



# Tape Analytics

Sporelytics Batch: 215314

**Prepared For:** John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

Project:

Sample Report



**Authorized for release by:**

Joshua Krinsky

Laboratory Technical Director

*This report may not be reproduced, distributed, or utilized in any manner whatsoever without the express written consent of Sporelytics, except in its entirety. For any inquiries or additional information, please reach out to the laboratory using the contact details provided on this page. The results contained within this report exclusively pertain to the sample(s) received and processed by the laboratory, as documented on the accompanying Chain of Custody.*

# SPORELYTICS

2901 W Cypress Creek Rd #125, Fort Lauderdale, FL 33309  
Phone: (954) 633-8989 • Fax: (954) 633-8993 • [www.sporelytics.com](http://www.sporelytics.com)



# Table of Contents

**Sporelytics Batch:** 215314

**Project:** Sample Report

**Prepared For:** John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

|                                   |    |
|-----------------------------------|----|
| 1. Cover Page .....               | 1  |
| 2. Table of Contents .....        | 2  |
| 3. Project Summary .....          | 3  |
| 4. Sample Summary .....           | 4  |
| 5. Detection Summary .....        | 5  |
| 6. Client Sample Results .....    | 6  |
| 7. Definitions and Glossary ..... | 7  |
| 8. Fungal Glossary .....          | 9  |
| 9. References and Links .....     | 18 |



# Project Summary

**Sporelytics Batch:** 215314

**Project:** Sample Report

**Prepared For:** John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

**Receipt** - The sample(s) detailed in this report were collected on May 9th, 2025 and received by Sporelytics on May 10th, 2025. Upon arrival at our state-of-the-art laboratory, each sample undergoes a initial inspection to verify its condition and integrity. This comprehensive review is followed by our stringent chain of custody process, which is designed to maintain the highest levels of accuracy and traceability throughout the entirety of the analytical procedures. All samples were received in good condition, barring any exceptions documented in the results section of this report or on the accompanying Chain of Custody.

**Sample Analysis** - The analyses were conducted in accordance to Sporelytics' Standard Operating Procedures (SOPs) and Quality Assurance Program (QAP). These protocols ensure the precision and accuracy in our analytical processes. Our laboratory employs advanced instrumentation and cutting-edge technologies to ensure the highest level of accuracy and reliability in the results. No deviations from these procedures were made unless documented in the results section of this report. Any additional information that the laboratory deems pertinent is provided as Data Qualifiers accompanying the sample results.

**Quality Assurance** - Founded by a team of visionary scientists, Sporelytics is steadfast in its commitment to delivering precise and reliable data. Sporelytics has meticulously developed and implemented a comprehensive set of policies and procedures that conform to the stringent requirements of ISO/IEC 17025:2017, the General Requirements for the Competence of Testing and Calibration Laboratories. These protocols have undergone rigorous review by an independent external organization. Moreover, Sporelytics actively participates in the AIHA Environmental Microbiology Proficiency Analytical Testing (EMPAT) Program to ensure ongoing excellence in proficiency testing.

Our laboratory is staffed with highly trained and experienced professionals who are dedicated to maintaining the highest standards of scientific rigor. Utilizing state-of-the-art technology, Sporelytics excels in the identification and quantification of fungal spores. Our advanced analytical instruments, including high-resolution microscopes and sophisticated data analysis software, enable us to provide unparalleled accuracy in our findings. The laboratory's data systems are designed to deliver comprehensive and customizable reporting options, ensuring that clients receive precise and timely results in both hardcopy and electronic formats. This integration of advanced technology and expert knowledge positions Sporelytics as a leader in the field of fungal spore analysis.



# Sample Summary

**Sporelytics Batch:** 215314

**Project:** Sample Report

**Prepared For:** John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

| Lab Sample ID | Client Sample ID    | Media | Collected | Received  |
|---------------|---------------------|-------|-----------|-----------|
| 215314-17     | Kitchen Cabinet     | Tape  | 5/9/2025  | 5/10/2025 |
| 215314-18     | Living Room Ceiling | Tape  | 5/9/2025  | 5/10/2025 |
| 215314-19     | Bedroom Wall        | Tape  | 5/9/2025  | 5/10/2025 |
| 215314-20     | Bathroom Vanity     | Tape  | 5/9/2025  | 5/10/2025 |



