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Nota di contenuto	CELL DIVISION: THEORY, VARIANTS AND DEGRADATION ; CELL DIVISION: THEORY, VARIANTS AND DEGRADATION ; CONTENTS ; PREFACE ; Chapter 1 DIRECT AND REVERSE GENETICS FOR CYANOBACTERIAL CELL DIVISION STUDIES IN GENOMIC AND PROTEOMIC ERA ; ABSTRACT ; INTRODUCTION ; GENETICAL APPROACHES TO STUDY CYANOBACTERIAL CELL DIVISION ; GENOMIC AND PROTEOMIC STUDIES OF CYANOBACTERIAL CELL DIVISION GENES ; CONCLUSION ; ACKNOWLEDGEMENTS ; REFERENCES ; Chapter 2 MICROALGAE CELL AND POPULATION PERFORMANCE UNDER POLLUTION IMPACT ; ABSTRACT ; INTRODUCTION ; MATERIALS AND METHODS ; 1. Experimental Organisms 2. Toxicity Tests 3. Chromium Contamination Effect (Dose-Response Relationships) ; 4. The Photosynthetic Characteristics of Algal Cell ; 5. Fluctuation Test: Analysis of Transformation from Chromium Sensitivity to Chromium Resistance ; RESULTS AND DISCUSSION ; 1. Intrapopulational Changes of Algae under Toxic Exposure ; 1.1. Size-age distribution, coenobial composition and functional characteristics of S. quadricauda control culture. ; 1.2. Effect of toxicants at low concentrations ; 1.3. Effect of toxicants at moderate concentrations ; 1.4. Effect of toxicants at sublethal concentrations

1.5. Effect of toxicants at lethal concentrations 1.6. *S. quadricauda* cell cycle changes after the toxic treatment ; 2. Structural Changes and Adaptation of Algal Population under Different Regimens of Toxic Exposure.; 2.1. Chromium contamination effect investigation. ; 2.2. The number of the toxicant-resistant cells within *S. quadricauda* population ; 2.3. Analysis of transformation from chromium sensitivity to chromium resistance. Mutation rate evaluation; 3. Algostatic Effect of Silver; CONCLUSION ; REFERENCES

Chapter 3 CELL DIVISION AND CELL ELONGATION OF *CORYNEBACTERIUM GLUTAMICUM*, A ROD-SHAPED BACTERIUM THAT LACKS ACTIN-LIKE HOMOLOGUES ABSTRACT ; INTRODUCTION ; MORPHOLOGICAL ECCENTRICITIES OF *CORYNEBACTERIA*: CLUB SHAPE, OUTER MEMBRANE, PLEOMORPHISM, AND SNAPPING DIVISION ; CELL ELONGATION AT THE CELL POLES ; PENICILLIN-BINDING PROTEINS ; GENES INVOLVED IN *CORYNEBACTERIAL* CELL DIVISION AND ITS REGULATION ; CONCLUSION ; ACKNOWLEDGMENTS ; REFERENCES ; Chapter 4 THE IMPACT OF CELL CYCLE REGULATION ON THE TUMORIGENESIS PROCESS ; ABSTRACT ; CELL DIVISION: LIFE GUARDIAN OR DEATH PROMOTER THE CELL PROLIFERATION STIMULI THE ROLE OF CELL CYCLE CONTROL IN ONCOGENESIS ; REFERENCES ; Chapter 5 ONE RING TO BIND THEM ALL AT THE CENTRE OF THE CELL ; ABSTRACT; INTRODUCTION ; 1. Cell Division Site Determination ; (a) Positive signals at the centre of the cell ; (b) Negative signals from the cell ends ; 2. Novel Regulators Defining the Site for CAR Formation ; (a) Cdr2, a novel regulator of cell division site specification ; (b) Kin1, a regulator of internal cellular organization, interacts with Pom1 ; 3. Assembly of the CAR at the Cell Equator ; (a) The cortical node model (b) The aster model

Sommario/riassunto

Cell division is a highly co-ordinated process by which the living organisms grow, develop and reproduce. This book presents original research results on the cell division research.
