

COASTAL ENVIRONMENTAL  
PO BOX 167  
HAMMONTON, NJ 08330

## Certificate of Mold Analysis

Prepared for: COASTAL ENVIRONMENTAL  
Phone Number:  
Fax Number:  
Project Name: PVIL HIGH SCHOOL  
Test Location:  
,  
Chain of Custody #: 1163822  
Received Date: August 30, 2018  
Report Date: August 31, 2018



Carlos Ochoa, Technical and Quality Control Manager

Currently there are no Federal regulations for evaluating potential health effects of fungal contamination and remediation. This information is subject to change as more information regarding fungal contaminants becomes available. For more information visit <http://www.epa.gov/mold> or [www.nyc.gov/html/doh/html/epi/mold.shtml](http://www.nyc.gov/html/doh/html/epi/mold.shtml). This document was designed to follow currently known industry guidelines for the interpretation of microbial sampling, analysis, and remediation. Since interpretation of mold analysis reports is a scientific work in progress, it may as such be changed at any time without notice. The client is solely responsible for the use or interpretation. PRO-LAB/SSPTM Inc. makes no express or implied warranties as to health of a property from only the samples sent to their laboratory for analysis. The Client is hereby notified that due to the subjective nature of fungal analysis and the mold growth process, laboratory samples can and do change over time relative to the originally sampled material. PRO-LAB/SSPTM Inc. reserves the right to properly dispose of all samples after the testing of such samples are sufficiently completed or after a 7 day period, whichever is greater.



For more information please contact PRO-LAB at (954) 384-4446 or email [info@prolabinc.com](mailto:info@prolabinc.com)

Prepared for : COASTAL ENVIRONMENTAL

Test Address : PVIL HIGH SCHOOL

ANALYSIS METHOD	Spore trap analysis	Spore trap analysis	Spore trap analysis	Spore trap analysis
LOCATION	AMBIENT	A 201	C 203	C 207
COC / LINE #	1163822-1	1163822-2	1163822-3	1163822-4
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L
SERIAL NUMBER	26497255	26496497	26496474	26496437
COLLECTION DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
ANALYSIS DATE	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018
CONCLUSION	CONTROL	NOT ELEVATED	NOT ELEVATED	NOT ELEVATED

IDENTIFICATION	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total
Arthrinium	4	53	4									
Bipolaris/Drechslera	4	53	4									
Cercospora	4	53	4									
Cladosporium	48	640	44									
Curvularia	4	53	4									
Ganoderma	12	160	11									
Other Ascospores	8	110	8									
Other Basidiospores												
Penicillium/Aspergillus				4	53	100	24	320	100	4	53	50
Smuts, myxomycetes	4	53	4							4	53	50
Torula	20	270	19									

<b>TOTAL SPORES</b>	108	1,445	100	4	53	100	24	320	100	8	106	100
<b>MINIMUM DETECTION LIMIT*</b>	4	53		4	53		4	53		4	53	

<b>BACKGROUND DEBRIS</b>	Light			Light			Light			Light		
<b>Cellulose Fiber</b>	4	53		12	160							
<b>OBSERVATIONS &amp; COMMENTS</b>							Debris: Light					

Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

\* **Minimum Detection Limit.** Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample.  
**NA** = Not Applicable.

Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report it was not observed in the samples submitted.

**Interpretation Guidelines:** A determination is added to the report to help users interpret the mold analysis results. A mold report is only one aspect of an indoor air quality investigation. The most important aspect of mold growth in a living space is the availability of water. Without a source of water, mold generally will not become a problem in buildings. These determinations are in no way meant to imply any health outcomes or financial decisions based solely on this report. For questions relating to medical conditions you should consult an occupational or environmental health physician or professional.

**CONTROL** is a baseline sample showing what the spore count and diversity is at the time of sampling. The control sample(s) is usually collected outside of the structure being tested and used to determine if this sample(s) is similar in diversity and abundance to the inside sample(s).

**ELEVATED** means that the amount and/or diversity of spores, as compared to the control sample(s), and other samples in our database, are higher than expected. This can indicate that fungi have grown because of a water leak or water intrusion. Fungi that are considered to be indicators of water damage include, but are not limited to: *Chaetomium*, *Fusarium*, *Memnoniella*, *Stachybotrys*, *Scopulariopsis*, *Ulocladium*.

**NOT ELEVATED** means that the amount and/or the diversity of spores, as compared to the control sample and other samples in our database, are lower than expected and may indicate no problematic fungal growth.