# Detection Summary

Sporelytics Batch: 215314

Project: Sample Report

Prepared For: John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

| Lab Sample ID | Client Sample ID    | Spore Type                   | Result / Count/cm <sup>2</sup> |
|---------------|---------------------|------------------------------|--------------------------------|
| 215314-17     | Kitchen Cabinet     | Ascospores                   | 38                             |
|               |                     | Aspergillus/Penicillium-Like | 225                            |
|               |                     | Cladosporium                 | 94                             |
|               |                     | Curvularia                   | 19                             |
|               |                     | Hyphal Fragments             | 19                             |
| 215314-18     | Living Room Ceiling | Ascospores                   | 38                             |
|               |                     | Aspergillus/Penicillium-Like | 4,312                          |
|               |                     | Chaetomium                   | 188                            |
|               |                     | Cladosporium                 | 806                            |
|               |                     | Stachybotrys                 | 38                             |
|               |                     | Hyphal Fragments             | 131                            |
| 215314-19     | Bedroom Wall        | Aspergillus/Penicillium-Like | 431,250                        |
|               |                     | Stachybotrys                 | 2,494                          |
|               |                     | Hyphal Fragments             | 31,875                         |
| 215314-20     | Bathroom Vanity     | Aspergillus/Penicillium-Like | 24,375                         |
|               |                     | Chaetomium                   | 994                            |
|               |                     | Hyphal Fragments             | 1,444                          |



**Sporelytics**  
2901 W Cypress Creek Rd #125  
Fort Lauderdale, FL 33309  
Phone: (954) 633-8989  
Email: info@sporelytics.com

**Batch:** 215314

**T001 Tape Lift Analysis**

**Prepared For:** John Funguy  
Sporefinders Mold Inspections  
12321 Mildew Manor  
Sporeville, FL 33309  
(954) 633-8989

**Project:** Sample Report

**Sampled:** 05-09-25  
**Received:** 05-10-25

**Analysis Date:** 05-10-25  
**Report Date:** 05-12-25

|                          |                                |                                |                                |                                |
|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <b>Sample ID:</b>        | 215314-17                      | 215314-18                      | 215314-19                      | 215314-20                      |
| <b>Client Sample ID:</b> | Kitchen Cabinet                | Living Room Ceiling            | Bedroom Wall                   | Bathroom Vanity                |
| <b>Detection Limit:</b>  | 19                             | 19                             | 19                             | 19                             |
| <b>Media:</b>            | Tape                           | Tape                           | Tape                           | Tape                           |
| <b>Sample Analysis:</b>  | Analyzed at 600X Magnification | Analyzed at 600X Magnification | Analyzed at 600X Magnification | Analyzed at 600X Magnification |

| Spore Types                  | Raw Count | Count/cm <sup>2</sup> | %  | Raw Count  | Count/cm <sup>2</sup> | %  | Raw Count     | Count/cm <sup>2</sup> | %  | Raw Count    | Count/cm <sup>2</sup> | %  |
|------------------------------|-----------|-----------------------|----|------------|-----------------------|----|---------------|-----------------------|----|--------------|-----------------------|----|
| Alternaria                   | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Arthrimum                    | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Ascospores                   | 2         | 38                    | 10 | 2          | 38                    | 1  | —             | —                     | —  | —            | —                     | —  |
| Aspergillus/Penicillium-Like | 12        | 225                   | 60 | 230        | 4,312                 | 80 | 23,000        | 431,250               | 99 | 1,300        | 24,375                | 96 |
| Basidiospores                | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Bipolaris/Dreschlera         | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Botrytis                     | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Chaetomium                   | —         | —                     | —  | 10         | 188                   | 3  | —             | —                     | —  | 53           | 994                   | 4  |
| Cladosporium                 | 5         | 94                    | 25 | 43         | 806                   | 15 | —             | —                     | —  | —            | —                     | —  |
| Curvularia                   | 1         | 19                    | 5  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Ganoderma                    | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Nigrospora                   | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Pithomyces                   | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Epicoccum                    | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Fusarium                     | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Memnoniella                  | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Oidium/Peronospora           | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Rust                         | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Smut/Myxomyces/Periconia     | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Stachybotrys                 | —         | —                     | —  | 2          | 38                    | 1  | 133           | 2,494                 | 1  | —            | —                     | —  |
| Torula                       | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Ulocladium                   | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| Unidentified Spores          | —         | —                     | —  | —          | —                     | —  | —             | —                     | —  | —            | —                     | —  |
| <b>Total Spores</b>          | <b>20</b> | <b>375</b>            |    | <b>287</b> | <b>5,381</b>          |    | <b>23,133</b> | <b>433,744</b>        |    | <b>1,353</b> | <b>25,369</b>         |    |
| Hyphal Fragments             | 1         | 19                    |    | 7          | 131                   |    | 1,700         | 31,875                |    | 77           | 1,444                 |    |



# Definitions and Glossary

## Definitions

**Mold** - A diverse group of fungi that grow in the form of multicellular filaments called hyphae. These organisms thrive in various environments, particularly in damp or decaying organic matter. In a laboratory context, mold is identified and analyzed based on its morphology, growth patterns, and reproductive structures. Mold spores can be airborne and, upon settling on suitable substrates, can proliferate rapidly under favorable conditions. The presence of mold in indoor environments is often a concern due to potential health effects and material degradation. Common sources in the indoor environment include water-damaged buildings, areas with poor ventilation, and materials such as wood, paper, and drywall that provide a nutrient-rich substrate.

**Fungi** - A diverse kingdom of eukaryotic organisms that include yeasts, molds, and mushrooms. They play crucial roles in nutrient cycling, decomposition, and symbiotic relationships with plants and animals. Fungi can grow in various environments, often thriving in moist or nutrient-rich conditions, and they reproduce through the production of spores.

