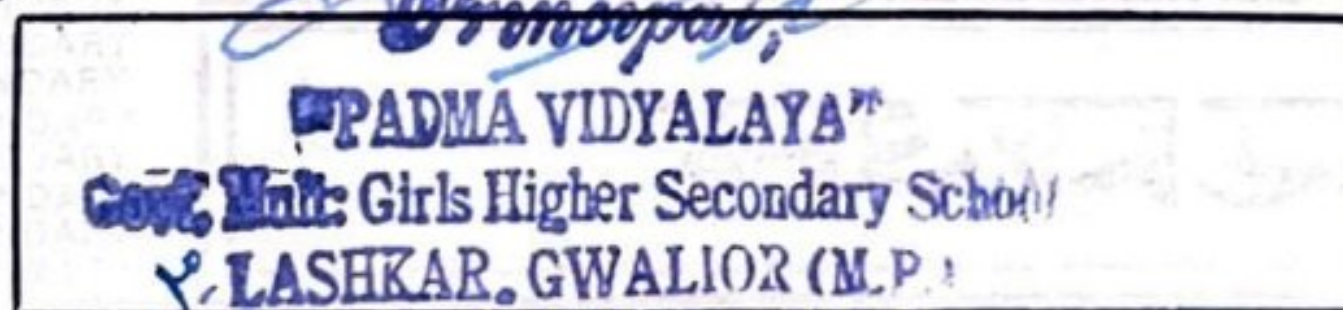
CHEMISTRY

BIOLOGY

THE CANDIDATE HAS ATTENDED PROFICIENCY IN ELE. MATHEMATICS, GENERAL SCIENCE / SOCIAL STUDIES AND CRAFT. ( FOR REGULAR CANDIDATES ONLY )

BHOPAL 8th JUNE 1973

SEAL OF THE  
INSTITUTION



ABBREVIATION  
PR—PRIVATE CANDIDATE

*[Signature]*  
SECRETARY

BOARD OF SECONDARY EDUCATION,  
MADHYA PRADESH, BHOPAL



# JIWAJI UNIVERSITY, GWALIOR

Statement of marks for the examination of -

B.S.C. FINAL 3 Y.D.C.

APRIL-1976

ROLL NO. 655 NAME KUMARI REKHA MAHOR

JS-73-00718

RAMJIDAS

07-05-76

S U B J E C T S	S C H E M E O F M A R K S					M A R K S O B T A I N E D				
	I	II	III	MIN.	MAX.	I	II	III	TOTAL	
CHEMISTRY..... TH	50	50	-	33	100	17	41	-	58	
CHEMISTRY..... PR	50	-	-	17	50	31	-	-	31	
BCTANY..... TH	50	50	-	33	100	24	25	-	49	
BCTANY..... PR	50	-	-	17	50	30	-	-	30	
ZCCLOGY..... TH	50	50	-	33	100	20	30	-	50	
ZOOLOGY..... PR	50	-	-	17	50	33	-	-	33	
					450	GRAND TOTAL			251	
M A R K S	FIRST YEAR		SECOND YEAR		THIRD YEAR		GRAND TOTAL		RESULT	DIVISION
	TOTAL	OUT OF	TOTAL	OUT OF	TOTAL	OUT OF	TOTAL	OUT OF		
	298	550	272	450	251	450	821	1450	PASS	SECOND

*B. P. D. Singh*

1. The asterisk adjacent to marks denotes failure (\*).
2. The alphabet "C" adjacent to marks denotes carry forward.

Vidya Mahal, Gwalior.

CANDIDATE COPY

Dy. Registrar (Exams.)



# JIWAJI UNIVERSITY, GWALIOR

Statement of marks for the examination of

M.Sc. FINAL BOTANY

APRIL 1978

ROLL No. 194 NAME KU. REKHA MAHOR  
 JS-73-00718 RAMJI DAS  
 GOVERNMENT SCIENCE COLLEGE, GWALIOR.