**UNUSUAL** means that the presence of current or former growth was observed in the analyzed sample. An abundance of spores are present, and/or growth structures including hyphae and/or fruiting bodies are present and associated with one or more of the types of mold/fungi identified in the analyzed sample.

**NORMAL** means that no presence of current or former growth was observed in the analyzed sample. If spores are recorded they are normally what is in the air and have settled on the surface(s) tested.

Prepared for : COASTAL ENVIRONMENTAL

Test Address : PVIL HIGH SCHOOL

ANALYSIS METHOD	Spore trap analysis	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam
LOCATION	A 206	A 206 TABLES	C 207 DESK	A 201 CHAIRS
COC / LINE #	1163822-5	1163822-6	1163822-7	1163822-8
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	SWAB	SWAB	SWAB
SERIAL NUMBER	26496471	206	207	201
COLLECTION DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
ANALYSIS DATE	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018
CONCLUSION	NOT ELEVATED	NORMAL	NORMAL	NORMAL

IDENTIFICATION	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Mold Present	Mold Present	Mold Present	Mold Present
Arthrinium							
Bipolaris/Drechslera							
Cercospora							
Cladosporium							
Curvularia							
Ganoderma							
Other Ascospores							
Other Basidiospores							
Penicillium/Aspergillus	8	110	100	X	X	X	X
Smuts, myxomycetes							
Torula							

TOTAL SPORES	8	110	100	NA	NA	NA	NA
MINIMUM DETECTION LIMIT*	4	53		NA	NA	NA	NA

BACKGROUND DEBRIS	Light	Not Applicable	Not Applicable	Not Applicable
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OBSERVATIONS & COMMENTS		No presence of current or former growth observed. Only normally settled spores observed.	No presence of current or former growth observed. Only normally settled spores observed.	No presence of current or former growth observed. Only normally settled spores observed.
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Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

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Test Address : PVIL HIGH SCHOOL

ANALYSIS METHOD	Direct Microscopic Exam	Spore trap analysis	Spore trap analysis	Spore trap analysis
LOCATION	C 203 DESK	AMBIENT	B103	A208
COC / LINE #	1163822-9	1163822-10	1163822-11	1163822-12
SAMPLE TYPE & VOLUME	SWAB	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L
SERIAL NUMBER	203	26497256	26497259	26496488
COLLECTION DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
ANALYSIS DATE	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018	Aug 31, 2018
CONCLUSION	NORMAL	CONTROL	NOT ELEVATED	NOT ELEVATED

IDENTIFICATION	Mold Present	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total
Arthrinium										
Bipolaris/Drechslera										
Cercospora										
Cladosporium					4	53	25			
Curvularia										
Ganoderma		8	110	19						
Other Ascospores		12	160	27						
Other Basidiospores		12	160	27						
Penicillium/Aspergillus	X				8	110	51	36	480	100
Smuts, myxomycetes		12	160	27	4	53	25			
Torula										

TOTAL SPORES	NA	44	590	100	16	216	100	36	480	100
MINIMUM DETECTION LIMIT*	NA	4	53		4	53		4	53	

BACKGROUND DEBRIS	Not Applicable	Light	Light	Light
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OBSERVATIONS & COMMENTS	No presence of current or former growth observed. Only normally settled spores observed.			
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Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

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Test Address : PVIL HIGH SCHOOL

ANALYSIS METHOD	Direct Microscopic Exam	Direct Microscopic Exam	INTENTIONALLY BLANK	INTENTIONALLY BLANK
LOCATION	A208 DESK	B103 CHAIR		
COC / LINE #	1163822-13	1163822-14		
SAMPLE TYPE & VOLUME	SWAB	SWAB		
SERIAL NUMBER	208	103		
COLLECTION DATE	Aug 29, 2018	Aug 29, 2018		
ANALYSIS DATE	Aug 31, 2018	Aug 31, 2018		
CONCLUSION	NORMAL	NORMAL		

IDENTIFICATION	Mold Present	Mold Present	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total
Arthrinium								
Bipolaris/Drechslera								
Cercospora								
Cladosporium								
Curvularia								
Ganoderma								
Other Ascospores								
Other Basidiospores								
Penicillium/Aspergillus	X	X						
Smuts, myxomycetes								
Torula								