**Spores** - Specialized reproductive units produced by fungi, bacteria, algae, and some plants. They are typically unicellular, although multicellular spores can also exist. Spores are characterized by their ability to survive in unfavorable environmental conditions due to their robust and resistant structures. Spores can be dispersed through air, water, insects, or other vectors, and may remain dormant on a surface for years until favorable conditions for growth occur.

**Mycotoxin** - Toxic secondary metabolites produced by certain species of fungi, including some that thrive in environments with high humidity and moisture levels. Exposure to mycotoxins can occur through inhalation, ingestion, or skin contact. Mycotoxins are known to have various health effects, ranging from mild to severe, depending on the type and concentration of the toxin, as well as the duration of exposure.

## Glossary

**Sample ID** - A unique identifier assigned to a specific sample upon receipt at the laboratory. This identifier is used to track and manage the sample throughout the analytical process, ensuring accurate and consistent record-keeping.

**Client Sample ID** - A unique identifier assigned to a sample by the client submitting it for analysis. This information is provided to the laboratory on the Chain of Custody allowing for correlation of the sample with its corresponding data and analysis results. This is commonly the location the sample was collected.

**Media** - The collection device used to capture surface mold spores and other particulates for subsequent analysis. Tape sampling media typically consists of transparent tape to avoid interference with microscopic analysis, a microscope slide, and a plastic case or bag to transport the sample.

**Sample Analysis** - The method of microscopy used by the laboratory to analyze the sample. In order to provide the highest quality analysis, the laboratory uses 600X magnification to analyze the samples. This high magnification level is essential for observing the intricate, minute details that would not be visible at a lower magnification.

**Raw Count** - The initial count observed and recorded during the microscopic analysis of the sample. This count represents the number of spores detected in the portion of the sample analyzed to the laboratory.

**Count/cm<sup>2</sup>** - Count Per Square Centimeter is a calculated extrapolation that represents the concentration of mold spores that would be present in a square centimeter of surface area. This calculation is based on the portion of the sample analyzed by the laboratory and the raw count.



# Definitions and Glossary

## Glossary

**Percent (%)** - Percent composition of the sample. This is a calculation refers to the concentration of a specified spore expressed as a percentage of the total spore count.

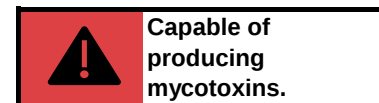
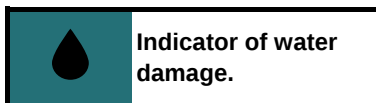
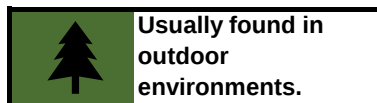
**Detection Limit** - Also known as Method Detection Limit, it defines the sensitivity of the method. Detection Limit represents the lowest number of spores that need to be present in one square centimeter of surface area to detect at least one spore by this analysis. This calculation is based on the portion of the sample analyzed by the laboratory.

## Remediation

**Remediation** - Remediation refers to the process of identifying, removing, cleaning, and treating mold-contaminated areas to ensure a safe and healthy environment. Effective mitigation requires addressing the underlying moisture issues that promote mold growth. This includes repairing leaks, improving ventilation, and using dehumidifiers. Professional mold remediation services may be necessary to safely remove contaminated materials and clean affected areas. The use of personal protective equipment (PPE) is essential during remediation to prevent further exposure.

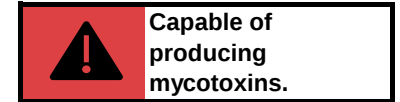
**Note** - Sporelytics does not make any determinations or recommendations regarding the necessity of remediation based solely on the results contained in this report. The findings presented herein should be interpreted in conjunction with a comprehensive physical inspection of the property by a qualified professional. This combined approach is essential to accurately assess the extent of mold contamination and to determine appropriate actions, if any, that may be required. Sporelytics advises property owners to consult with certified mold assessment and remediation specialists and environmental health experts to ensure informed decision-making and effective remediation strategies.

