

August 5, 2021

#### **Client Name and Address:**

MAC Services, LLC 21 Mill Pond Drive Rochester, MA 02770

Re: Microbial Analytical Results from: 1141 Brayton Ave; Middle School; Somerset, MA

H2O Laboratory Number:03880

Dear Joseph Cooney,

We at H2O EnviroComp would like to thank you for your recent business. Samples were received on 8/3/2021 from a job located at 1141 Brayton Ave; Middle School; Somerset, MA. The final report is enclosed for the following samples: 1-19.

Please note that environmental conditions should be taken into account when interpreting the associated data and sampling at any other time period may produce differing results. H2O EnviroComp follows prescribed procedures for the analysis of air cassettes and direct samples to identify and quantify particulate and microbiological contamination.

These results only pertain to this job and should not be used in the interpretation of any other job. This report may be reproduced only in its entirety.

If you have any questions please do not hesitate to call me at the number below.

Regards,

Steven Grevelis Laboratory Director

Enclosures:

- Analytical results
- Chain of Custody
- Fungal glossary



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-01 Sample Medium: Allergenco-D
Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 58

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	1	42	Smuts	ND	ND
Basidiospores, Non-specified	1	42	Rusts	ND	ND
Aspergillus/Penicillium-Like	1	42	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	3
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 126

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 1 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-02 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification:600 XTotal Liters:75

**Location:** Room 55

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	2	84	Rusts	ND	ND
Aspergillus/Penicillium-Like	ND	ND	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	
Oidium	ND	ND	]		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1	
Background Density; 1 (Low) to 5 (Overloaded):	1	
Total Fungal Raw Count:	2	
Analytical Sensitivity (Spore/Cubic Meter):	42	

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 84

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 2 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-03 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 51

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	1	42	Rusts	ND	ND
Aspergillus/Penicillium-Like	ND	ND	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	<u>.</u>
Oidium	ND	ND	1		

Sample Data Comments:

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	1

Analytical Sensitivity (Spore/Cubic Meter): 42
Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 42

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 3 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-04 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 46

#### Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	10	168	Rusts	ND	ND
Aspergillus/Penicillium-Like *	27	455	Spegazzinia	ND	ND
Cladosporium	4	67	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	41
Analytical Sensitivity (Spore/Cubic Meter):	17

Number of Traverses: 30 **Total Fungal Count (Spore/Cubic Meter):** 691

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

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24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

#### Mold Identification by Samples

Sample Number: 03880-05 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 44

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	8	337	Rusts	ND	ND
Aspergillus/Penicillium-Like	1	42	Spegazzinia	ND	ND
Cladosporium	1	42	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	10
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 421

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 5 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-06 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 62

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	2	84	Smuts	ND	ND
Basidiospores, Non-specified	6	253	Rusts	ND	ND
Aspergillus/Penicillium-Like	1	42	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	9
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 379

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

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24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-07 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification:600 XTotal Liters:75

**Location:** Room 16

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	1	42	Smuts	ND	ND
Basidiospores, Non-specified	14	589	Rusts	ND	ND
Aspergillus/Penicillium-Like	8	337	Spegazzinia	ND	ND
Cladosporium	4	168	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND			

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	27
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12 **Total Fungal Count (Spore/Cubic Meter):** 1137

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 7 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

#### Mold Identification by Samples

Sample Number: 03880-08 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification:600 XTotal Liters:75

**Location:** Room 32

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	1	42	Smuts	ND	ND
Basidiospores, Non-specified	11	463	Rusts	ND	ND
Aspergillus/Penicillium-Like	4	168	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	16
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 674

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 8 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-09 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 35

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	8	337	Smuts	1	42
Basidiospores, Non-specified	17	716	Rusts	ND	ND
Aspergillus/Penicillium-Like	9	379	Spegazzinia	ND	ND
Cladosporium	20	842	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	1	42	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND	]		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	56
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 2358

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 9 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-10 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Room 37