17-06-78  
 REGULAR

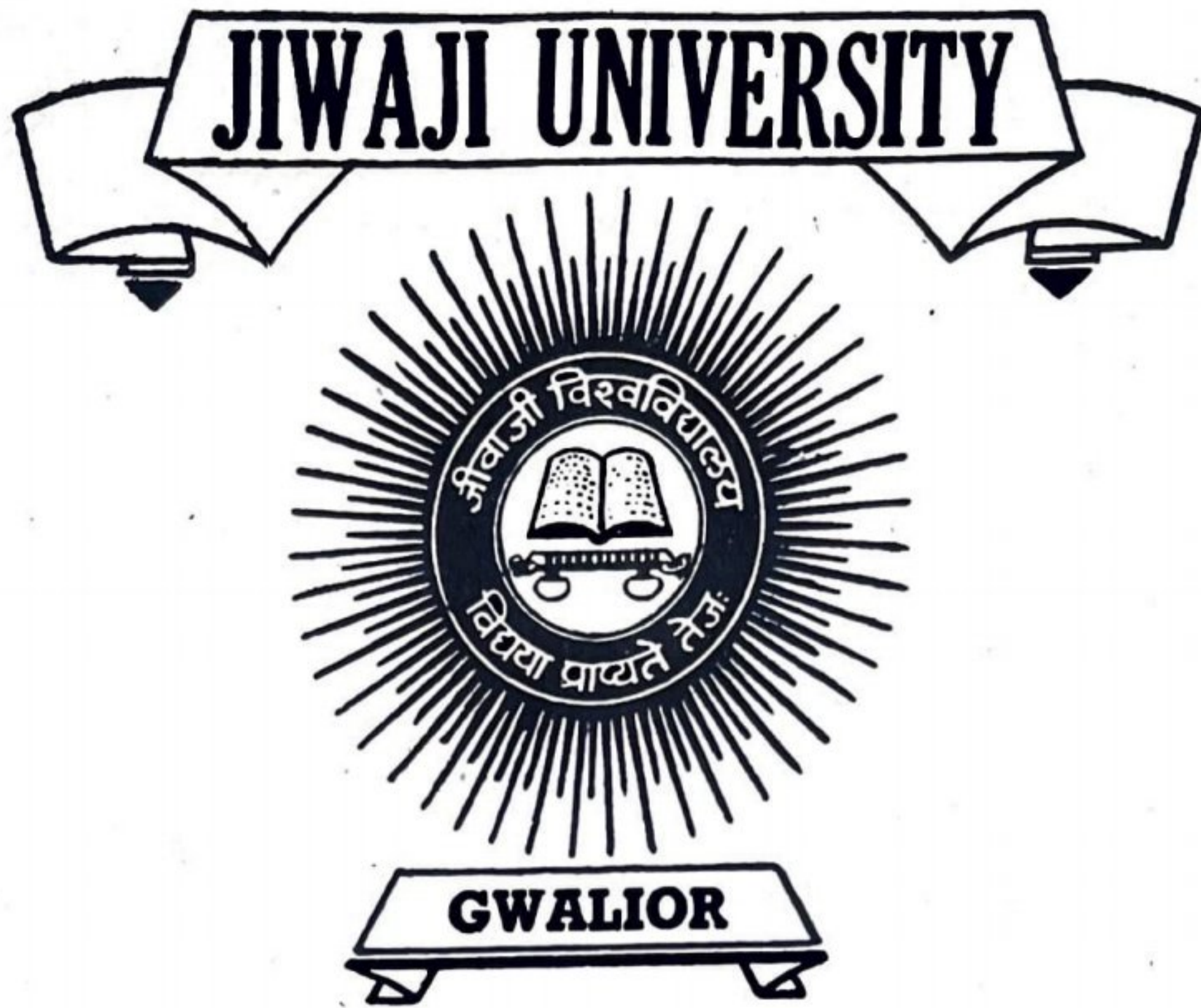
SUBJECTS	SCHEME OF MARKS					MARKS OBTAINED				
	I	II	III	MIN	MAX	I	II	III	TOTAL	
4-MOLECULAR BIO. CYTO -GENETICS, BREEDING E	75	-	-	15	75	35	-	-	35	
6-ANGIOSPERMS	75	-	-	15	75	43	-	-	43	
7-PLANT PHYSIOLOGY AND BIO-CHEMISTRY	75	-	-	15	75	42	-	-	42	
8-PLANT PATHOLOGY	75	-	-	15	75	58	-	-	58	
PRACTICALS	200	-	-	72	200	165	-	-	165	
					500	GRAND TOTAL			343	
M A R K S	FIRST YEAR		SECOND YEAR		THIRD YEAR		GRAND TOTAL		RESULT	DIVISION
	TOTAL	OUT OF	TOTAL	OUT OF	TOTAL	OUT OF	TOTAL	OUT OF		
	323	500	343	500			666	1000	PASS FIRST	

1. The asterisk adjacent to marks denotes failure (\*)
2. The alphabet 'C' adjacent to marks denotes carry forward

Vidya Vihar, Gwalior.

CANDIDATE COPY

*B. P. Das*  
 Dy. Registrar (Exams.)



