## COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN VARIANTS OF CATTLE

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

#### **AASHI MARIA BABU**

(CRAVSZO001)

UNDER THE SUPERVISION

Dr. Sr. RINI RAPHAEL

#### **HEAD OF THE DEPARTMENT**



# DEPARTMENT OF ZOOLOGY CARMEL COLLEGE (AUTONOMOUS), MALA THRISSUR, KERALA

2023 - 2024

Supervisor

Head
Department of Zoology
Carmel Commonous)

Male-viol-2

earmel College Multiped

Head of the department

Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732



This is to certify that this dissertation entitled "COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN VARIANTS OF CATTLE" is authentic record of research work carried out by AASHI MARIA BABU(CRAVSZ0001) in the Department of Zoology. Carmel College (Autonomous), Mala under my supervision and guidance in partial fulfilment of the requirement for the Degree of Bachelor of Science in Zoology under faculty of Science, University of Calicut and further declare that no part of this dissertation has been presented before for any other degree.

Place : Mala

Date:

HIVOR

Dr.Sr. Rini Raphael

Head of the department

Carmel College (Autonomous), Mala

Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732

Valued by,

**EXAMINERS** 

2) Name and designation .....
Signature ......

M. SHASI E'M











### BONAFIDE CERTIFICATE

Certified that this thesis titled, "COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE (LYZ) IN HOLSTEIN-FRIESIAN AND JERSEY BREEDS OF CATTLE. "is a bonafide work of AASHI MARIA BABU, Reg no CRAVSZO001 who carried out the Research under my supervision. Certified further, that to the best of my knowledge, the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an occasion on this or any other candidate.

Confirmedly,

Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd. Thrissur, Kerala- 680 009



# ISOLATION AND IDENTIFICATION OF CELLULOSE DEGRADING BACTERIA FROM GUT OF GRASSHOPPER AND DETERMINATION OF THEIR CELLULOLYTIC POTENTIAL BY bgls GENE DETECTION

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

ANCHITHA P V (CRAVSZO003)

UNDER THE SUPERVISION

Ms. HARITHA P NAIR

**Assistant Professor of Zoology** 



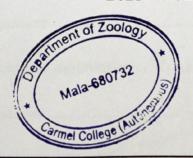
DEPARTMENT OF ZOOLOGY

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023 - 2024

Supervisor



Head of the department
Head
Department of Zeele

Carmel Gollege (Autonomous)
Mala-680732



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Place: Mala

Date: 19/08/2024

Dr. Sr. Rini Raphael

Head of the department

Carmel College (Autonomous), Mala Head

Department of Zoology Carmel College (Autono Xus) Mala-680732

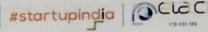
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**EXAMINERS** 

2) Name and designation Dr. SHATI & M.











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Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd. Thrissur, Kerala- 680 009



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Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

DONA ROSE M R

(CRAVSZO009)

UNDER THE SUPERVISION

Ms. HARITHA P NAIR

**Assistant Professor of Zoology** 



# DEPARTMENT OF ZOOLOGY CARMEL COLLEGE (AUTONOMOUS), MALA THRISSUR, KERALA





Head of the department

Head

Department of Zoology

Carmel College (Autonomous)

Mala-680732



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Place: Mala

Date: 19/03/2024

Dr. Sr. Rini Raphael

Head of the department

Carmel College (Autonomous), Mala Head

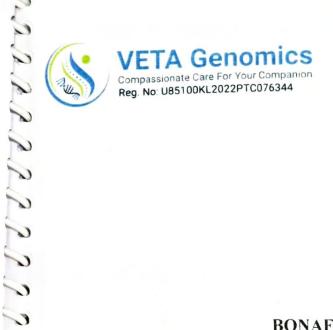
Department of Zoology Carmel College (Autonomous) Mala-680732

Valued by,

**EXAMINERS** 

2) Name and designation ... Dr. s. HADI 6 M

Signature .....











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Confirmedly,

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Mr. Jismon Thomas

Lead Research Scientist

VETA Genomics Pvt. Ltd.