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	2	84	Smuts	1	42
Basidiospores, Non-specified	10	421	Rusts	ND	ND
Aspergillus/Penicillium-Like	7	295	Spegazzinia	ND	ND
Cladosporium	1	42	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	<u>.</u>
Oidium	ND	ND			

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	21
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 884

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 10 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

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City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-11 Sample Medium: Allergenco-D
Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

Location: Outdoor @ Side Entrance

Sample Data:

•		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Туре:	Count	Meter
Ascospores, Non-specified	37	1558	Smuts	1	42
Basidiospores, Non-specified	206	8674	Rusts	ND	ND
Aspergillus/Penicillium-Like	2	84	Spegazzinia	ND	ND
Cladosporium	29	1221	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Coprinus	ND	ND
Pithomyces	2	84	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		_	
Memnoniella	ND	ND			

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	277
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 11663

Reporting Notes: N/A = Not Applicable

ND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 11 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-12 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification:600 XTotal Liters:75

**Location:** Room 14

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	29	1221	Rusts	ND	ND
Aspergillus/Penicillium-Like	5	211	Spegazzinia	ND	ND
Cladosporium	1	42	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	35
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12 **Total Fungal Count (Spore/Cubic Meter):** 1474

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 12 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Joseph Cooney MAC Services, LLC Inspector: Date Sampled: Not Company:

Provided

Contact: Joseph Cooney **Project Name:** 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive **Project Notes:** Project Number: 2021-Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 **Date Reported:** 8/5/2021

**Report Status:** Phone: 508-789-0983 Version 1

### Mold Identification by Samples

Sample Number: 03880-13 Sample Medium: Allergenco-D Client Sample ID: 3481781 Sampling Rate: 15L/Min for 5 Minutes

**Total Liters:** 75 Magnification: 600 X

Location: Room 11

Sample Data:

•		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	2	84	Smuts	ND	ND
Basidiospores, Non-specified	14	589	Rusts	ND	ND
Aspergillus/Penicillium-Like	2	84	Spegazzinia	ND	ND
Cladosporium	11	463	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	4	168	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND			

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	33
Analytical Sensitivity (Spore/Cubic Meter):	42

12

Number of Traverses: **Total Fungal Count (Spore/Cubic Meter):** 1389

Reporting Notes: N/A = Not Applicable ND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 13 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

MAC Services, LLC Joseph Cooney Inspector: Date Sampled: Not Company:

Provided

Contact: Joseph Cooney **Project Name:** 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive **Project Notes:** Project Number: 2021-Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 **Date Reported:** 8/5/2021

**Report Status:** Phone: 508-789-0983 Version 1

### Mold Identification by Samples

Sample Number: 03880-14 Sample Medium: Allergenco-D Client Sample ID: 3481770 Sampling Rate: 15L/Min for 5 Minutes

**Total Liters:** 75 Magnification: 600 X Location: Room 7

Sample Data:

•		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	2	84	Smuts	ND	ND
Basidiospores, Non-specified	17	716	Rusts	ND	ND
Aspergillus/Penicillium-Like	3	126	Spegazzinia	ND	ND
Cladosporium	7	295	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND			

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	29
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12 **Total Fungal Count (Spore/Cubic Meter):** 1221

Reporting Notes: N/A = Not Applicable ND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 14 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

# Mold Identification by Samples

Sample Number: 03880-15 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75
Location: Room 5

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	3	126	Smuts	ND	ND
Basidiospores, Non-specified	27	1137	Rusts	ND	ND
Aspergillus/Penicillium-Like	ND	ND	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	<u>.</u>
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	30
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12 **Total Fungal Count (Spore/Cubic Meter):** 1263

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 15 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-16 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

Location: Room 43 - Computer Lab

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	2	84	Smuts	ND	ND
Basidiospores, Non-specified	16	674	Rusts	ND	ND
Aspergillus/Penicillium-Like	4	168	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	<u>.</u>
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1	
Background Density; 1 (Low) to 5 (Overloaded):	1	
Total Fungal Raw Count:	22	
Analytical Sensitivity (Spore/Cubic Meter):	42	