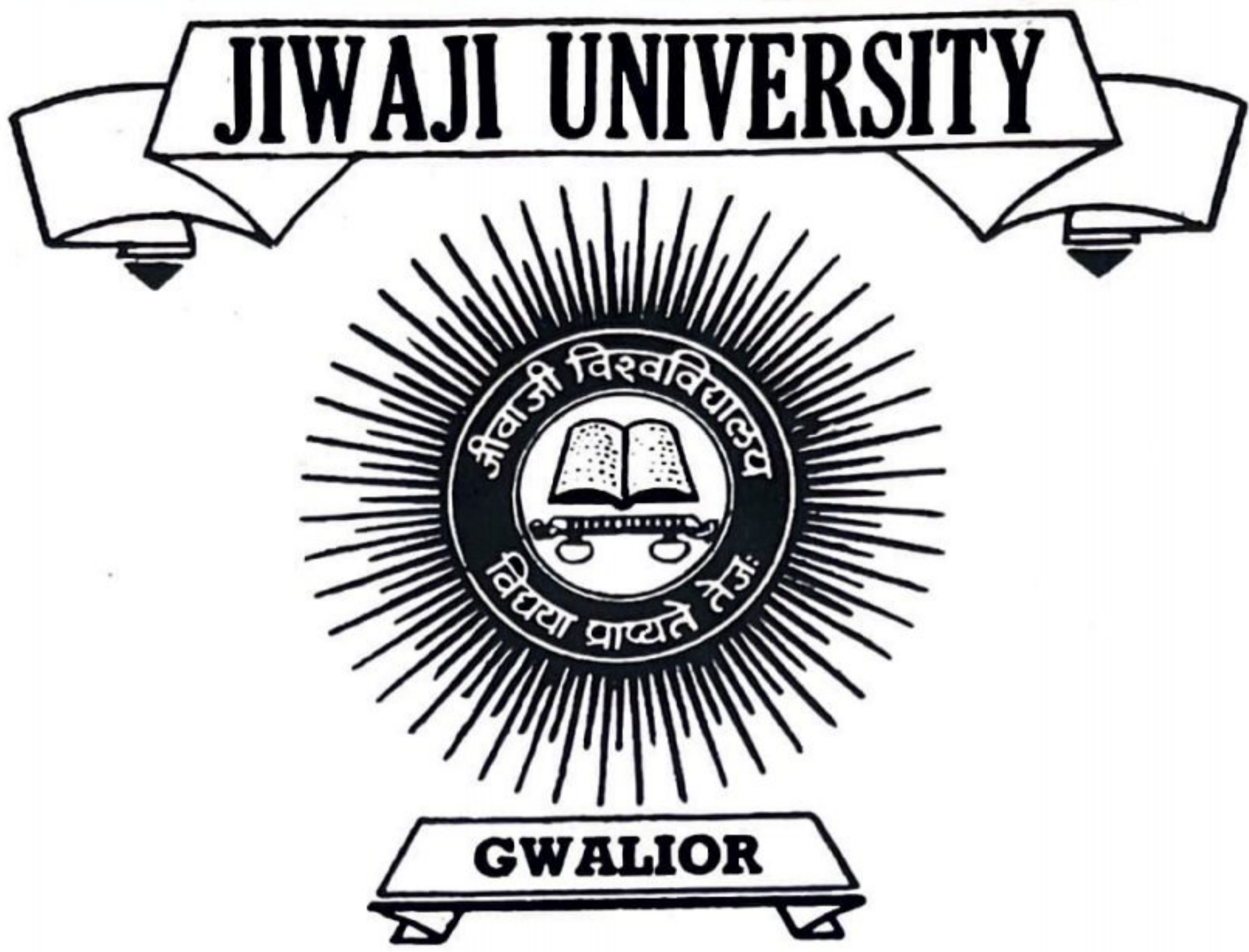
## BACHELOR OF SCIENCE

This is to certify that (Km.) Rekha Mahor  
of the Kamlaraja Girls <sup>Post-Graduate</sup> College, Gwalior  
obtained the degree of **BACHELOR OF SCIENCE**  
in this University at the examination of 1976 and  
that she was placed in Second Division.

Her/His subjects were 1. Chemistry  
2. Zoology 3. Botany  
4. x

Date: 23<sup>rd</sup> March, 1977.