TOTAL SPORES	NA	NA						
MINIMUM DETECTION LIMIT*	NA	NA						

BACKGROUND DEBRIS	Not Applicable	Not Applicable		
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OBSERVATIONS & COMMENTS	No presence of current or former growth observed. Only normally settled spores observed.	No presence of current or former growth observed. Only normally settled spores observed.		
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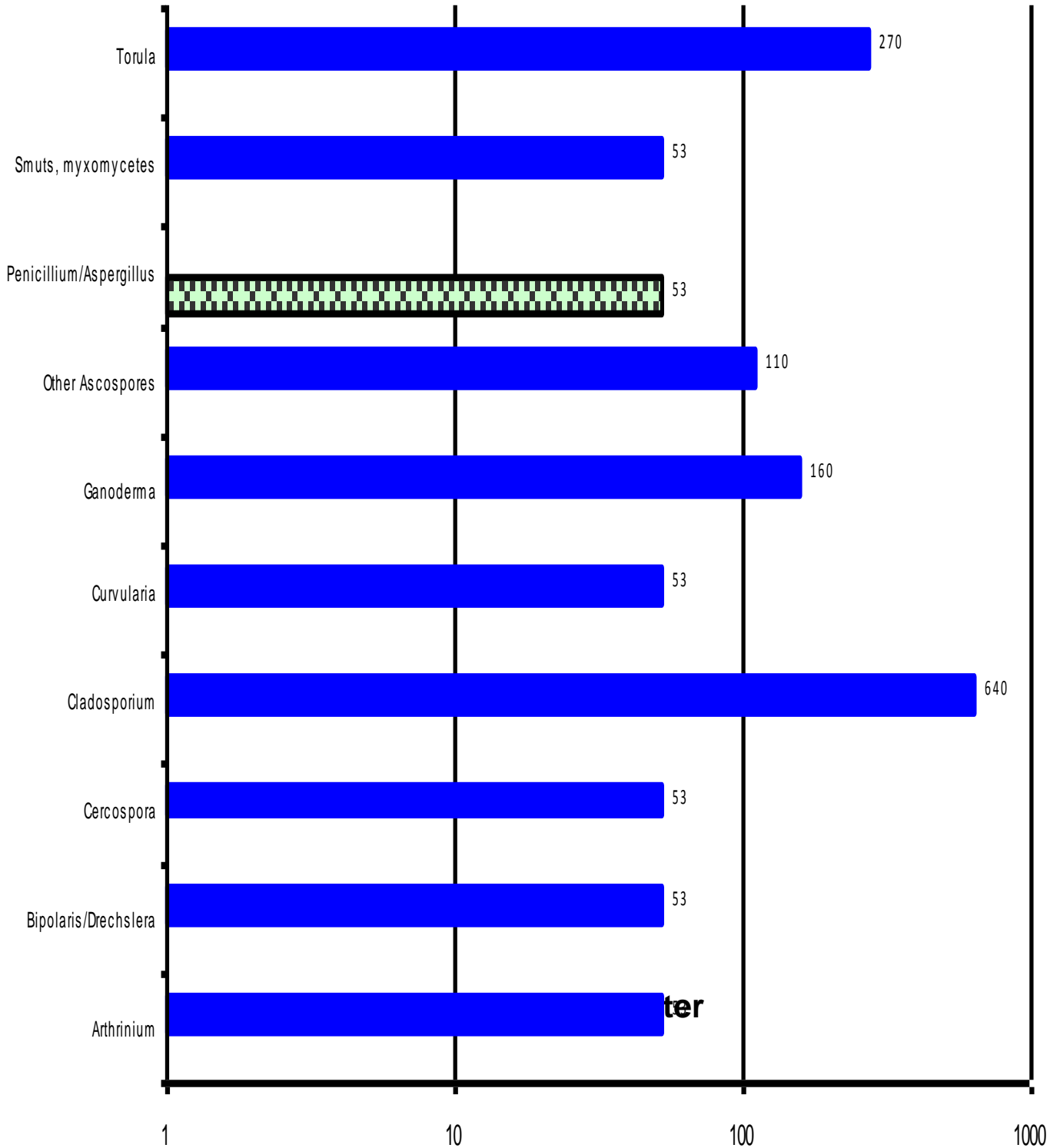
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**Chain of Custody # 1163822**