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 926

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 16 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-17 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Nurse Office

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	5	211	Smuts	ND	ND
Basidiospores, Non-specified	20	842	Rusts	ND	ND
Aspergillus/Penicillium-Like	3	126	Spegazzinia	ND	ND
Cladosporium	5	211	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	<u>.</u>
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	33
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12 **Total Fungal Count (Spore/Cubic Meter):** 1389

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 17 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-18 Sample Medium: Allergenco-D
Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

Location: Teacher's Lounge Near

Cafetaria

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	3	126	Smuts	ND	ND
Basidiospores, Non-specified	25	1053	Rusts	ND	ND
Aspergillus/Penicillium-Like	1	42	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND			
Oidium	ND	ND	]		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	29
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 1221

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 18 of 19



24 School Street P.O. Box 444 West Dennis, MA 02670 Phone 508.737.4289

Company: MAC Services, LLC Inspector: Joseph Cooney Date Sampled: Not

Provided

Contact: Joseph Cooney Project Name: 1141 Brayton Ave; Middle Date Received: 8/3/2021

School; Somerset, MA

Address: 21 Mill Pond Drive Project Notes: Project Number: 2021- Date Analyzed: 8/5/2021

196

City, ST, Zip: Rochester, MA 02770 Lab No: 03880 Date Reported: 8/5/2021

Phone: 508-789-0983 Report Status: Version 1

### Mold Identification by Samples

Sample Number: 03880-19 Sample Medium: Allergenco-D Client Sample ID: Sampling Rate: 15L/Min for 5 Minutes

Magnification: 600 X Total Liters: 75

**Location:** Guidance Office

Sample Data:

		Count/			Count/
		Cubic		Raw	Cubic
Type:	Raw Count	Meter	Type:	Count	Meter
Ascospores, Non-specified	ND	ND	Smuts	ND	ND
Basidiospores, Non-specified	7	295	Rusts	ND	ND
Aspergillus/Penicillium-Like	ND	ND	Spegazzinia	ND	ND
Cladosporium	ND	ND	Stachybotrys	ND	ND
Chaetomium	ND	ND	Ulocladium	ND	ND
Ganoderma	ND	ND	Nigrospora	ND	ND
Pithomyces	ND	ND	Un-ID Spore	ND	ND
Alternaria	ND	ND	Pollen	ND	ND
Cercospora-like	ND	ND	Hyphal Frags	ND	ND
Curvularia	ND	ND	Insect Frags	ND	ND
Epicoccum	ND	ND		-	
Oidium	ND	ND	1		

**Sample Data Comments:** 

Skin Fragment Prevalence; 1 (Low) to 4 (High):	1
Background Density; 1 (Low) to 5 (Overloaded):	1
Total Fungal Raw Count:	7
Analytical Sensitivity (Spore/Cubic Meter):	42