K. K. Jiwari  
Vice-Chancellor

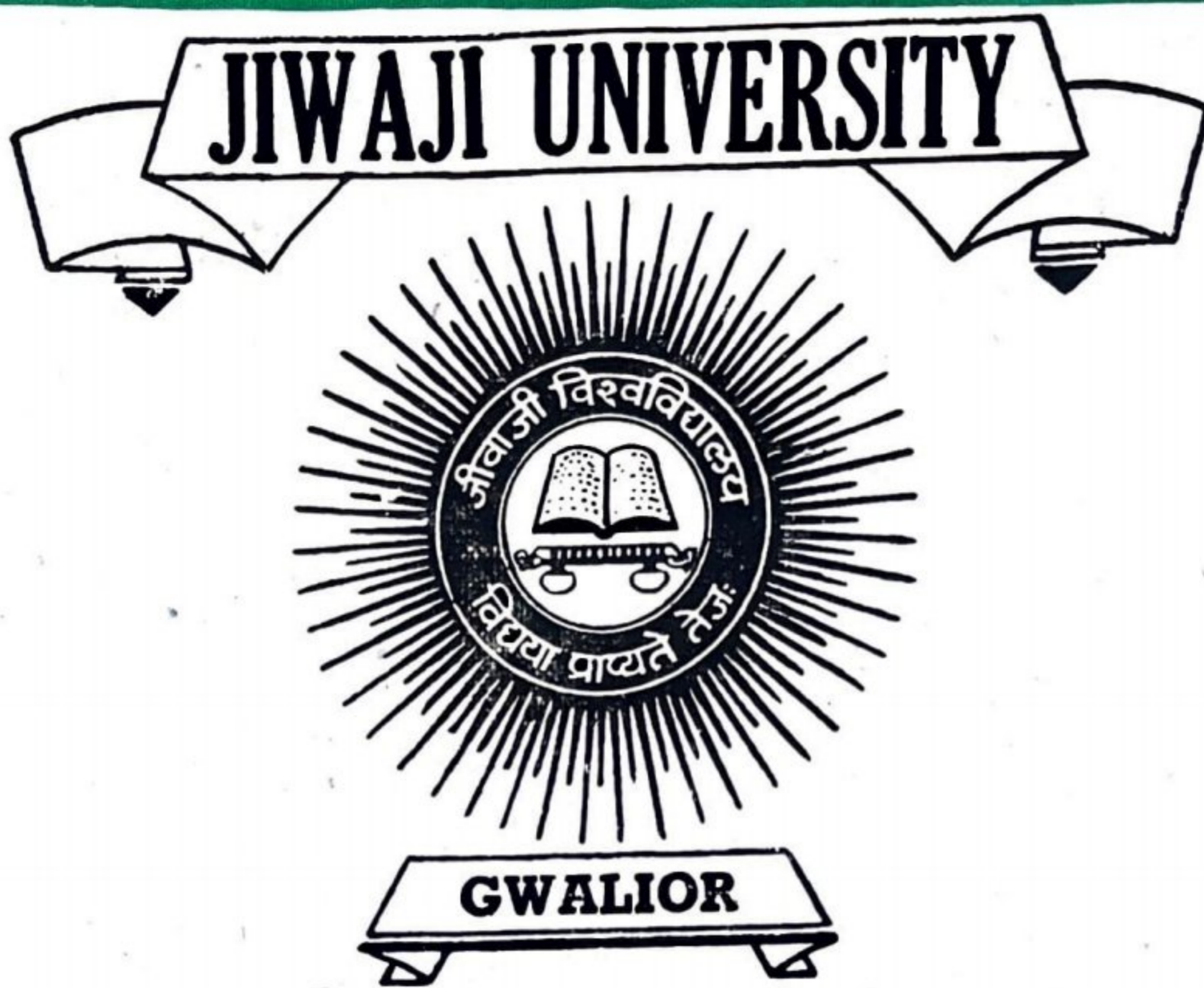


## MASTER OF SCIENCE

This is to certify that (K.M.) Rekha Mahor  
of the Govt. Science college, Gwalior  
obtained the Degree of **MASTER OF SCIENCE**  
in Botany in this University at the Examination  
of 1978 and that ~~he~~/she was placed in First  
Division.

Date : 24<sup>th</sup> March, 1979.

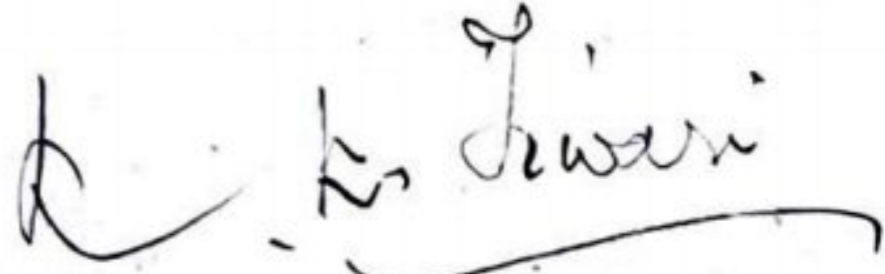
K. K. Swain  
Vice-Chancellor



## DOCTOR OF PHILOSOPHY

This is to certify that Ku. Rekha Mahor  
has been admitted to the Degree of **DOCTOR OF**  
**PHILOSOPHY** of this University in \_\_\_\_\_  
Botany at the Convocation of 1983 .

