

CHAPTER 18

GENETICS

Doctoral Theses

200. GUPTA (Aarti)
Analysis of Fruit Characteristics in Transgenic Tomatoes with RNAi-Mediated Silencing of ACC Synthase Genes and Over-Expression of Polyamine Biosynthesis Genes.
Supervisor : Prof. M. V. Rajam
Th 19830

Contents

1. Introduction. 2. Review of literature. 3. Materials and methods. 4. Results and discussion. 5. Summary and conclusions. 6. References and annexures.

201. GUPTA (Enna Dogra)
RNAi-Mediated Silencing of Polyamine Biosynthesis Genes for the Control of Growth of Oral and Breast Cancer Cell Lines.
Supervisors : Prof. M. V. Rajam and Prof. P. C. Ghosh
Th 19831

Contents

1. Introduction. 2. Review of literature. 3. Material and methods. 4. Results and discussion. 5. Summary and conclusions. 6. References and appendices.

202. GUPTA (Ruchi)
Antimicrobial Peptides LR14 (AMPs LR14) Produced by Lactobacillus Plantarum LR/14 : Mode of Action, Inhibition spectrum and Their Application.
Supervisor : Prof. Sheela Srivastava
Th 19228

Contents

1. Purification of AMPs LR14. 2. Inhibition studies of AMPs LR14. 3. Toxicity testing and applications of AMPs LR14. Summary

and conclusions. References and annexure.

203. THENRAL (S. G.)
Identification of a Novel Gene MID2 for Intellectual Disability and Leads in Additional Families Using Next Generation Sequencing Tools.
Supervisor : Prof. B. K. Thelma
Th 19829

Contents

1. Review of literature and introduction. 2. Material and methods. 3. Genetic analyses of family 1 and 2. 4. Genetic analyses of family 3. 5. Genetic analyses of family 4. 6. Summary, references and appendix.

204. TOYANJI JOSEPH PUNCHAICHIRA
Identification of Functional Variants in Dopamine- β -Hydroxylase Gene by Genotype-Phenotype Correlation and Their Implications for Disease.
Supervisors : Prof. Thelma B. K. and Dr. Suneet Kateriya
Th 20271

Contents

1. Review of literature and introduction. 2. Materials and methods. 3. UPLC based method for the detection of dopamine- β -hydroxylase activity in sera samples. 4. Identification of functional variants in dopamine- β -hydroxylase by genotype-phenotype correlation. 5. Genotype-phenotype correlation in DBH using ex-vivo assays and next generation sequencing. 6. Conclusions and perspectives. Bibliography and appendix.