Number of Traverses: 12

Total Fungal Count (Spore/Cubic Meter): 295

Reporting Notes: N/A = Not ApplicableND = None Detected

\* = Type detected observed in clumps

Analyzed by: Steven Grevelis

Analyzed Date: 8/5/2021 Page 19 of 19

Received by:\_\_/

Client: MAC Services, LLC Phone: 508-789-0983					Client Address: 21 Mill Pond Drive Rochester, MA					
Project Name: Some	erset $M, 22($	e Schort			Project	t Number: 20	21-196			
Proj. Address: 1141 Brayton Ave.				Town: Somerset State: MA Zip Code						
Sampled By: Joseph Cooney  Date: Project Manager: Joseph Cooney  Turn Around Time: Rush 24 Hour 48 Hour 3 Day			Email Address(es) to Send Report to:  Email 1: jcooney@macmoldandmore.com					H2O Lab ID: 03880		
SAMPLE ID	nusii = 24 noui	LOCATI		15 Day	Email 2:	Sample Type (Air, Tape Lift, Bulk)	Rate (I/min)	Time (min)	ata Volume	Sample Media (Air-O- Cell, Allergenco-D, etc)
3481790	Room	58				Air	15	5	75	Allergenco-D
3481772	Roum	55	A substance	1		Air	15	5	75	Allergenco-D
3481773	Rao in	\$1		i		Air	15	5	75	Allergenco-D
348 1767	Room	46				Air	15	5	75	Allergenco-D
348/775	Rosm.	44				Air	15	5	75	Allergenco-D
3481782	Room	62				Air	15	5	75	Allergenco-D
3481776	Room	16				Air	15	5	75	Allergenco-D
3481778	Room	32				Air	15	5	75	Allergenco-D
348 1771	Rovan	35				Air	15	5	75	Allergenco-D
348 1788	Room	37				Air	15	5	75	Allergenco-D

Date/Time: 8/3/2021 VIA USPS

Client Address: 21 Mill Pond Drive Client: MAC Services, LLC Phone: 508-789-0983 Rochester, MA Project Name: Somerset Middle School Project Number: 2021-196 Brayton Ave Proj. Address: 1141 Town: Somerset State: MA Zip Code Sampled By: Joseph Cooney Email Address(es) to Send Report to: H2O Lab ID: Project Manager: Joseph Cooney Email 1: jcooney@macmoldandmore.com Date: 03880 Turn Around Time: Rush 24 Hour \$48 Hour □3 Day X 5 Day Email 2: Sample Volume Data Sample Media (Air-O-Type Cell, Allergenco-D, SAMPLE ID LOCATION (Air, Tape Rate Time Lift, Bulk) (I/min) (min) Volume etc) entrance. Out door @ sibe 75 348 1779 5 Allergenco-D Air 15 Room 14 346 1777 75 Allergenco-D Air 15 5 348 1781 Room 11 5 75 Allergenco-D Air 15 348 1770 Room 7 15 5 Air 75 Allergenco-D Room 5 348 1768 15 Air 5 75 Allergenco-D Room 43- Computer Las 3482064 15 5 75 Allergenco-D Air 348 2067 5 75 Air 15 Allergenco-D 348 2065 Teachers Louige near castetania Air 15 5 75 Allergenco-D Guidance Office 348 2066 15 5 75 Air Allergenco-D 15 Allergenco-D Air 75 Joseph Cooney

Received by: A

Relinquished by:

Date/Time:

8-2-21

Date/Time: 8/3/2021 VIA USPS



# H2O EnviroComp Fungal Glossary

Note: The following list is not inclusive of all molds and fungi.

**Absidia:** Found outdoors in soil and decaying vegetation. Found indoors in stored grains and other foods. Absidia is recognized as an allergen. In immunocompromised patients pulmonary invasions, the meninges (brain or spinal cord), and kidney infections can result from exposure.

**Acremonium:** Found outdoors in decaying or dead plant materials. Found indoors in food and wet, cellulose based building materials. Grows well indoors when there is a high water content (>0.90 Aw). Type I (hat fever, asthma) and Type III (hypersensitivity pneumonitis) allergen. Known to cause infections in immunodeficient patients and persons with wound injuries. There are 100 known species.

Alternaria: Common saprobe and pathogen of plants. Typically found on plant tissue, decaying wood, and foods, soil and air outdoors. Indoors it is found near condensation (window frames, showers), house dust (in carpets, and air). It also colonizes building supplies, computer disks, cosmetics, leather, optical instruments, paper, sewage, stone monuments, textiles, wood pulp, and jet fuel. Type I allergies (hay fever, asthma) and Type III (hypersensitivity pneumonitis). Alternaria spores are one of the most common and potent indoor and outdoor airborne allergens. Additionally, Alternaria sensitization has been determined to be one of the most important factors in the onset of childhood asthma. Synergy with Cladosporium or Ulocladium may increase the severity of symptoms.