Thrissur, Kerala- 680 009



# MOLECULAR SCREENING OF E. coli FROM VARIOUS WATER BODIES BY THE IDENTIFICATION OF VIRULENCE ASSOCIATED GENE (FimH) AND THEIR SUSCEPTIBILITY AGAINST VARIOUS ANTIBIOTICS

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

DRISYA.M

(CRAVSZO010)

UNDER THE SUPERVISION

Ms. AYRIN JOSE

Assistant Professor of Zoology



DEPARTMENT OF ZOOLOGY

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023 - 2024

Supervisor

Head

Department of Zoology

Carmel College (Autonomous)

Mala-680732

Head of the department

Department of Zoology Carmel College (Autonomous) Mala-680732



This is to certify that this dissertation entitled "MOLECULAR SCREENING OF E. coli FROM VARIOUS WATER BODIES BY IDENTIFICATION OF VIRULENCE ASSOCIATED GENE (FimH) AND THEIR SUSCEPTIBILITY AGAINST **VARIOUS** ANTIBIOTICS" is authentic record of research work carried out by DRISYA. M (CRAVSZO010) in the Department of Zoology. Carmel College (Autonomous), Mala under my supervision and guidance in partial fulfilment of the requirement for the Degree of Bachelor of Science in Zoology under faculty of Science, University of Calicut and further declare that no part of this dissertation has been presented before for any other degree.

Place: Mala

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Date: 19-03-24.

Dr. Sr. Rinf Raphael

Head of the department

Carmel College (Autonomous), Mala

Department of Zoology Carmel College (Autonomous) Mala-680732

Valued by,

**EXAMINERS** 

1) Name and designation .. Signature .....

2) Name and designation ... Dr. Leef J. J. Q. Signature .....

Dr-84401









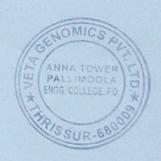


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Confirmedly,

Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd. Thrissur, Kerala- 680 009



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Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

FATHIMA SHERIN. P (CRAVSZO005)

UNDER THE SUPERVISION

Ms. AYRIN JOSE

Assistant Professor of Zoology



# DEPARTMENT OF ZOOLOGY CARMEL COLLEGE (AUTONOMOUS), MALA THRISSUR, KERALA

2023 - 2024

Supervisor.

Head
Department of Zoology
Carmel College (Autenomous)
Mala-680732

Mala-680732

Mala-680732

Mala-680732

Mala-680732

arnie

Head of the department

Head

Department of Zoology Carmel College (Autonomous) Mala-680732



This is to certify that this dissertation entitled "MOLECULAR SCREENING coli FROM VARIOUS WATER BODIES BY IDENTIFICATION OF VIRULENCE ASSOCIATED GENE (FimH) AND THEIR SUSCEPTIBILITY AGAINST VARIOUS ANTIBIOTICS" is authentic record of research work carried out by FATHIMA SHERIN. P (CRAVSZO005) in the Department of Zoology. Carmel College (Autonomous), Mala under my supervision and guidance in partial fulfilment of the requirement for the Degree of Bachelor of Science in Zoology under faculty of Science, University of Calicut and further declare that no part of this dissertation has been presented before for any other degree.

Place: Mala Dr. Sr. Rinî Raphael

Date: 19-03-24 Head of the department

Carmel College (Autonomous), Mala

Department of Zoology Carmel College (Autonomous) Mala-680732

Valued by,

**EXAMINERS** 

1) Name and designation Signature Signature Signature

2) Name and designation .007.: Tuyo Thomas bang.

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#### **BONAFIDE CERTIFICATE**

Certified that this thesis titled, "MOLECULAR SCREENING OF E.COLI FROM VARIOUS WATER BODIES BY THE IDENTIFICATION OF VIRULENCE ASSOCIATED GENE (fimH) AND THEIR SUSCEPTIBILITY DETERMINATION AGAINST VARIOUS ANTIBIOTICS" is a bonafide work of FATHIMA SHERIN P, Reg no CRAVSZO005 who carried out the Research under my supervision. Certified further, that to the best of my knowledge, the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an occasion on this or any other candidate.

Confirmedly,

Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd. Thrissur, Kerala- 680 009



# COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN THE VARIANTS OF CATTLE

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

# KRISHNA PRIYA A (CRAVSZO006)

UNDER THE SUPERVISION

DR. SR. RINI RAPHAEL
Head of the Department



# DEPARTMENT OF ZOOLOGY CARMEL COLLEGE (AUTONOMOUS), MALA THRISSUR, KERALA

2023 - 2024

Supervisor

Head
Department of Zoology
Carmol Coll conomous)
32

Mala-680732

Mala-680732

Mala-680732

Head of the Department
Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732



This is to certify that this dissertation entitled "COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN THE VARIANTS OF CATTLE" is authentic record of research work carried out by KRISHNA PRIYA A (CRAVSZO006) in the Department of Zoology, Carmel College (Autonomous), Mala under my supervision and guidance in partial fulfilment of the requirement for the Degree of Bachelor of Science in Zoology under faculty of Science, University of Calicut and further declare that no part of this dissertation has been presented before for any other degree.

Place : Mala

Date: 19/03/2024

Dr. Sr. Rini Kaphael

Head of the department

Carmel College (Autonomous), Mala

Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732

Valued by,

**EXAMINERS** 

Signature ....











