

APPLIED AND ENVIRONMENTAL MICROBIOLOGY

Volume 58

July 1992

No. 7

GENETICS AND MOLECULAR BIOLOGY

- Structure, Organization, and Transcription of a Cellobiohydrolase Gene Cluster from *Phanerochaete chrysosporium*.** Sarah F. Covert, Amber Vanden Wymelenberg, and Dan Cullen 2168–2175
- Determination of Plasmid DNA Concentration Maintained by Nonculturable *Escherichia coli* in Marine Microcosms.** Jeffrey J. Byrd, Joseph G. Leahy, and Rita R. Colwell 2266–2270

ENZYMOLGY AND PROTEIN ENGINEERING

- Purification and Characterization of Two Serine Carboxypeptidases from *Aspergillus niger* and Their Use in C-Terminal Sequencing of Proteins and Peptide Synthesis.** Florence Dal Degan, Bruno Ribadeau-Dumas, and Klaus Breddam 2144–2152

PHYSIOLOGY AND BIOTECHNOLOGY

- Ethanol Production from Cellobiose, Amorphous Cellulose, and Crystalline Cellulose by Recombinant *Klebsiella oxytoca* Containing Chromosomally Integrated *Zymomonas mobilis* Genes for Ethanol Production and Plasmids Expressing Thermostable Cellulase Genes from *Clostridium thermocellum*.** Brent E. Wood and L. O. Ingram 2103–2110
- Microbial Oxidation of Oleic Acid.** Saleh H. El-Sharkawy, Wei Yang, Larry Dostal, and John P. N. Rosazza 2116–2122
- Reductive Desulfurization of Dibenzylidissulfide.** Kathleen W. Miller 2176–2179
- Anaerobic Growth of *Thiobacillus ferrooxidans*.** J. T. Pronk, J. C. de Bruyn, P. Bos, and J. G. Kuenen 2227–2230
- Application of ¹³C Nuclear Magnetic Resonance To Elucidate the Unexpected Biosynthesis of Erythritol by *Leuconostoc oenos*.** Maria Veiga-Da-Cunha, Paula Firme, M. Vitória San Romão, and Helena Santos 2271–2279
- Localization of Methanol Dehydrogenase in Two Strains of Methylotrophic Bacteria Detected by Immunogold Labeling.** Theresa A. Fassel, Lorie A. Buchholz, Mary Lynne Perille Collins, and C. C. Remsen 2302–2307
- Oxidation of Nitrapyrin to 6-Chloropicolinic Acid by the Ammonia-Oxidizing Bacterium *Nitrosomonas europaea*.** Todd Vannelli and Alan B. Hooper ... 2321–2325
- Vitamin B₁₂-Dependent Propionate Production by the Ruminant Bacterium *Prevotella ruminicola* 23.** Herbert J. Strobel 2331–2333
- Changes in Fatty Acid Branching and Unsaturation of *Streptomyces griseus* and *Brevibacterium fermentans* as a Response to Growth Temperature.** Merja Suutari and Simo Laakso 2338–2340

FOOD MICROBIOLOGY

- Detection of Active Yeast Cells (*Saccharomyces cerevisiae*) in Frozen Dough Sections.** K. Autio and T. Mattila-Sandholm 2153–2157

Continued on following page

Numerical Taxonomy of Gram-Negative, Nonmotile, Nonfermentative Bacteria Isolated during Chilled Storage of Lamb Carcasses. M. Prieto, M. R. García-Armesto, M. L. García-López, A. Otero, and B. Moreno.....	2245–2249
Depletion of Proton Motive Force by Nisin in <i>Listeria monocytogenes</i> Cells. Maria E. C. Bruno, Alan Kaiser, and Thomas J. Montville	2255–2259
Monoclonal Antibody-Colony Immunoblot Method Specific for Isolation of <i>Pediococcus acidilactici</i> from Foods and Correlation with Pediocin (Bacteriocin) Production. Arun K. Bhunia and Michael G. Johnson	2315–2320
Roles of Arginine in Growth of <i>Clostridium botulinum</i> Okra B. Sandra I. Patterson-Curtis and Eric A. Johnson	2334–2337

MYCOLOGY

Production of Dihomo-γ-Linolenic Acid by a $\Delta 5$-Desaturase-Defective Mutant of <i>Mortierella alpina</i> 1S-4. Saeree Jareonkitmongkol, Hiroshi Kawashima, Norifumi Shirasaka, Sakayu Shimizu, and Hideaki Yamada	2196–2200
The Composition and Attributes of <i>Colletotrichum truncatum</i> Spores Are Altered by the Nutritional Environment. Mark A. Jackson and David A. Schisler	2260–2265