His/Her thesis is on Phytopathological Studies on  
The Wilt Complex of Coriander (Coriandrum Sativum L

  
**Vice-Chancellor**

**Date :** 28th, March, 1984.

Department of Botany

Government Science College,  
GWALIOR (MP)

Date: 23<sup>rd</sup> March 1983

C E R T I F I C A T E

This is to certify that MISS REKHA MAHOR has worked as a Research Scholar in this College from March, 1979 to March, 1983 (4 years). During her research period, she has taught under-graduate and post-graduate classes in practicals and in theory also.


She has also served as a teacher on an ad-hoc basis during the session 1978-79.

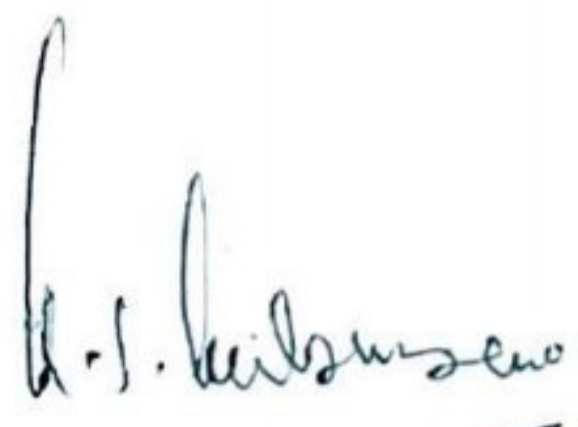
She is hard working, sincere and has a good control over her classes. She has taken keen interest in all the activities of the department.

I am happy to put on record that her behaviour and work was quite satisfactory.

She bears a good moral character.

I wish her success in her future career as a teacher and a researcher.

  
23.3.83  
S. W. Khandekar  
Professor of Botany  
Govt. Science College, Gwalior (M. P.)

  
23.3.83  
PRINCIPAL,  
Govt. Science College  
Gwalior (M.P.)



Date 5th November, 1982

C E R T I F I C A T E

This is to certify that Miss Rekha Mahore has been a student of this college since 1976. She has joined research in August 1978 and submitted her Ph.D. thesis in Botany on 23.10.82 ( Jiwaji University Gwalior ).

During her research, she has taught Undergraduate & Postgraduate classes in Practicals and at times <sup>in</sup> theory also.


She has also served as a teacher on an ad-hoc basis during the session 1978-79.


She is hard working, Sincere and has a good control over her classes. She has taken keen interest in all the activities of the department.

I am happy to put on record that her behaviour and work was quite satisfactory.

She bears a good moral character.

I wish her success in her future career as a teacher and a researcher.

  
12-11-82  
PRINCIPAL,  
Govt. Science College  
Gwalior (M.P.)

 5.11.82  
( S.W.Khandekar )  
Head of Botany, Deptt.  
Govt. Science College  
Gwalior (M.P.)

ਦਫ਼ਤਰ ਸਿੱਖਿਅਕ ਸੇਵਾ ਰਾਈ ਸਰਕਾਰੀ ਕਾਲਜ ਏ. ਬੰਮਿਤਸਰ

ਕੁਰਮ ਨੰ: 2-96/ 12244

ਮਿਤੀ 29-2-96.

ਵਿਸ਼ਾ: ਵਾਰਡੀ ਰੀਮੋਵ।

ਸ਼੍ਰੀ/ਸ਼੍ਰੀ ਮਤੀ ਰਵਨ ਸੁਪਤੀ ਜਿਸ ਦੀ ਨਿਯੁਕਤੀ ਇਸ ਕਾਲਜ ਵਿਚ ਬਰੈਕ ਪਾਰਟ ਟਾਈਮ ਲੈਕਚਰਾਰ ਇਨ Biology (1st Sem.) ਕੀਤੀ ਗਈ ਹੈ, ਨੂੰ ਵਿਦਿਅਕ ਸੰਸਥਾ ਖਤਮ ਹੋ ਜਾਣ ਕਰਕੇ ਅਜ ਮਿਤੀ 29-2-96 ਨੂੰ ਦੁਬਾਰਾ ਤੋਂ ਬਾਅਦ ਇਸ ਕਾਲਜ ਦੇਖੀ, ਤੋਂ ਵਾਰਡ ਕੀਤਾ ਜਾਂਦਾ ਹੈ।

