

## CHAPTER 46

### PLANT MOLECULAR BIOLOGY

#### Doctoral Theses

521. AGARWAL (Priyanka)  
**Regulation of Fruit Ripening in Tomato by Genetic Manipulation of Ethylene Signal Transduction.**  
Supervisor : Dr. Arun K. Sharma  
Th 20226

*Contents*

1. Review. 2. Materials and methods. 3. Results. 4. Discussion.  
5. Summary and conclusions. References and appendix.

522. BARANWAL (Vinay Kumar)  
**Identification of Genic Component That Influences Manifestation of Hybrid Vigour by Using Genome-Wide Transcriptome Analyses in Rice.**  
Supervisor : Dr. Sanjay Kapoor  
Th 20131

*Contents*

1. Review of literatures: Understanding molecular bases of heterosis: Predictions from high throughput studies. 2. Material and methods. 3. Results 4. Discussions. References and appendix.

523. BREJA (Priyanka)  
**Functional Validation of Rice Homeodomain Genes (OsHOX14, OsBLH) and F-Box Gene (OsFBLD10) in Reproductive Development and OsHOX22 in Abiotic Stress Toleranc.**  
Supervisor : Prof. Jitendta P. Khurana  
Th 20132

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1. Review of literature on homeodomain transcription factors. 2. Materials and methods. 3.Result and discussion. 4. Summary

and conclusions. References and annexure.

524. MITTAL (Dheeraj)  
**Insights Into Head Shock Factors in Rice (Oryza Sativa L.).**  
Supervisor : Prof. Anil Grover  
Th 20130

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1. Introduction. 2. Review of literature. 3. Materials and methods. 4. Results and discussion. 5. Summary and conclusions. Literature cited and appendix.