ENVIRONMENTAL AND PUBLIC HEALTH MICROBIOLOGY

Limited Degradation of Chlorophenols by Anaerobic Sludge Granules. William W. Mohn and Kevin J. Kennedy	2131–2136
Influence of Ecosystematic Factors on Survival of <i>Escherichia coli</i> after Large-Scale Release into Lake Water Mesocosms. Ingrid Brettar and Manfred G. Höfle	2201–2210
Biosorption of Dichlorodiphenyltrichloroethane and Hexachlorobenzene in Groundwater and Its Implications for Facilitated Transport. Roland Lindqvist and Carl G. Enfield	2211–2218
Biodegradation of Polycyclic Aromatic Hydrocarbons by New Isolates of White Rot Fungi. Jim A. Field, Ed de Jong, Gumersindo Feijoo Costa, and Jan A. M. de Bont	2219–2226
Biodegradation of Mixtures of Substituted Benzenes by <i>Pseudomonas</i> sp. Strain JS150. Billy E. Haigler, Charles A. Pettigrew, and Jim C. Spain	2237–2244
Reductive Dechlorination of Chlorophenols by a Pentachlorophenol-Acclimated Methanogenic Consortium. David K. Nicholson, Sandra L. Woods, Jonathan D. Istok, and Daniel C. Peek	2280–2286

GENERAL MICROBIAL ECOLOGY

Inhibition of Settlement by Larvae of <i>Balanus amphitrite</i> and <i>Ciona intestinalis</i> by a Surface-Colonizing Marine Bacterium. Carola Holmström, Dan Rittschof, and Staffan Kjelleberg	2111–2115
Enzymes Involved in Anaerobic Polyethylene Glycol Degradation by <i>Pelobacter venetianus</i> and <i>Bacteroides</i> Strain PG1. Joachim Frings, Edgar Schramm, and Bernhard Schink	2164–2167
Comparative Acid Tolerances and Inhibitor Sensitivities of Isolated F-ATPases of Oral Lactic Acid Bacteria. Michael G. Sturr and Robert E. Marquis	2287–2291
Association of Luminous Bacteria with Artificial and Natural Surfaces in Arabian Gulf Seawater. John C. Makemson, Nada Fulayfil, and Philip Basson	2341–2343

METHODS

Dual Staining of Natural Bacterioplankton with 4',6-Diamidino-2-Phenylindole and Fluorescent Oligonucleotide Probes Targeting Kingdom-Level 16S rRNA Sequences. Randall E. Hicks, Rudolf I. Amann, and David A. Stahl	2158–2163
Applications of a Colorimetric Plate Assay for Soluble Methane Monooxygenase Activity. David W. Graham, Dick G. Korich, Ronald P. LeBlanc, Norval A. Sinclair, and Robert G. Arnold	2231–2236
Rapid Method for Analyzing Bacterial Behavioral Responses to Chemical Stimuli. Toshiyuki Nikata, Ken Sumida, Junichi Kato, and Hisao Ohtake	2250–2254
Rapid Method for Separation of Bacterial DNA from Humic Substances in Sediments for Polymerase Chain Reaction. Yu-Li Tsai and Betty H. Olson	2292–2295
Immunogold and Fluorescein Immunolabelling of <i>Legionella pneumophila</i> within an Aquatic Biofilm Visualized by Using Episcopic Differential Interference Contrast Microscopy. Julie Rogers and C. W. Keevil	2326–2330

MICROORGANISM-PLANT INTERACTIONS

Screening of Nonfilamentous Bacteria for Production of Cutin-Degrading Enzymes. W. F. Fett, H. C. Gerard, R. A. Moreau, S. F. Osman, and L. E. Jones	2123–2130
Diversity among Rhizobia Effective with <i>Robinia pseudoacacia</i> L. Janet McCray Batzli, William R. Graves, and Peter van Berkum	2137–2143
Use of Repetitive (Repetitive Extragenic Palindromic and Enterobacterial Repetitive Intergeneric Consensus) Sequences and the Polymerase Chain Reaction To Fingerprint the Genomes of <i>Rhizobium meliloti</i> Isolates and Other Soil Bacteria. Frans J. de Bruijn	2180–2187
Assessment of Genetic Diversity and Population Structure of <i>Xanthomonas oryzae</i> pv. <i>Oryzae</i> with a Repetitive DNA Element. J. E. Leach, M. L. Rhoads, C. M. Vera Cruz, F. F. White, T. W. Mew, and H. Leung	2188–2195
Combined Subtraction Hybridization and Polymerase Chain Reaction Amplification Procedure for Isolation of Strain-Specific <i>Rhizobium</i> DNA Sequences. A. J. Bjourson, C. E. Stone, and J. E. Cooper	2296–2301
Utilization of Carbon Substrates, Electrophoretic Enzyme Patterns, and Symbiotic Performance of Plasmid-Cured Clover Rhizobia. J. Ivo Baldani, R. W. Weaver, M. F. Hynes, and B. D. Eardly	2308–2314