

**Genome wide Identification and Analysis of  
Potassium Transporter in Cucumis Sativus by using  
Bioinformatics Approach**



**A Dissertation Submitted to**

**CH.CHARAN SINGH UNIVERSITY, MEERUT**

**In partial fulfillment of the requirement for the award of the degree of**

**Master of Science in**

**BIOINFORMATICS**

**By**

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Session 2019-2021**

**UNDER SUPERVISION OF  
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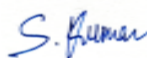
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### CERTIFICATE

This is to certify that thesis entitled **Genome wide identification and analysis of Potassium transporter in *Cucumis sativus* by using Bioinformatics approach** submitted in the fulfilment for the award of the degree of **MSc. Bioinformatics** in the Department of Bioinformatics, J. V. College, Baraut,-250611, (UP) is an original record of bona fide research work carried out by **Dharmendra Kumar** under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. **Dharmendra Kumar** worked here from **01.02.2021** to **31.07.2021**.

I wish him/her all the success in future endeavors.

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## **ACKNOWLEDGEMENT**

I would like to thank Sh. Manoj Kumar Sharma and Dr. Sachin Kumar who gave me a golden opportunity to work on this project. I'd also like to express my gratitude to Dr. Jay Kumar Saroha, principal wholeheartedly.

I would like to express my sincere gratitude and indebtedness to Dr. Manoj Kumar Sharma Coordinator, Department of Bioinformatics, J.V College, Baraut keep for producing me opportunities of submitting this academic training report.

I must also thank my parents and friends for the immense support and help during this project. Without their help, completing this project would have been very difficult.

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# Contents

## **1. Introduction**

1.1 Importance

## **2. Potassium**

2.1 Importance of potassium

2.2 Potassium deficiency

2.3 Function

## **3. Review of Literature**

## **4. Material and methods**

4.1 Data collection

4.2 Identification and Chromosomal localization

4.3 Prediction of exon/intron boundaries

4.4 Functional domain and physicochemical properties

4.5 Phylogeny analysis

## **5. Results and discussions**

5.1 Genome wide identification

5.2 Chromosomal distribution and homeologs

5.3 Predict gene structure and conserved motifs

5.4 Phylogeny analysis

5.5 Homology modeling proteins

## **6. Conclusion**

## **7. References**

***In Silico* Genome wide Identification and  
Analysis of Aquaporins in *Hordeum vulgare* (L.)**



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# CONTENTS

## 1. Introduction

- 1.1 *Hordeum vulgare*
- 1.2 Productivity and quality traits
- 1.3 Aquaporins
- 1.4 Role of Aquaporins
- 1.5 Mechanism
- 1.6 Deficiency

## 2. Review of Literature

## 3. Material and methods

- 3.1 Data collection
- 3.2 Identification and Chromosomal localization
- 3.3 Prediction of exon/intron boundaries
- 3.4 Functional domain and physicochemical properties
- 3.5 Phylogeny analysis

## 4. Results and discussions

- 4.1 Genome wide identification
- 4.2 Chromosomal distribution and homeologs
- 4.3 Predict gene structure and conserved motifs
- 4.4 Phylogeny analysis
- 4.5 Homology modeling proteins

## 5. Conclusion

## 6. References



**Genome-wide Identification and Gene  
Expression Pattern of ABC Transporter  
Gene in Vitis Vinifera**



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# Contents

## **1. Introduction**

- 1.1 Vitis vinifera
- 1.2 Origin and distribution
- 1.3 Cultivation

## **2. ABC transporter**

- 2.1 ABC transporter
- 2.2 Function

## **3. Review of Literature**

## **4. Material and methods**

- 4.1 Data collection
- 4.2 Identification and Chromosomal localization
- 4.3 Prediction of exon/intron boundaries
- 4.4 Functional domain and physicochemical properties
- 4.5 Phylogeny analysis

## **5. Results and discussions**

- 5.1 Genome wide identification
- 5.2 Chromosomal distribution and homeologs
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- 5.4 Phylogeny analysis
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**Genome-wide Identification and  
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# Contents

## **1. Introduction**

*1.1 Beta vulgaris*

## **2. Boron transportor**

2.1 Functions

2.2 Plant analysis

2.3 Deficiency

## **3. Review of Literature**

## **4. Material and methods**

4.1 Data collection

4.2 Identification and Chromosomal localization

4.3 Prediction of exon/intron boundaries

4.4 Functional domain and physicochemical properties

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