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Confirmedly,

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Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd.

Thrissur, Kerala- 680 009



# ISOLATION AND IDENTIFIICATION OF CELLULOSE DEGRADING BACTERIA FROM GUT OF GRASSHOPPER AND DETERMINATION OF THEIR CELLULOLYTIC POTENTIAL BY bgls GENE DETECTION

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

NANDHANA C S

(CRAVSZO007)

UNDER THE SUPERVISION

Ms. HARITHA P NAIR

**Assistant Professor of Zoology** 



DEPARTMENT OF ZOOLOGY

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023 - 2024





Head of the department
Department of Zoology
Carmel College (Autonomous)
Mala-680732



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Place : Mala Dr. Sr. Rini Raphael

Date: 19/03/2024 Head of the department

Carmel College Autonomous), Mala Carmel College Man mous)

Mala-680732

Valued by,

**EXAMINERS** 

1) Name and designation D7. JRefs There are Signature Signature Signature Signature











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Confirmedly,

Mr. Jismon Thomas Lead Research Scientist

VETA Genomics Pvt. Ltd. Thrissur, Kerala- 680 009



## COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN VARIANTS OF CATTLE

Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

**NESNI P J** 

(CRAVSZO011)

UNDER THE SUPERVISION

Dr.Sr.RINI RAPHAEL

Head of the Department of Zoology



# DEPARTMENT OF ZOOLOGY CARMEL COLLEGE (AUTONOMOUS), MALA THRISSUR, KERALA

2023 - 2024

Supervisor

Head

Department of Zoology Carmel College (Autonomous) Mala-680732 Head of the department

Department of Zoology
Carmel College (Autonomous)
Mala-680732





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Place: Mala

Date:

Dr.Sr. Rini Raphael

Head of the department

Carmel College (Autonomous), Mala

Head
Department of Zoology
Carnel College (Autonomous)
Mala-680732

Valued by,

**EXAMINERS** 

1) Name and designation ... Signature .....

2) Name and designation ... Dr. ... Per ...

Signature.

Lese Thomas fan











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By

PRINSI PRAKASAN (CRAVSZO008)

UNDER THE SUPERVISION

Ms. AYRIN JOSE

Assistant Professor of Zoology



DEPARTMENT OF ZOOLOGY

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023 - 2024

Supervisor .

Head
Department of Zoology
Carnel Collen. Autonomous)

Malamou732



Rink!

lead of the department

Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732



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Place: Mala

Date: 19-03-24

Dr. Sr. Rini Raphael

Head of the department

Carmel College (Autonomous), Mala

Head

Department of Zoology Carmel College (Autonomous)

Mala-680732

Valued by,

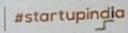
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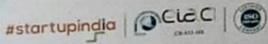
1) Name and designation Dr. SHAJI E.M.
Signature

2) Name and designation Dr. Designature Signature











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Mr. Jismon Thomas Lead Research Scientist VETA Genomics Pvt. Ltd.

Thrissur, Kerala- 680 009



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Project report submitted to the University of Calicut for the partial fulfillment of the award of the degree of Bachelor of Science in Zoology

By

**SONA SUNNY** 

(CRAVSZO012)

UNDER THE SUPERVISION

DR. SR. RINI RAPHAEL

**Head of the Department** 



DEPARTMENT OF ZOOLOGY

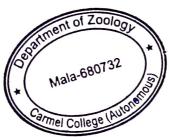
CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023 - 2024

Supervisor .

Head
Department of Zoology
Carmel Colleg. (Autonomous)
Mala-680732



Head of the Department

Head
Department of Zoology
Carmel College (Autonomous)
Mala-680732



This is to certify that this dissertation entitled "COMPARATIVE POLYMORPHIC ANALYSIS OF LYSOZYME GENE IN THE VARIANTS OF CATTLE" is authentic record of research work carried out by SONA SUNNY(CRAVSZO012) in the Department of Zoology, Carmel College (Autonomous), Mala under my supervision and guidance in partial fulfilment of the requirement for the Degree of Bachelor of Science in Zoology under faculty of Science, University of Calicut and further declare that no part of this dissertation has been presented before for any other degree.

Place : Mala	Dr. Sr. Rini Raphael

Date: 19/3/2024 Head of the department

Carmel College (Autonomous), Mala

Department of Zoology Carmel College (Autonomous) Mala-680732

Valued by,

**EXAMINERS** 

1)	Name and designation Dr. SHAJI & M.	
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2)	Name and designation . Dr. Ileg G . The Bash (20)	
	Name and designation . Dr. Ise G. Thompson	
	1 3/6/2	ž











### **BONAFIDE CERTIFICATE**

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Confirmedly,

Mr. Jismon Thomas

Lead Research Scientist VETA Genomics Pvt. Ltd.