ਸ਼੍ਰੀ/ਸ਼੍ਰੀ ਮਤੀ ਰਵਨ ਸੁਪਤੀ ਨੂੰ ਇਸ ਖਸਮੀ ਤੇ ਮਿਤੀ 18-10-95

ਤੇ 29-2-96 ਤਕ ਕੰਮ ਕੀਤਾ ਹੈ।

ਨਿੱਠ ਖੇਤਰ ਨੰ: 1/1/1

ਸ:ਰ:ਸਰਕਾਰੀ ਕਾਲਜ ਵਿਸਤਰੀਖ, ਬੰਮਿਤਸਰ  
ਸਿੱਖਿਅਕ

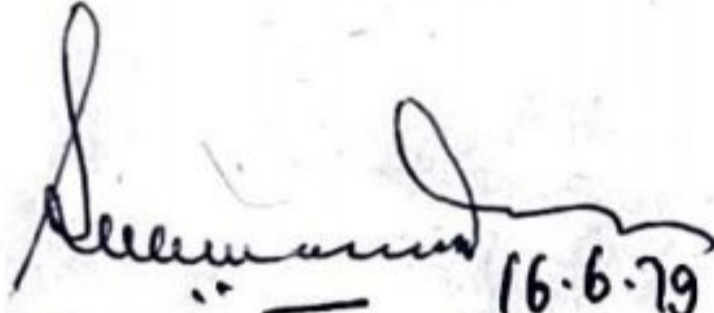
ਕਿ:ਕੇ:ਕੇ:ਕੇ ਦਾ ਇਕ ਉਤਾਰਾ ਹੇਠ ਲਿਖਿਆ ਨੂੰ ਸੂਚਨਾ ਖਤੀ ਯੋਗ ਕਾਰਵਾਈ ਹਿਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ।

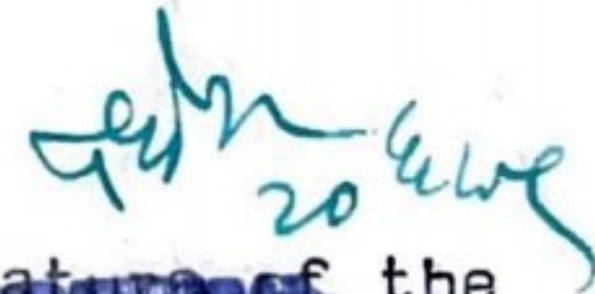
- 1)  ਸ਼੍ਰੀ/ਸ਼੍ਰੀ ਮਤੀ ਰਵਨ ਸੁਪਤੀ ਪਾਰਟ ਟਾਈਮ ਲੈਕਚਰਾਰ ਇਨ Biology (1st Sem.)  
Railway officers Rest House, Amritsar
- 2) ਜਿਲਾ ਕੋਲਕਾਤ, ਅਫਸਰ, ਬੰਮਿਤਸਰ।
- 3) ਹਿਠ ਕਲਕਤਾ।

2. ਨੰ  
ਸਿੱਖਿਅਕ  
ਸ:ਰ:ਸਰਕਾਰੀ ਕਾਲਜ ਵਿਸਤਰੀਖ, ਬੰਮਿਤਸਰ  
[Signature]

This is to certify that Kum. Rekha Mahor daughter of Shri Ramjidas Mahor served as *Adhoc* Lecturer in, <sup>the</sup> Botany Department of Government Science College, Gwalior from 20th September, 1978 to 7th March, 1979 i.e. about 6 months. She has taught undergraduate and post-graduate classes during this period.

She is hard working, sincere and has a good control ~~of~~ the class.

  
16.6.79  
Signature of the  
Head of Botany Deptt.  
Professor & Head of Botany Deptt.  
Govt. Science College Gwalior

  
Signature of the  
Principal,  
Government Science College  
Gwalior (M.P.)  
20/6/79

# THE UNIVERSITY OF JODHPUR

DAVID N. SEN

D. Sc. (Czech.)

PROFESSOR & HEAD



P.O. Box 14

LABORATORY OF PLANT ECOLOGY

DEPARTMENT OF BOTANY

UNIVERSITY OF JODHPUR

JODHPUR - 342 001 (INDIA)

Off. 22606

TEL. Res. 24418

Dept. 23399

September 17, 1994

## CERTIFICATE

This is to certify that Dr. (Mrs.) Rekha Gupta  
w/o Dr. V.K. Gupta served as Ad-hoc Assistant  
Professor in the Botany Department of K.N. College  
for Women, Jodhpur University, Jodhpur w.e.f.  
27th March, 1991 to 30th April, 1994.

She is hard working, sincere and has a good  
control on the class.