# Fungal Glossary



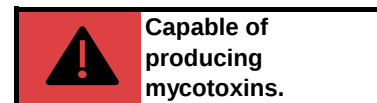
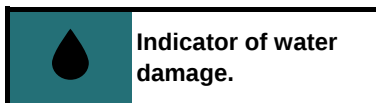
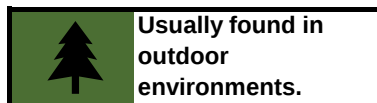
| Alternaria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Description | Characteristics                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Details</b> - Commonly isolated from soil, plants, and various organic materials. It is a cosmopolitan genus, meaning it can be found worldwide. They thrive in environments with high humidity and moderate temperatures.</p> <p><b>Growth Conditions</b> - Species grow rapidly on various substrates, including food, textiles, and building materials. They prefer damp, poorly ventilated areas and can grow at a wide range of ambient temperatures.</p> <p><b>Allergenicity</b> - A significant allergen and is known to cause allergic reactions.</p> <p><b>Mycotoxin Production</b> - Some species have the potential to produce mycotoxins.</p>          |             |    |
| Arthrimum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Description | Characteristics                                                                                                                                                                                                                                             |
| <p><b>Details</b> - Typically isolated from plant debris, soil, and water-damaged indoor materials such as composite wood, plaster, wallpaper, and painted surfaces. It is cosmopolitan, meaning it can be found worldwide.</p> <p><b>Growth Conditions</b> - Species thrive in environments with moderate humidity and temperatures. They grow rapidly on a wide range of materials, both indoors and outdoors.</p> <p><b>Allergenicity</b> - Not a well-known allergen, however, it can potentially cause respiratory issues in sensitive individuals.</p> <p><b>Mycotoxin Production</b> - Not very common, but some species are capable of producing mycotoxins.</p> |             |                                                                                                                                                                                                                                                             |
| Ascospores                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Description | Characteristics                                                                                                                                                                                                                                             |
| <p><b>Details</b> - These spores are formed within sac-like structures called asci. They are ubiquitous and can be found in a variety of environments, including soil, decaying plant material, and indoor damp areas.</p> <p><b>Growth Conditions</b> - Species thrive in environments with moderate to high humidity and temperatures. They can grow on a wide range of substrates, including wood, paper, and textiles.</p> <p><b>Allergenicity</b> - They can act as allergens, causing respiratory issues.</p> <p><b>Mycotoxin Production</b> - Not all produce mycotoxins, however, some can produce mycotoxins that may contaminate food and feed.</p>            |             |                                                                                   |

# Fungal Glossary



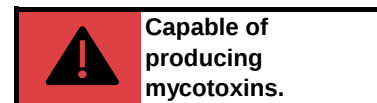
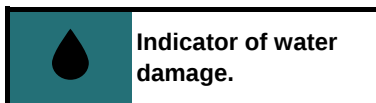
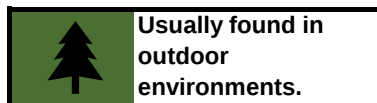
| Aspergillus/Penicillium-Like                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Description | Characteristics                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Details</b> - Commonly found in both indoor and outdoor environments. They thrive in areas with moderate to high humidity and temperatures.</p> <p><b>Growth Conditions</b> - They are versatile and can grow on a wide range of substrates, including organic materials like soil and decaying plants, as well as building materials such as drywall and wood. These fungi flourish in damp, poorly ventilated areas, making them common in places with water damage or high humidity levels.</p> <p><b>Allergenicity</b> - These fungi are known allergens and can cause respiratory issues.</p> <p><b>Mycotoxin Production</b> - A significant number of species are capable of producing mycotoxins, however, these genera are comprised of a large number of species that are ubiquitous in nature and many of which do not produce mycotoxins.</p> |             |                                                                                          |
| Basidiospores                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description | Characteristics                                                                                                                                                             |
| <p><b>Details</b> - Basidiospores are reproductive spores produced by fungi including mushrooms, puffballs, bracket fungi, and rusts. They are ubiquitous in nature and are commonly found in outdoor environments such as gardens, forests, woodlands, and soil. They are often disseminated by wind and released during periods of high humidity or rain. Indoors, basidiospores can indicate the presence of decayed wood, as many are wood-decay fungi.</p> <p><b>Growth Conditions</b> - Basidiospores thrive in damp conditions, particularly those affecting wooden structural components.</p> <p><b>Allergenicity</b> - Some species can be an allergen to sensitive individuals.</p> <p><b>Mycotoxin Production</b> - They do not produce mycotoxins, however, some mushrooms are capable of producing mycotoxins.</p>                                |             |                                                                                         |
| Bipolaris/Dreschlera                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description | Characteristics                                                                                                                                                             |
| <p><b>Details</b> - Commonly found in plant debris, soil, and various plant materials. They are cosmopolitan in nature and can thrive in both indoor and outdoor environments. These fungi are particularly prevalent on grasses, grains, and other plant materials.</p> <p><b>Growth Conditions</b> - Species thrive in environments with moderate to high humidity levels. They require a moist environment for optimal growth and sporulation.</p> <p><b>Allergenicity</b> - Known allergens and can cause Type I and Type III hypersensitivity reactions in sensitive individuals.</p> <p><b>Mycotoxin Production</b> - Certain species of Bipolaris have been reported to produce mycotoxins, however, it is not well understood at this time.</p>                                                                                                        |             |   |