Thrissur, Kerala- 680 009





# REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name: Hashi Maria Babu

I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTOR NO: CRAV520001

Brown

**Head of the Department** 

Department of Zoology
Carmel Collett tronomous)
Mala-obu732



Lecturer-in-charge
Ms. HARIT HA. P.NAIR

Date:....

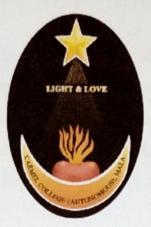
**EXAMINERS:** 

1.

Dr. 8HADI E.M.

114.3.2024

2. Or Teys Thanayan July and



### REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name:A	NCH	ITHA:	P.Y		
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I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVSZ (9003

Head of the Department of Pology
Department of Pology
Carmel College (Autonomous)
Mala-680732

Lecturer-in-charge Ms. HARITHA. P. NAIR

Date: 19:13-2024

**EXAMINERS:** 

1. Dr. Tryk Thensy an france 2. Dr. SHADI E.M. Config



## REPORT ON FIELD STUDY **B.Sc.PROGRAMME IN ZOOLOGY**

Name: DONA ROSE M R

I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVSZO009

Head of the Department of Zoology Carmel College (Autonomous)



Lecturer-in-charge Ms. HARITHAP. NAIR

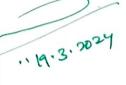
Date:....

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**EXAMINERS:** 

1. Dr. Tryes Thomakas France.

2. DA. SHAOT E.M.





# REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name:	)risya·M	 
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I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVSZOO10

<u>MMR</u> Jead of the Départ

Head of the Department of Zoology
Carmel College (Autonomous)

Mala-680732

Date: 19-03-24

Lecturer-in-charge

Ms. HARITHA. P. NAIR

**EXAMINERS:** 

1. Dr. Teeja Thanaspan - 1/9/3/24

Mala-680732

Mala-680732

Mala-680732

2. Dr. SHAON E'M.

19.3.2024



### REPORT ON FIELD STUDY **B.Sc.PROGRAMME IN ZOOLOGY**

Name: FATHIMA SHERIN P

I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVS20 005.

Head of the Department of Zoology Carmel College (Autonomous)

Mala-680732

Date: 19-03-24

Mala-680732

Lecturer-in-charge HARITHA. P. NAIR.

**EXAMINERS:** 



### REPORT ON FIELD STUDY **B.Sc.PROGRAMME IN ZOOLOGY**

Name: KRISHNA PRIYA A

I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVSZOOD6

Head Head of the Departmenting

Carmel College (Autonomous) Mala-680732

Date:..

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Mala-680732

Lecturer-in-charge

HARITHA P. NAIR

**EXAMINERS:** 

2. Dr. Jeys Thonay on



## REPORT ON FIELD STUDY **B.Sc.PROGRAMME IN ZOOLOGY**

Name: NANOHANA C.S.	
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I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAVS.70007.

Head of the Department Carmel College (Autonomous) Mala-680732

Lecturer-in-charge

Ms. HARITHA.P. NAIR.

Date: 19-03-2024.

**EXAMINERS:** 

3

.. 19. 3 2024

Mala-680732

armel College

1. Dr. SHAOI EM.



# REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name:NESNI	P.J	
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I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTOR NO: CRAVS/X 0011

Frme

Head of the Department

Department of Zoology Carmel College (Autonomous) Mala-680732



Lecturer-in-charge M3. HARITHA. P. NAIR

Date:....

**EXAMINERS:** 

1. Dr. SHAJI E.M.

.. 19. 3. 2024

2. Dr. TegaThanegen

As you



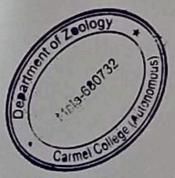
# REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name: PRINSI PRAKASAN

I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAYSZOOO8

Head of the Department
Department of Zoology



Lecturer-in-charge
Ms. HARITHA. P. NAIR

Date:.....

**EXAMINERS:** 

1. Dr. SHADI EM.

2. Dr. Jegë Thoney an-

19.3.24



### REPORT ON FIELD STUDY B.Sc.PROGRAMME IN ZOOLOGY

Name: SONA SUNNY	
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I certify that this is a field report done during the academic year 2023-2024 by the candidate with

REGISTER NO: CRAYSZOOL2

Head of the Departmentogy Carmel College (Autonomous)

Date: 19/3/2424

Lecturer-in-charge

Ms. HARITHA. P. NAIR

**EXAMINERS:** 

1. Dr. SHAJI & M.