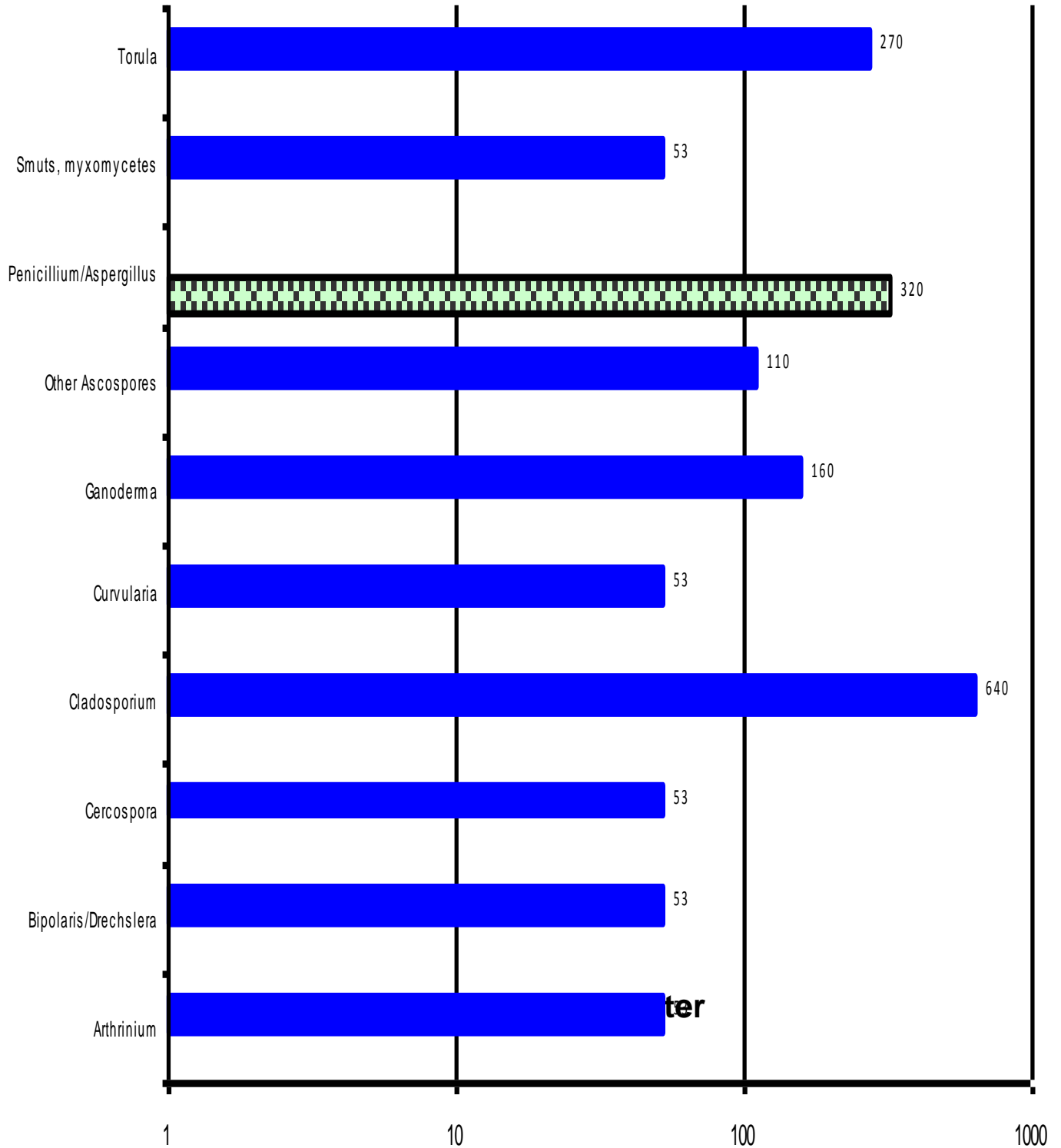
 A 201  
 Ambient







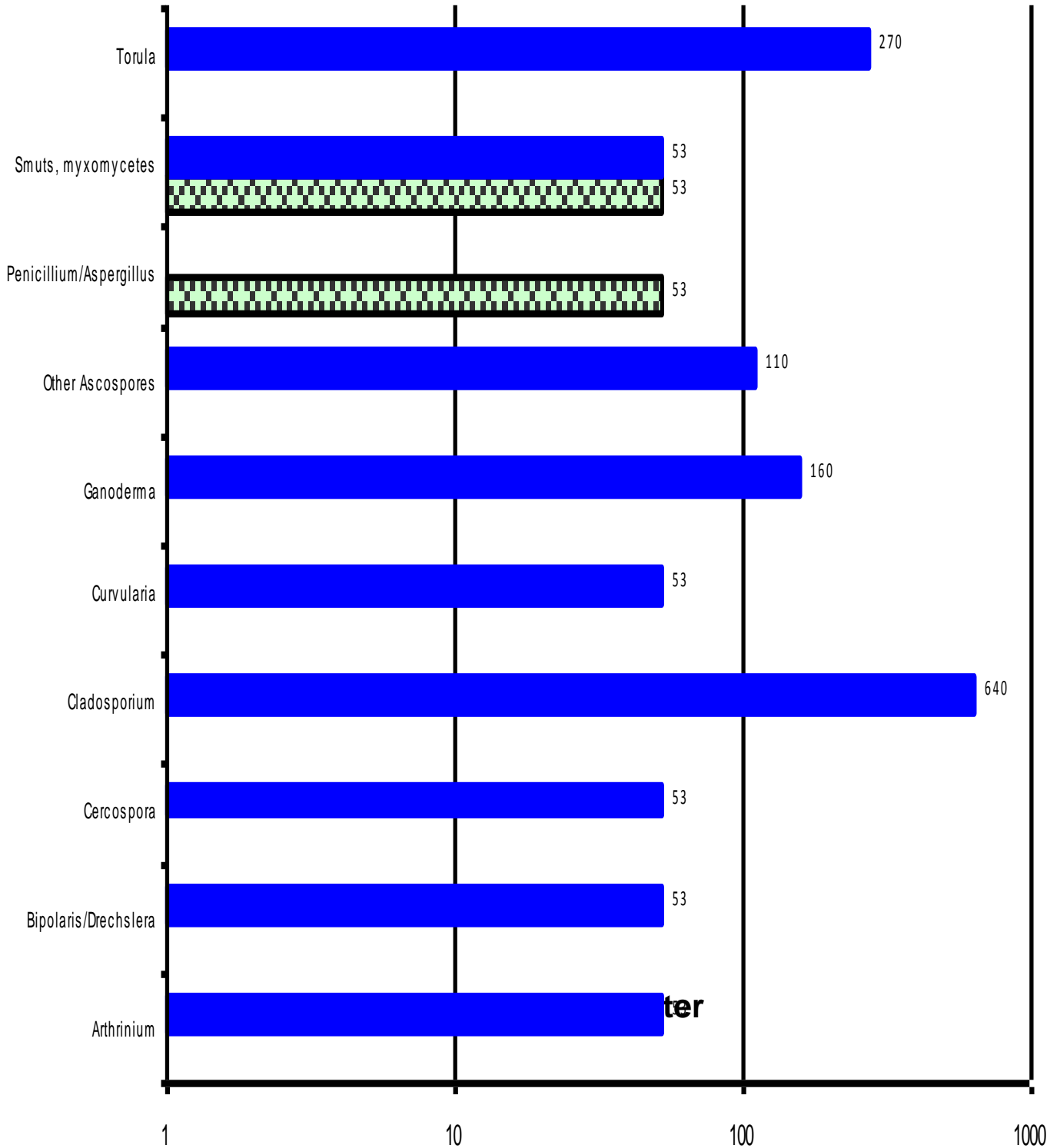
Chain of Custody # 1163822

C 203  
Ambient



**Chain of Custody # 1163822**

 C 207  
 Ambient

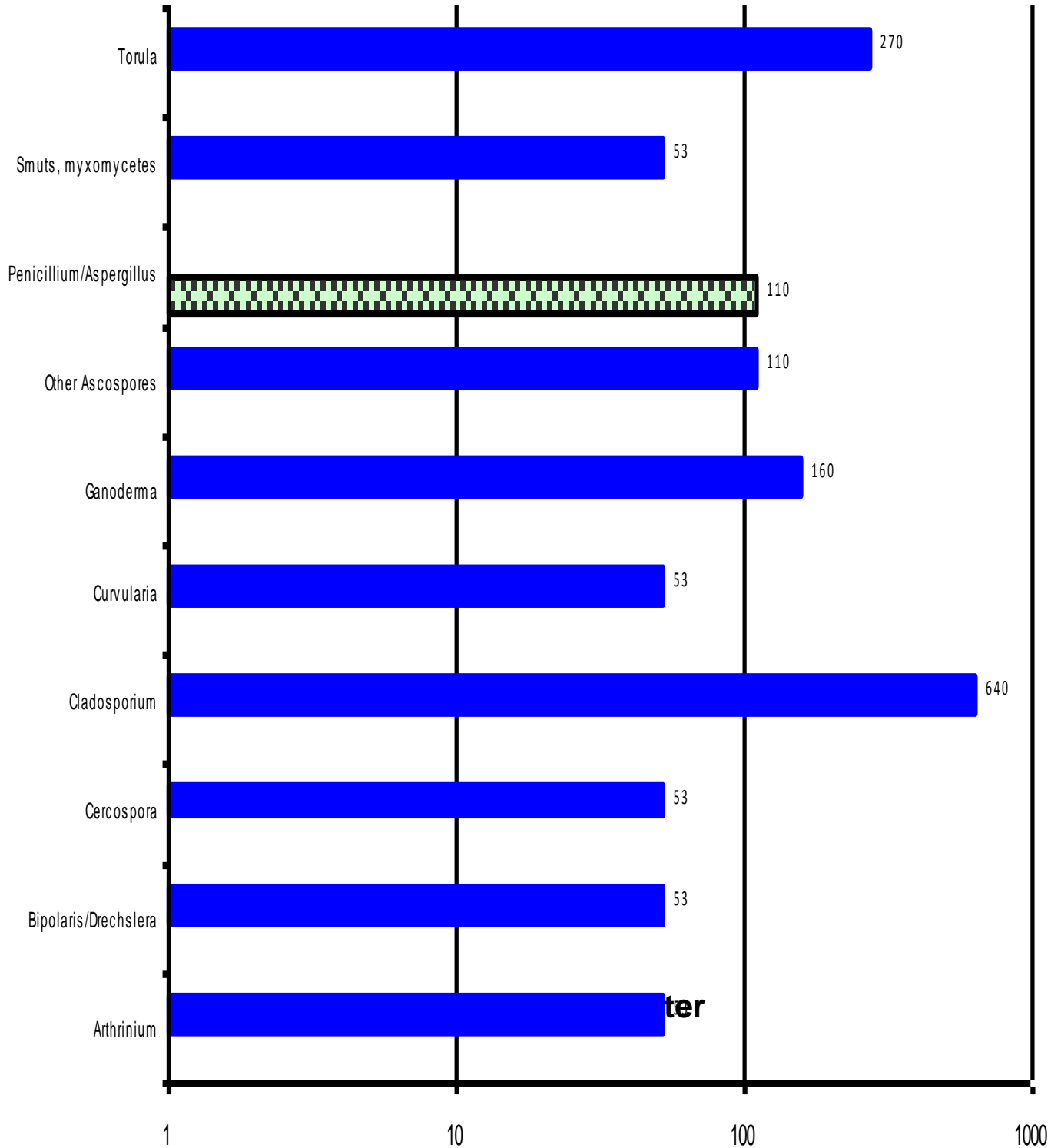








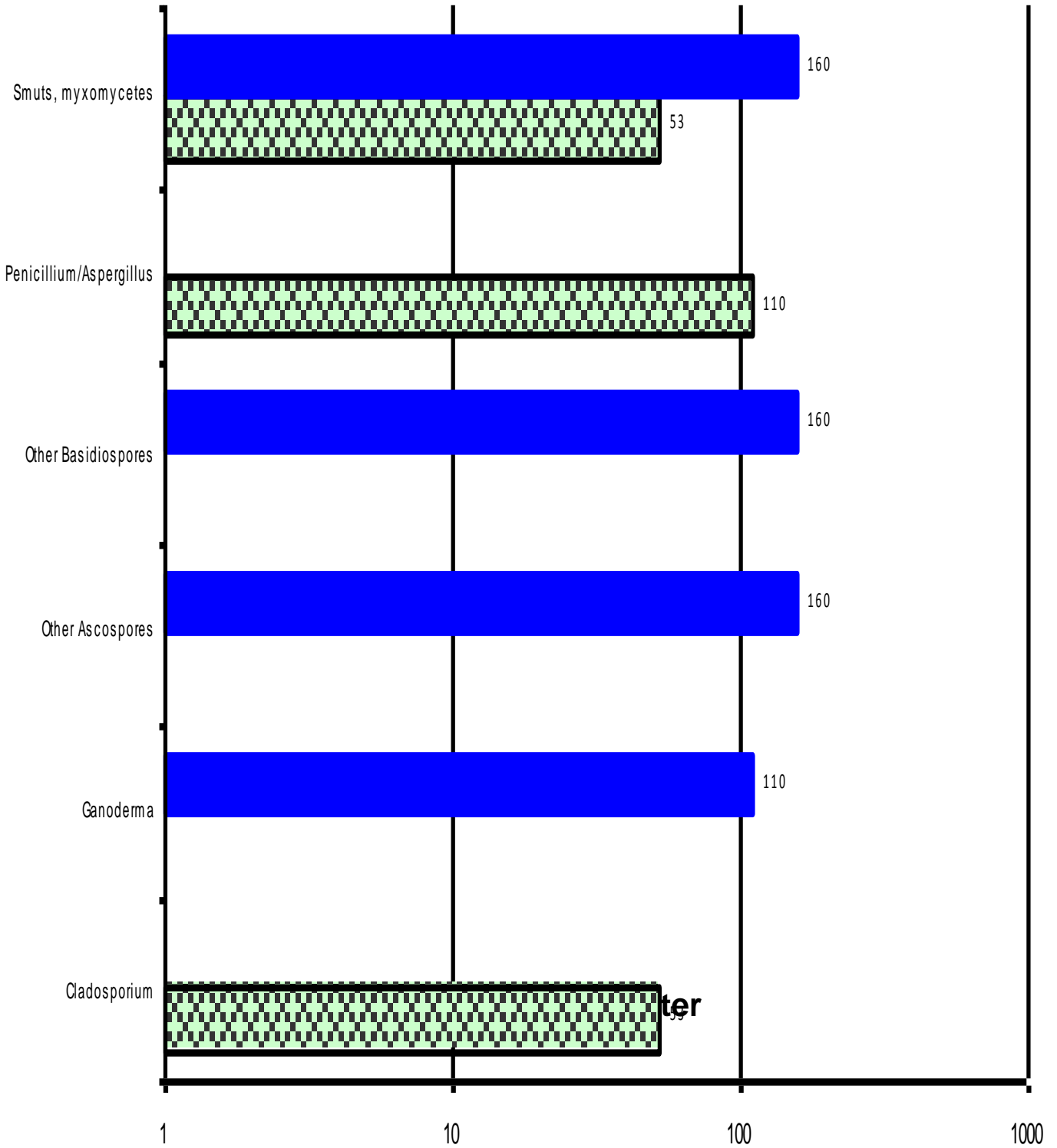
Chain of Custody # 1163822

A 206  
Ambient





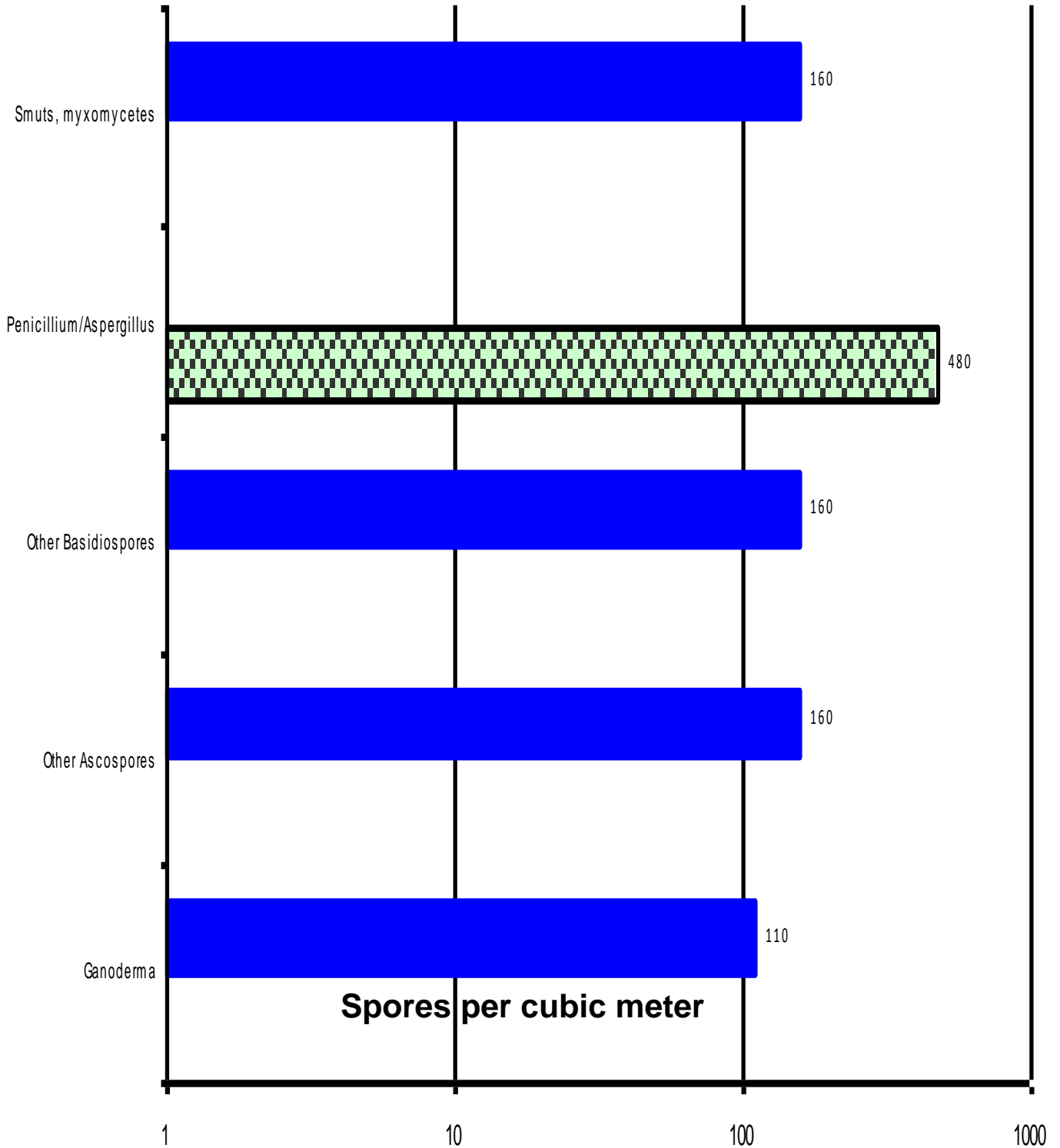
**Chain of Custody # 1163822**

 B103  
 Ambient



Chain of Custody # 1163822

 A208  
 Ambient



Identification	Outdoor Habitat	Indoor Habitat	Possible Allergic Potential Not an opinion or interpretation	Comments
Arthrinium	Common everywhere. Grows on soil and decomposing plant material.	Cellulose base building materials, notably gypsum wallboard. This kind of mold is rarely found.	May have allergic potential.	