(David N. Sen)

को वि० अतिरिक्त  
डॉ. डी. वाडुपूर  
17/09/1994 Jodhpur NP

## LIST OF PUBLICATIONS

- 1 A new fruit –rot disease of Kanduri [*Coccinea cordifolia* Linn] 1981 Current Science 50 [6] 281 p.
- 2 Antifungal spectrum of some petal extracts of family convolvulaceae 1981 ,Geobios 8[2], 66-67p.
- 3 A new fungal disease of Coriander in India 1982 Acta Botanica Indica 10[2] 323 p.
- 4 Detection of inoculum of stem gall pathogen by washing method in coriander seed lot of M. P. 1980,67<sup>th</sup> session Ind. Sci. Cong. Pt. 3<sup>rd</sup> 120 p.
- 5 An easy and quick detecting method for coriander seeds for sowing against Stem gall disease 1980 Seed. Tech. News 10[2] 21 p.
- 6 Post infectional changes in amino acid contents of fruit rot infected Kanduri 1980 Ind. Jour. Of My. &Pt. Path 10[5] 64 p.
- 7 Changes in cultural characters of *Fusarium oxysporum* f.sp *coriandrii* by light spectrum 1981 .68<sup>th</sup> session . Ind. Sci. Cong. Pt. 3<sup>rd</sup> 34- 35
- 8 Changes in amino acid contents of Kakaura fruits infected with *Fusarium moniliformae sheld.* 1981. 68<sup>th</sup> Session Ind. Sci. Cong. Pt. 3<sup>rd</sup> 34p.
- 9 Studies on the formation of macro & microconidia of *Fusarium oxysporum* f. Sp. *Coriandrii* in different colours of light 1981 M. P. Vighayan Academy
- 10 Production of toxic metabolites by *Fusarium oxysporum* f. Sp.*coriandrii* causing wilt disease of coriander 1982 69<sup>th</sup> session Ind. Sci. Cong. Pt.3<sup>rd</sup> 31p.
- 11 Post infectional changes in the amino acid contents of the fruit of Kanduri caused by *Fusarium moniliformae sheldon.* 1982, 69<sup>th</sup> session Ind. Sci. Cong. Pt.3<sup>rd</sup> 22p.
- 12 Post infectional changes in the sugar contents of the seeds of coriander plants infected with *Fusarium oxysporum* f. Sp. *coriandrii* 1983 70 session Ind. Sci. Cong. Pt.3<sup>rd</sup>.

## A NEW FUNGAL DISEASE OF CORIANDER IN INDIA

Rekha Mahor, S A M H Naqvi and R N Gupta

DEPARTMENT OF BOTANY, GOVERNMENT SCIENCE COLLEGE, GWALIOR-474009

---

Root-rot of *Coriandrum sativum* L. caused by *Rhizoctonia bataticola* (Taub.) Butler is reported for the first time from India.

During the survey of coriander-growing areas of Gwalior and Guna division, a severe root-rot of coriander was observed. The disease generally appears on mature plants by the middle of February to March-April. Leaves and stems of diseased plants wither and dry turning to straw colour. In severe state entire plants become wilted. There is a discolouration and rotting of roots and the development of abundant dark sclerotial bodies on their outer surface. On splitting open, the roots showed black tiny sclerotial bodies visible with the naked eyes.

A number of isolations were made from the diseased roots and also by the transfer of single sclerotium on potato-dextrose-agar. Mycelium and sclerotia developed in culture. The fungus was identified as *Rhizoctonia bataticola* (Taub.) Butler and pathogenicity was confirmed by suitable tests.

A perusal of existing literature (Bilgrami *et al.* 1979) shows that this note makes an addition to the list of fungal diseases of coriander in India.

The authors are thankful to the Director, C M I, Kew, England for confirming the identify of the fungus (No. 255277) and are grateful to Head of Botany Deptt., Govt. Science College, Gwalior for laboratory facilities.

### REFERENCES

- BILGRAMI K S, JAMALUDDIN AND RIZVI M A 1979 *The Fungi of India* I. New Delhi : Today & Tomorrow's Printers & Publishers

## A NEW FRUIT ROT DISEASE OF KANDURI (*COCCINIA CORDIFOLIA* LINN.)

ALKA KAPOOR, REKHA MAHOR AND R. N. GUPTA

Department of Botany, Govt. Science College, Gwalior 474 002, India

KANDURI (*Coccinia cordifolia* Linn.) is a pretty twinning shrub of rainy season, found throughout India. The fruits are used as vegetables and said to be useful for diabetes.

During July and August (1979 and 1980) a severe fruit rot disease of Kanduri was observed in the vegetable fields around Gwalior, M.P. The disease was marked by discoloration and softening of the fruit tissues which in an advance stage became brown in colour. The pathogen finally reached the seeds.

Isolations made from the infected fruits yielded consistently a fungus culture. Pathogenicity tests were performed on young fruits by Prick method of inoculation. Symptoms appeared within 3-4 days and reisolations from these yielded the same organism as was used for inoculation. The fungus produces septate, light yellow coloured aerial mycelium on PDA plates. It is characterized by the production of microconidia in chains. Macroconidia are 3-5 septate,

spindle-sickle-shaped, slightly curved, generally pointed at the tip and  $24-31 \times 3.6-4 \mu$  in size. Chlamydo-spores are lacking. The fungus was identified as *Fusarium moniliforme* Sheldon.