# Fungal Glossary



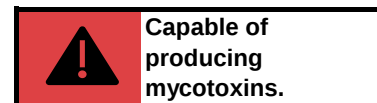
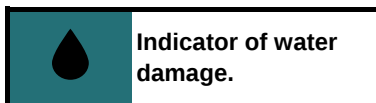
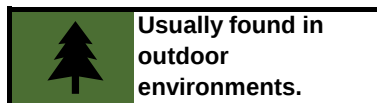
| Botrytis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description                                                                                                                                                                                                                                                    | Characteristics |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <p><b>Details</b> - Species are found globally, thriving in both temperate and tropical regions. They are commonly found as plant pathogens or on decaying plant material.</p> <p><b>Growth Conditions</b> - These fungi prefer cool, moist environments and are often associated with high humidity conditions. They can infect a wide range of hosts, including fruits, vegetables, ornamental flowers, and nursery plants.</p> <p><b>Allergenicity</b> - Species are known to cause allergic reactions.</p> <p><b>Mycotoxin Production</b> - They do not produce mycotoxins.</p>                                                                                                                                                                                                                                                                                       |                                                                                          |                 |
| Chaetomium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - This genus is widely distributed in various environments, including soil, air, decaying plant material, and water-damaged building materials. Species are commonly found indoors on cellulose-rich substrates such as wood, paper, textiles, and drywall.</p> <p><b>Growth Conditions</b> - They thrive in environments with high moisture content and temperatures. Their presence is considered an indicator of water damage due to their requirement for high moisture levels to grow.</p> <p><b>Allergenicity</b> - Species are known to be allergenic, causing respiratory issues.</p> <p><b>Mycotoxin Production</b> - They have the potential to produce mycotoxins.</p>                                                                                                                                                                       |    |                 |
| Cladosporium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - These fungi are widely distributed in both indoor and outdoor environments. They are commonly found on decaying plant material, soil, textiles, and various other organic substrates. Indoors, they can grow on damp surfaces such as wood, wallpaper, and carpeting, especially in areas with high humidity or poor ventilation.</p> <p><b>Growth Conditions</b> - Species thrive in a wide range of temperatures. They prefer environments with moderate water activity.</p> <p><b>Allergenicity</b> - Species are known to produce allergenic spores that can trigger allergic reactions, particularly in individuals with asthma or other respiratory conditions.</p> <p><b>Mycotoxin Production</b> - Species do not produce major mycotoxins of concern. However, they can produce volatile organic compounds (VOCs) associated with odors.</p> |                                                                                                                                                                           |                 |

# Fungal Glossary



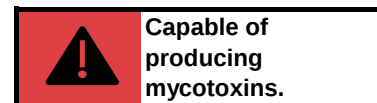
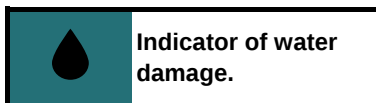
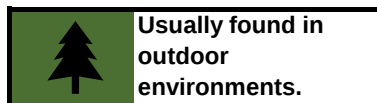
| Curvularia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                                                                                                                                                                                                                                                             | Characteristics |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <p><b>Details</b> - These fungi are commonly found in soil, plant debris, and on various plant surfaces, particularly in tropical and subtropical regions. Some species can also be isolated from indoor environments, especially from wooden structures.</p> <p><b>Growth Conditions</b> - Species thrive in warm, humid environments. They can live on dead organic matter or as pathogens on living plants.</p> <p><b>Allergenicity</b> - They are known allergens causing allergic reactions.</p> <p><b>Mycotoxin Production</b> - Some species have the potential to produce mycotoxins which can contaminate crops.</p>                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                   |                 |
| Epicoccum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Description                                                                                                                                                                                                                                                                                                                                             | Characteristics |
| <p><b>Details</b> - They are commonly found in soil, decaying plant material, and various environmental settings. Species are known for their robust nature and ability to grow in a wide range of conditions.</p> <p><b>Growth Conditions</b> - Species thrive in environments with high humidity and can grow on a variety of substrates, including wood, paper, textiles, and food. They are often secondary colonizers, appearing after other molds have already contaminated the substrate.</p> <p><b>Allergenicity</b> - It is a common allergen and can cause allergic reactions.</p> <p><b>Mycotoxin Production</b> - They do not produce mycotoxins that are known to affect humans.</p>                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                     |                 |
| Fusarium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Description                                                                                                                                                                                                                                                                                                                                             | Characteristics |
| <p><b>Details</b> - They are widely distributed in soil and associated with plants. It is commonly found in temperate and tropical regions, thriving in environments such as agricultural fields, particularly on cereal crops. Indoors, they can be found in areas with high moisture levels, such as bathrooms, kitchens, basements, and areas affected by water damage. They can grow on damp building materials like drywall, wood, wallpaper, and carpeting. Poor ventilation and high humidity levels can contribute to their growth and proliferation within indoor environments.</p> <p><b>Growth Conditions</b> - Species prefer moist conditions and can grow on a variety of substrates. They are typically soil-borne but can also be found in air and water.</p> <p><b>Allergenicity</b> - They are known allergens causing allergic reactions.</p> <p><b>Mycotoxin Production</b> - Species are known for their ability to produce mycotoxins.</p> |     |                 |