Bipolaris/Drechslera	Common everywhere. Frequently associated with grasses, but also found on plant material, decaying food, and soil.		Common Type I (hay fever and asthma), fungal sinusitis.	This is a group of like-looking spores that include Bipolaris, Drechslera, Exserohilum, and sometimes Helminosporium. They cannot be consistently separated by spore morphology and are thus grouped together. Must be cultured to consistently separate the genera.
Cercospora	Common everywhere, especially growing on leaves.	Not known to grow indoors.	None known.	
Cladosporium	The most common spore type reported in the air worldwide. Found on dead and dying plant litter, and soil.	Commonly found on wood and wallboard. Commonly grows on window sills, textiles and foods.	Type I (hay fever and asthma), Type III (hypersensitivity pneumonitis) allergies.	A very common and important allergen source both outdoors and indoors.
Curvularia	Commonly found everywhere on soil and plant debris.	Capable of growing on many cellulytic substrates like wallboard and wood.	Type I (hay fever and asthma) and common cause of allergenic sinusitis.	
Ganoderma	Common everywhere growing on hardwood trees.	None known.	None known.	
Ascospores	Common everywhere. Constitutes a large part of the airspora outside. Can reach very high numbers in the air outside during the spring and summer. Can increase in numbers during and after rainfalls.	Very few of this group grow inside. The notable exception is Chaetomium, Ascotricha and Peziza.	Little known for most of this group of fungi. Dependent on the type (see Chaetomium and Ascotricha).	