**Arthrinium:** Found outdoors in decaying plant material and soil. Found indoors on cellulose containing materials. *Arthrinium sphaerospermum* is recognized as an allergen.

**Ascospores:** Ascospores are found everywhere in nature. Ascospores are the result of sexual reproduction and produced in a saclike structure called an ascus. All ascospores belong to members of the Phylum Ascomycota, which encompasses a plethora of genera worldwide.

**Asperigillus/Penicillium**: These species are common contaminants on various substances. This organism causes food spoilage and is an indicated organism for dampness indoors. Some of these species are known to produce mycotoxins. If health effects are noticed by occupants or workers, in an environment that evidences an amplification of Penicillium, identification of species is helpful. These especially opportunistic pathogens may cause respiratory infections. Some varieties produce mycotoxins and aflatoxins.

**Basidiospores**: Found outdoors in gardens forests and woodlands. Plant pathogen. Indoors it is the agent of "dry rot" and other fungi causing white and brown wood rot. Grow and destroy the structural wood of buildings. Poria incrassata causes a particularly destructive dry rot in buildings. A probably common allergen. Type I allergies (hay fever, asthma).

**Bipolaris:** Found outdoors in plant debris and soil. Found indoors on houseplants and indoor building materials. Type I allergies (hay fever, asthma). Most commonly reported cause of allergic and chronic invasive sinusitis.

**Botrytis:** Plant pathogen responsible for causing gray mold (*B. cincera*) on grapes, strawberries, raspberries, blackberries, low bush blueberries, lettuce, cabbage and onion. Indoors it is found on houseplants fruits and vegetables. Type I (hay fever, asthma) and type III (hypersensitivity) allergies.



## H2O EnviroComp Fungal Glossary

**Candida:** Found in leaves, flowers, soil, water and is an inhabitant of the skin, mouth and vagina. It is unknown what suitable substrates are in the indoor environment. Has been reported as an allergen. Occurs in patients taking drugs such as oral contraceptives and antibiotics.

**Cercospora:** Found outdoors on plants. It is a plant parasite causing leaf spot. It is unknown what substrates it prefers indoors. Thrives in moderate to high humidity its allergenic potential is unknown.

**Chaetomium:** Found outdoors in soil, seeds, dung, woody and straw materials. Indoors found on damp sheet rock paper. Type I allergies (hay fever, asthma).

**Coprinus:** Found outdoors in wood, dung, litter and soil. Industrial uses: Popular experimental organism in genetic research

**Cladosporium**: Found outdoors in soil of many different types. Indoors it is found on many substrates including textiles, wood, and moist windowsills. Cladosporium grows at 0degrees C, and so is associated with refrigerated foods. It is a common and important allergen. Type I allergies (hay fever, asthma).

**Cladophialophora (form of Cladosporium): Phialophora:** Found outdoors in wood roots, stems and leaves of plants and grasses, and soil. It is a water loving fungus. Allergenicity has not been studied.

**Coprinus:** Found outdoors in wood, dung, litter and soil. Industrial uses: Popular experimental organism in genetic research

**Curvularia:** found outdoors in plant saprobe and pathogen to cereal plants and soil. Found indoors in paper and wood products. Type I allergies (asthma and hay fever) A relatively common cause of allergic fungal sinusitis.

**Dactylaria:** Found outdoors in decaying soil and leaves. Dactylaria species comprise a very small proportion of the fungal biota. There have been several reports of opportunistic infections caused by these genera but a true pathogenic role has not been firmly established. No information is available regarding upper respiratory health effects, or toxicity. Allergenicity has not been studied.

**Epicoccum:** Found outdoors in plant debris and soil. Found indoors in paper and textiles. Type I allergies (asthma and hay fever).

**Fusarium:** Found outdoors in soil. Occasionally found on a variety of substrates. Fusarium requires very wet conditions. Aw=0.86-0.91 (minimum for various species). Type I allergies (asthma and hay fever).

