1. Record Nr. UNINA9910876764703321

Titolo	Sampling and analysis of indoor microorganisms / / [edited by] Chin S. Yang, Patricia Heinsohn
Pubbl/distr/stampa	Pacifica, Calif, : Wiley Interscience, 2007
ISBN	1-280-82674-6 9786610826742 0-470-11243-3 0-470-11242-5
Descrizione fisica	1 online resource (291 p.)
Altri autori (Persone)	YangChin S HeinsohnPatricia A
Disciplina	579/.17
Soggetti	Buildings Microbial ecology Molds (Fungi) Environmental sampling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	SAMPLING AND ANALYSIS OF INDOOR MICROORGANISMS; CONTENTS; PREFACE; CONTRIBUTORS; 1. INTRODUCTION TO MICROBIOLOGICAL GROWTH AND CONTAMINATION INDOORS; 1.1. Introduction; 1.2. Health Effects of Indoor Fungal and Bacterial Growth; 1.3. Team and Individual Expertise; 1.4. Approach of This Book; 1.5. Conclusion; 2. CONDUCTING BUILDING MOLD INVESTIGATIONS; 2.1. Introduction; 2.2. Baseline Investigation; 2.2.1. Physical Inspection; 2.2.1.1. Visual Inspection; 2.2.1.2. Documentation; 2.2.1.3. Moisture and Moisture Mapping; 2.2.2. Sampling Design; 2.2.2.1. Air Sampling Methods 2.2.2.2. Selection of Air Sampling Instruments2.2.2.3. Air Sampling Flowrate, Pump Calibration, and Sampling Duration; 2.2.2.4. Number of Indoor and Outdoor Air Samples, Air Sampling Locations, and Order of Sampling; 2.2.2.5. Sampling Techniques; 2.2.2.6. Surface Sampling Techniques and Analysis; 2.2.2.7. Laboratory Selection; 2.2.2.8. Prior Notification; 2.3. Destructive Testing Investigation; 2.4. Sampling during Mold Remediation Oversight and Clearance; 2.5. Conclusions; 3.

MICROBIOLOGICAL SAMPLING STRATEGIES IN INDOOR ENVIRONMENTS; 3.1. Introduction; 3.2. Sampling Strategy
3.3. Spatial or Location Variables3.4. Temporal (Time) Variables; 3.5. Indoor/Outdoor Comparisons; 3.6. Complaint and Noncomplaint Zones; 3.7. Source and Air Samples; 3.8. Bulk Samples; 3.9. Dust Samples; 3.10. Surface Sampling; 3.11. Culture Plate Impactions and Liquid Impingers; 3.12. Spore Trap Samplers; 3.13. Sampling by Filtration; 3.14. Conclusions; 4. MICROSCOPIC ANALYTICAL METHODS FOR FUNGI; 4.1. Introduction; 4.2. Principles and Usage of Microscopes; 4.2.1. Microscopes; 4.2.2. Microscope Objectives; 4.2.3. Photomicrographic Accessories; 4.3. Aseptic Technique and Biosafety
4.4. Sample Preparation for Spore Count4.5. Materials Needed for Preparing Samples; 4.6. Staining and Mounting Techniques; 4.7. Procedures for Identification and Quantification of Spore Traps; 4.8. Techniques for Spore Count Analysis; 4.9. Background Particulates (Nonspore Miscellaneous Materials); 4.10. Limits of Detection; 4.11. Data Presentation; 4.12. Variation of Replications and Duplications; 4.13. Sample Preparation for Direct Examination or from Cultures; 4.13.1. Bulk Samples; 4.13.2. Bulk Dust Samples; 4.13.3. Swab Samples; 4.13.4. Tape Lift Samples; 4.13.5. Culture Samples
4.14. Evaluation of Fungal Infestation4.15. Training of Microscopy Analysts; 4.16. Quality Assurance/Quality Control Procedures; 4.17. WEB Resources; 5. CULTURE-BASED ANALYTICAL METHODS FOR INVESTIGATION OF INDOOR FUNGI; 5.1. Advantages and Limitations of Culture-Based Analytical Methods; 5.2. Factors Influencing the Results of Culture-Based Analysis; 5.2.1. Ecological Considerations; 5.2.2. Viability of Fungal Spores; 5.2.3. Selection of Culture Media; 5.2.4. Concentration Variations; 5.2.5. Sampler Performance, Sampling Time, and Culture Preparation; 5.2.6. Experience of the Analyst
5.3. Culturable Sampling Considerations

Sommario/riassunto

Investigation techniques and analytical methodologies for addressing microbial contamination indoors Microbial contamination indoors is a significant environmental and occupational health and safety problem. This book provides fundamental background information on fungal and bacterial growth indoors as well as in-depth, practical approaches to analyzing and remedying problems. The information helps investigators, laboratory managers, and environmental health professionals properly use state-of-the-science methods and correctly interpret the results. With chapters by expert microbiolog