Basidiospores	Commonly found everywhere, especially in the late summer and fall. These spores are from Mushrooms.	Mushrooms are not normally found growing indoors, but can grow on wet lumber, especially in crawlspaces. Sometimes mushrooms can be seen growing in flower pots indoors.	Some allergenicity reported. Type I (hay fever, asthma) and Type III (hypersensitivity pneumonitis).	Among the group of Mushrooms (Basidiomycetes) are dry rot fungi Serpula and Poria that are particularly destructive to buildings.
Penicillium/Aspergillus	Common everywhere. Normally found in the air in small amounts in outdoor air. Grows on nearly everything.	Wetted wallboard, wood, food, leather, etc. Able to grow on many substrates indoors.	Type I (hay fever and asthma) allergies and Type III (hypersensitivity pneumonitis) allergies.	This is a combination group of Penicillium and Aspergillus and is used when only the spores are seen. The spores are so similar that they cannot be reliably separated into their respective genera.

Identification	Outdoor Habitat	Indoor Habitat	Possible Allergic Potential Not an opinion or interpretation	Comments
Smuts, myxomycetes	Commonly found everywhere, especially on logs, grasses and weeds.	Smuts don't normally grow indoors, but can occasionally be found on things brought from outside and stored in the house. Myxomycetes can occasionally grow indoors, but need lots of water to be established.	Type I (hay fever and asthma) allergies.	Smuts and myxomycetes are a combined group of organisms because their spores look so similar and cannot be reliably distinguished from each other.
Torula	Common everywhere growing on soil, decaying and dead leaves, and grasses.	Wallboard and other cellulose-based materials.	Type I (hay fever and asthma) allergies.	