**Gandomera:** Found outdoors on conifers and hardwoods worldwide, causing white rot, root rot, and stem rot. Ganoderma species are known to cause allergies in people on a worldwide scale.

**Memnoniella:** Found outdoors in plant litter soil and many types of plants and trees. Found indoors on a variety of substrates (cellulolytic). Allergens are unknown. Very closely related to Stachybotrys.

**Myxomycetes**: Found outdoors in decaying logs and stumps, particularly in forested areas. Only found occasionally indoors. Type I allergies (hay fever, asthma)



## H2O EnviroComp Fungal Glossary

**Nigrospora:** Found outdoors in decaying plants and soil. Rarely found indoors. Type I allergies (asthma and hay fever).

**Pithomyces:** Found outdoors in bark, leaf litter and soils. Indoors it is found in paper and requires high levels of moisture for spore germination. Its allergenic potential is unknown.

**Rust:** Rusts are parasitic to many types of plants. Rust fungi require a living plant host for growth. Type I allergens (hay fever, asthma). There are 5000 known species of rusts belonging to at least 150 different genera. Rusts are the cause of great economic losses on many cultivated plants.

Scopulariopsis (Hyphomycetes) Teleomorph: *Microascus* (Ascomycetes) Mainly soil-borne, but also frequently isolated from wood, grain, fruit, paper, and food such as meat and dairy products. Also isolated from indoor environments. *Most species can liberate arsenic gaseous compounds that can lead to arsenic poisoning. Has recently been associated with invasive human infections.* 

**Spegazzinia:** Found outdoors in plants and soil. It is unknown what substrates it is found on indoors. Allergenic properties are unknown.

**Stachybotrys**: Stachybotrys: Stachybotrys grows on wet materials that contain cellulose and low nitrogen content. Usually but not limited to building materials such as wallboard paper (unfinished drywall) that has a high water activity over a long period of time. It produces several types of toxic metabolites and mycotoxins that can irritate skin and mucous membranes. One of the mycotoxins it produces called satratoxin is also toxic when inhaled. **Extreme care should be taken when this organism is amplified indoors**. Individuals with chronic exposure to the toxin produced by this fungus reported cold and flu symptoms, sore throat, diarrhea, headaches, fatigue, dermatitis, intermittent local hair loss, and generalized malaise. The toxins produced by this fungus will suppress the immune system affecting the lymphoid tissue and the bone marrow.

**Stemphylium**: Found outdoors in soil, wood, decaying vegetation. Some species found on leaves are plant pathogens. Indoors growth is rare. Known allergen. Shares allergens with Alternaria. Type I allergies (hay fever, asthma).

**Trichoderma**: Found outdoors in soil, wood, decaying vegetation. Some species found on leaves are plant pathogens. Indoors growth on paper, textiles, and wet wood. Known allergen. Type I allergies (hay fever, asthma), Type III allergies (hypersensitivity), and has occasionally been associated with disease in immunocompromised individuals.

**Torula:** Found outdoors in leaves, plant roots, plant litter, soil and wood. Indoors it is found in paper, wicker furniture and wood. Type I allergies (hay fever, asthma).

**Ulocladium**: Found outdoors in soil, dung paint, grasses, fibers, wood, decaying plant material, paper and textiles. Indoors it is found in gypsum board, paper, paint, tapestries, jute and other straw materials. Ulocladium has a high water requirement. As an allergen it is major with type I allergies (hay fever, asthma) and it cross reacts with Alternaria, adding to the burden of Alternaria –sensitive patients.

**Wallemia:** Found outdoors in hay and soil. Found indoors in jams, salted fish, mattresses, textiles and wood in crawl spaces. It is a Type I (hay fever and asthma) allergen.

**Zygomycetes:** Found outdoors in decaying plant and animal matter. Found indoors in fruits and vegetables. It is a Type1 (hay fever, asthma) and Type III (hypersensitivity) allergen. Many zygomycetes are extremely fast growing and can inhibit other fungi when competing for food and space.