# Fungal Glossary



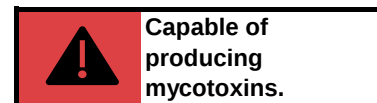
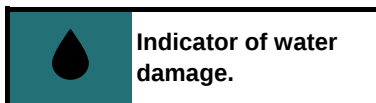
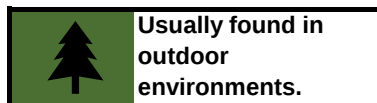
| Ganoderma                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Description                                                                                                                                                                                                                                                    | Characteristics |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <p><b>Details</b> - They are a genus of wood-decaying fungi. These fungi are commonly found on dead or dying trees, as well as on living hardwood trees, conifers, and palms. They thrive in both tropical and temperate regions, with a preference for warm and humid conditions.</p> <p><b>Growth Conditions</b> - Species grow as shelf-like fungi, typically developing on the trunks or exposed roots of trees. The fungi require a moist environment and a substrate rich in lignin and cellulose for optimal growth.</p> <p><b>Allergenicity</b> - They are considered potential allergens and have been implicated in respiratory allergic diseases.</p> <p><b>Mycotoxin Production</b> - Production of mycotoxins by Ganoderma is not well-documented.</p>                                                                                                                  |                                                                                          |                 |
| Memnoniella                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - A genus of fungi that is closely related to Stachybotrys. It is typically found in environments rich in cellulose, such as soil, paper, wallpaper, cotton, textiles, and dead plant material. Memnoniella thrives in damp conditions and is commonly found on water-damaged construction materials.</p> <p><b>Growth Conditions</b> - It requires high moisture levels to grow. Indoors, it is commonly found on wet gypsum board, insulation, ceiling tiles, damp cardboard, paper, textiles, wood, and other water-damaged materials.</p> <p><b>Allergenicity</b> - Spores can cause allergic reactions in sensitive individuals. These reactions typically manifest as Type I or Type III hypersensitivity reactions.</p> <p><b>Mycotoxin Production</b> - Memnoniella has the potential to produce mycotoxins similar to those produced by Stachybotrys.</p> |    |                 |
| Nigrospora                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - These fungi are commonly found in soil, decaying plant material, seeds, and various plant surfaces. They are widely distributed and can be found in both tropical and temperate regions.</p> <p><b>Growth Conditions</b> - Species thrive in environments with high humidity and moderate temperatures.</p> <p><b>Allergenicity</b> - species are known to produce allergenic spores that can cause respiratory allergies, particularly to sensitive individuals.</p> <p><b>Mycotoxin Production</b> - Production of mycotoxins is not well-documented.</p>                                                                                                                                                                                                                                                                                                      |                                                                                      |                 |

# Fungal Glossary



| Oidium/Peronospora                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description | Characteristics                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Details</b> - These fungi are obligate parasites, meaning they require living host plants to grow and reproduce. They are commonly found on the leaves, stems, and flowers of many plants, including cereals, vegetables, and ornamental plants.</p> <p><b>Growth Conditions</b> - They thrive in environments with high humidity and moderate temperatures, and their spores are easily spread by wind.</p> <p><b>Allergenicity</b> - Spores can cause allergic reactions in sensitive individuals.</p> <p><b>Mycotoxin Production</b> - They are not known to produce mycotoxins.</p>                                                                                                |             |                                                                                        |
| Pithomyces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Description | Characteristics                                                                                                                                                           |
| <p><b>Details</b> - These fungi are commonly found in soil, decaying plant material, and various plant surfaces. They thrive in warm, humid environments and are widely distributed in tropical and subtropical regions.</p> <p><b>Growth Conditions</b> - Indoors, they can grow on damp paper, cardboard, textiles, wood, and other water-damaged materials.</p> <p><b>Allergenicity</b> - Species are known to produce allergenic spores that can cause respiratory allergies.</p> <p><b>Mycotoxin Production</b> - Pithomyces is typically considered non-toxicogenic.</p>                                                                                                               |             |   |
| Rust                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Description | Characteristics                                                                                                                                                           |
| <p><b>Details</b> - They are obligate plant pathogens that require living host plants for growth and reproduction.</p> <p><b>Growth Conditions</b> - They are found in diverse environments where plants grow and thrive in environments with moderate to high humidity. Since they require a living host plant, they are not typically found indoors. However, they can grow in indoor plants, particularly in areas with high humidity and poor ventilation.</p> <p><b>Allergenicity</b> - These fungi primarily affect plants, but their spores can cause allergic reactions in sensitive individuals.</p> <p><b>Mycotoxin Production</b> - They are not known to produce mycotoxins.</p> |             |                                                                                      |