Perusal of literature<sup>1</sup> showed that the fruit rot of Kanduri caused by *F. moniliforme* has not been reported from India so far.

The authors (AK and RM) are highly thankful to UGC for financial assistance and are grateful to Dr. J. N. Kapoor, Division of Mycology and Plant Pathology, I.A.R.I., New Delhi, for confirming the identity of the fungus.

September 6, 1980.

1. Bilgrami, K. S. and Jamaluddin, M. A. Rizvi, *The Fungi of India*, Part I, Today and Tomorrow's Printers and Publishers, New Delhi, 1979.

**GEOBIOS 8 : 66-67, 1981**

**ANTIFUNGAL SPECTRUM OF SOME PETAL EXTRACTS**

**ALKA KAPOOR, REKHA MAHOR, NEETA VAISHAMPAYAN and NIDHI GAUTAM**

*Department of Botany, Govt. Science College, Gwalior-474 002, India*

*(Received March 31; Revised September 11, 1980)*

It has been observed that generally the petals are free from the diseases. Taking advantage of this observation, an attempt has been made to see their fungitoxic nature. Flower extracts of 25 plant species are reported to produce inhibition on the spore germination and mycelial growth of 3 test fungi, viz., *Cephalosporium sacchari*, *Curvularia pallens* and *Fusarium nivale* by Tripathi & Dixit (1976). In the present investigation, 5 plants of family Convolvulaceae viz. *Convolvulus pluricaulis*, *Evolvulus alsinoides*, *Ipomoea carnea*,

and mycelial growth of 3 test fungi, viz., *Cephalosporium sacchari*, *Curvularia pallens* and *Fusarium nivale* by Tripathi & Dixit (1976). In the present investigation, 5 plants of family Convolvulaceae viz. *Convolvulus pluricaulis*, *Evolvulus alsinoides*, *Ipomoea carnea*,



Table 1. Screening and chromatographic analysis of 5 plant species for antifungal activity.

Plant species	Spore germination (%)			Mycelial inhibition (%)			Rf values
	A. br.	A. ba.	F. ox.	A. br.	A. ba.	F. ox.	
<i>C. pluricaulis</i>	Nil	Nil	Nil	97	94	80	·31, ·64, ·84
<i>E. alsinoides</i>	3.7	4.0	8.0	81	80	70	·33, ·64, ·84
<i>I. carnea</i>	12.5	14.0	16.3	43	50	35	·29, ·52
<i>I. palmata</i>	19.8	25.6	22.5	30	40	30	·32
<i>R. hypocrateriformis</i>	32.1	33.5	54.9	10	12	12	·25
Control	100	100	100	Nil	Nil	Nil	—

A. br. = *A. brassicae*; A. ba. = *A. brassicicola*; and F. ox. = *F. oxysporum*.

*Ipomoea palmata* and *Rivea hypocrateriformis* have been taken for screening against the pathogens viz., *Alternaria brassicae*, *A. brassicicola* and *Fusarium oxysporum*.

Fresh petals were thoroughly washed with sterilized distilled water, ground, strained through two layers of muslin cloth and finally filtered through Whatman No. 1 filter paper. The clear filtrate thus obtained was sterilized and used as a test extract. The screening of the petal extracts was carried out by "Hanging Drop Technique" (Alexopoulos & Beneke, 1958) and by "Poisoned Food Technique" (Nene, 1971). For the paper chromatographic analysis, petal extracts were hydrolysed with 2M HCl for 30-40 min at 100°C.

As is evident from Table 1, the extracts of *C. pluricaulis* and *E. alsinoides* were almost completely fungicidal against all the test fungi while that of remaining were not so effective. The chromatographic analysis shows the presence of some unknown flavonoids in the extract.

It has been suggested earlier that the resistance in certain plants is due to the pre-

sence of certain chemicals in their tissues. The antifungal activity from flower extracts has been reported earlier by Tripathi & Dixit (1976). The petal extracts of 5 plants under investigation, indicating the presence of some flavonoids in them, which may prove to be a broad spectrum antibiotic(s). Their range of activity was found in the order *C. pluricaulis* > *E. alsinoides* > *I. carnea* > *I. palmata* > *R. hypocrateriformis*.

The authors are thankful to Prof. S.W. Khandekar Head, for providing facilities and to U.G.C. and C.S.I.R. for financial assistance.

#### REFERENCES

- Alexopoulos, C.J. and Beneke, E.S. *Laboratory Manual for Introductory Mycology* 2. Burgess Publishing Company, 1958.
- Nene, Y.L. *Fungicides in Plant Disease Control*. I.B.H. Publishing Company, New Delhi, 1971.
- Tripathi, S.C. and Dixit, S.N. *Symposium on Physiology of Micro-organisms*. 1976, pp. 225-230.