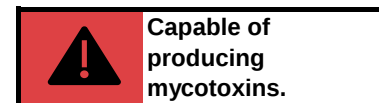
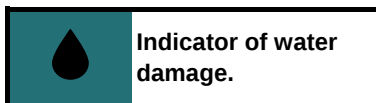
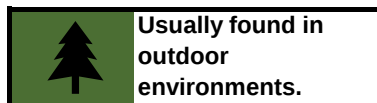
# Fungal Glossary



| Smut/Myxomyces/Periconia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Description                                                                                                                                                                                                                                                    | Characteristics |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <p><b>Details</b> - This is a grouping of several genera based on similar morphology. Some are plant pathogens and others live on decaying plants.</p> <p><b>Growth Conditions</b> - They can be found in various environments and can be found on grasses, cereals, decaying organic matter such as logs, leave, and soil.</p> <p><b>Allergenicity</b> - Some fungi spores within this grouping can act as allergens.</p> <p><b>Mycotoxin Production</b> - They are not known to produce mycotoxins.</p>                                                                                                                                          |                                                                                          |                 |
| Stachybotrys                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - A genus of molds commonly known as black mold. It is typically found in environments with high moisture levels and poor ventilation, such as water-damaged buildings, homes, and offices.</p> <p><b>Growth Conditions</b> - Stachybotrys thrives on materials like drywall, ceiling tiles, wood, and other cellulose-rich materials that have been exposed to prolonged moisture.</p> <p><b>Allergenicity</b> - Spores can cause allergic reactions in sensitive individuals.</p> <p><b>Mycotoxin Production</b> - Stachybotrys is notorious for producing mycotoxins.</p>                                                     |    |                 |
| Torula                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Description                                                                                                                                                                                                                                                    | Characteristics |
| <p><b>Details</b> - A type of mold that grows on cellulose-rich surfaces such as wood, paper, jute, straw baskets, and wicker. It is commonly found both indoors and outdoors.</p> <p><b>Growth Conditions</b> - It grows well at moderate temperatures and high humidity levels. Indoors, it thrives in damp environments with poor ventilation, such as basements, bathrooms, and areas with water damage. Outdoors, it is often found in soil, dead herbaceous stems, grasses, and wood.</p> <p><b>Allergenicity</b> - Spores can act as an allergen.</p> <p><b>Mycotoxin Production</b> - It is not well studied for mycotoxin production.</p> |                                                                                                                                                                           |                 |



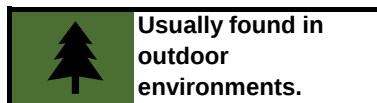
# Fungal Glossary



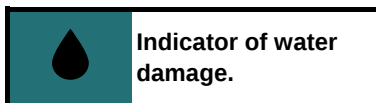
| Ulocladium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description | Characteristics |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|
| <p><b>Details</b> - These fungi are commonly found in soil, decaying plant material, and various plant surfaces. They thrive in environments with moderate to high humidity and temperatures.</p> <p><b>Growth Conditions</b> - Species are frequently found in indoor environments, particularly in areas that have experienced water damage. They can grow on a variety of damp or water-damaged materials, including wood, paper, wallpaper, carpets, and ceiling tiles.</p> <p><b>Allergenicity</b> - Spores can act as allergens.</p> <p><b>Mycotoxin Production</b> - It is not well studied for mycotoxin production.</p>                                                                                                                            |             |                 |
| Unidentified Spores                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Description | Characteristics |
| <p><b>Details</b> - These are a grouping of spores that can originate from various fungal genera, but cannot be identified for various reasons. They may not be identifiable due to morphological similarities, insufficient development, environmental contamination, damage, deformation, or microscopic limitations.</p> <p><b>Growth Conditions</b> - N/A</p> <p><b>Allergenicity</b> - N/A</p> <p><b>Mycotoxin Production</b> - N/A</p>                                                                                                                                                                                                                                                                                                                |             |                 |
| Hyphal Fragments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Description | Characteristics |
| <p><b>Details</b> - Small, thread-like structures, that are broken pieces of hyphae, which are the filamentous, branching structures that make up the body of a fungus.</p> <p><b>Growth Conditions</b> - Hyphal fragments are commonly found in both indoor and outdoor environments, particularly in areas with high humidity and water damage. They are indicative of fungal presence and growth, particularly in damp and poorly ventilated environments.</p> <p><b>Allergenicity</b> - Not all hyphal fragments act as allergens, but many can.</p> <p><b>Mycotoxin Production</b> - While hyphal fragments themselves do not produce mycotoxins, their presence indicates fungal growth, which may include molds capable of producing mycotoxins.</p> |             |                 |



# Fungal Glossary



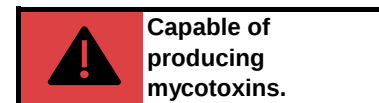
Usually found in outdoor environments.



Indicator of water damage.



Possible allergen.



Capable of producing mycotoxins.

| Pollen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Description | Characteristics                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Details</b> - Pollen is produced by a wide variety of plants, including trees, grasses, flowers, and weeds. It is typically found in the air during the flowering season of plants and can be carried by wind, insects, birds, or other animals to fertilize female plant structures.</p> <p><b>Growth Conditions</b> - This can vary widely depending on the plant. Humidity levels can influence pollen release and dispersal.</p> <p><b>Allergenicity</b> - They are a common allergen and a significant cause of seasonal allergies.</p> <p><b>Mycotoxin Production</b> - Pollen do not produce mycotoxins.</p> |             |   |

**Important** - The information provided in this report is not intended to offer medical advice and should not be used as such. This report is specifically designed for building diagnostic purposes only. To accurately assess exposure or potential exposure to mold, the results contained in this report should be used in conjunction with a thorough physical inspection of the property conducted by a qualified professional. Additionally, any determinations or conclusions regarding health-related issues should be made by consulting a qualified medical professional. It is imperative not to rely solely on this report for making medical decisions. For any medical or health-related concerns or questions, please seek the expertise of a healthcare provider.



# References and Links

## Government Agencies

|                                                           |                                                                                                                                                                                    |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Protection Agency (EPA)                     | <a href="http://www.epa.gov/mold/">www.epa.gov/mold/</a>                                                                                                                           |
| Mold and Your Home                                        | <a href="http://www.epa.gov/mold/mold-and-your-home">www.epa.gov/mold/mold-and-your-home</a>                                                                                       |
| A Brief Guide to Mold, Moisture, and Your Home            | <a href="http://www.epa.gov/mold/brief-guide-mold-moisture-and-your-home">www.epa.gov/mold/brief-guide-mold-moisture-and-your-home</a>                                             |
| Should You Have the Air Ducts in Your Home Cleaned?       | <a href="http://www.epa.gov/indoor-air-quality-iaq/should-you-have-air-ducts-your-home-cleaned">www.epa.gov/indoor-air-quality-iaq/should-you-have-air-ducts-your-home-cleaned</a> |
| Flood Cleanup - Avoiding Indoor Air Quality Problems      | <a href="http://www.epa.gov/indoor-air-quality-iaq/flood-cleanup-protect-indoor-air-quality">www.epa.gov/indoor-air-quality-iaq/flood-cleanup-protect-indoor-air-quality</a>       |
| Center for Disease Control and Prevention (CDC)           | <a href="http://www.cdc.gov/mold/">www.cdc.gov/mold/</a>                                                                                                                           |
| Mold Clean Up Guidelines and Recommendations              | <a href="http://www.cdc.gov/mold-health/about/clean-up.html">www.cdc.gov/mold-health/about/clean-up.html</a>                                                                       |
| Mold Resources and Publications                           | <a href="http://www.cdc.gov/mold-health/communication-resources/index.html">www.cdc.gov/mold-health/communication-resources/index.html</a>                                         |
| Occupational Safety & Health Administration (OSHA)        | <a href="http://www.osha.gov/mold">www.osha.gov/mold</a>                                                                                                                           |
| Recognize Mold Hazards                                    | <a href="http://www.osha.gov/mold/hazards">www.osha.gov/mold/hazards</a>                                                                                                           |
| Control and Clean-up                                      | <a href="http://www.osha.gov/mold/control">www.osha.gov/mold/control</a>                                                                                                           |
| World Health Organization (WHO)                           |                                                                                                                                                                                    |
| WHO Guidelines for Indoor Air Quality: Dampness and Mould | <a href="http://www.who.int/publications/i/item/9789289041683">www.who.int/publications/i/item/9789289041683</a>                                                                   |
| Mycotoxins                                                | <a href="http://www.who.int/news-room/fact-sheets/detail/mycotoxins">www.who.int/news-room/fact-sheets/detail/mycotoxins</a>                                                       |

## Trade Organizations

|                                                                         |                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| American Academy of Allergy, Asthma & Immunology (AAAAI)                | <a href="http://www.aaaai.org">www.aaaai.org</a>                                                                                                                                                                                     |
| Institute of Inspection, Cleaning and Restoration Certification (IICRC) | <a href="http://www.iicrc.org">www.iicrc.org</a>                                                                                                                                                                                     |
| American Industrial Hygiene Association (AIHA)                          | <a href="http://www.aiha.org/public-resources/consumer-resources/disaster-response-resource-center/mold-resource-center">www.aiha.org/public-resources/consumer-resources/disaster-response-resource-center/mold-resource-center</a> |
| Indoor Air Quality Association (IAQA)                                   | <a href="http://www.iaqa.org">www.iaqa.org</a>                                                                                                                                                                                       |
| Restoration Industry Association (RIA)                                  | <a href="http://www.restorationindustry.org">www.restorationindustry.org</a>                                                                                                                                                         |

Information and recommendations regarding mold can vary significantly based on local environmental conditions, including location and climate. To obtain the most accurate and relevant guidance, consult your local state and county Indoor Air Quality programs. Additionally, you can find links to your state's environmental agencies from the resources below.

|                                                              |                                                                                                                                                                                                                          |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPA Regional Office and State Indoor Air Quality Information | <a href="http://www.epa.gov/indoor-air-quality-iaq/find-regional-and-state-indoor-air-quality-contact-information">www.epa.gov/indoor-air-quality-iaq/find-regional-and-state-indoor-air-quality-contact-information</a> |
| CDC Indoor Air Quality State List                            | <a href="http://www.cdc.gov/air-quality/about/state-list.html">www.cdc.gov/air-quality/about/state-list.html</a>                                                                                                         |