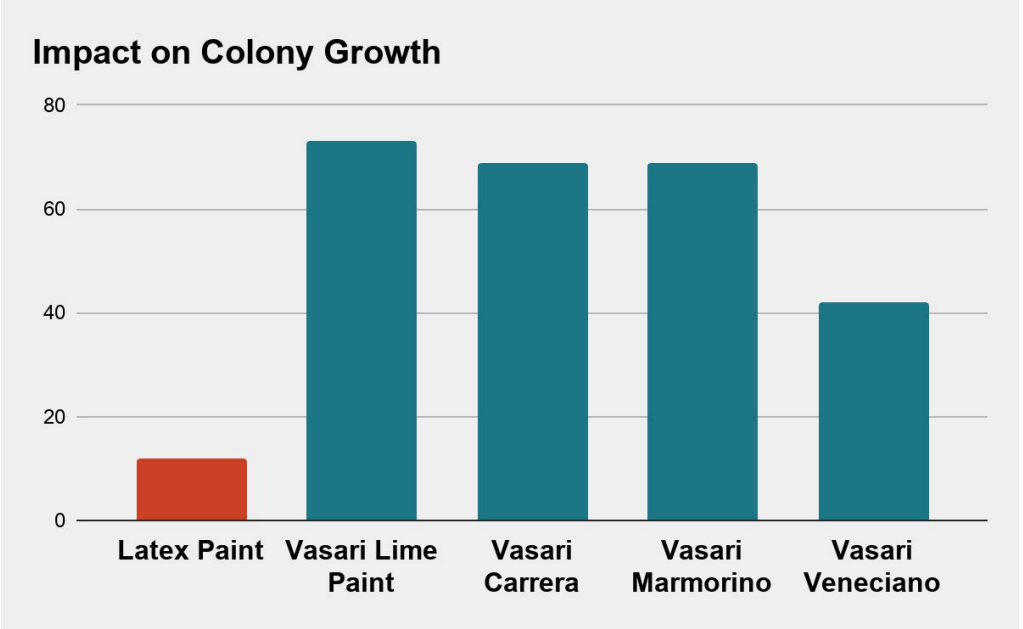
Analysis of airborne microbial growth, humidity and temperature. Comparing Vasari LIME based coatings to a leading brand 'antimicrobial' LATEX paint.

Dates performed: 04/15/20-04/20/20
Tested by: Ruyang Han, PhD , Microbiologist
Performed in Ventura, CA

Dr. Ryang Han conducted tests on microbial resistance of lime coatings vs. conventional 'antimicrobial' paint. To increase accuracy, 40 tests were conducted on microbial resistance of lime coating in plastered and latex painted hermetically boxes.

Microbial growth test in airborne environments

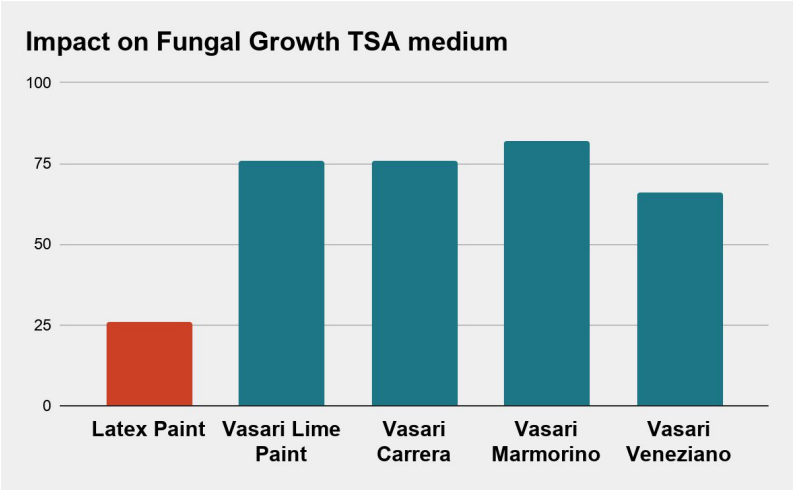
	TSA growth Medium Bacteria Colonies	Percent Decrease
Control sample	**13**	
Leading Latex 'anti-microbial' Paint	11.5	12%
Vasari Lime Paint	3.5	73%
Vasari Carrera	4	69%
Vasari Marmorino	4	69%
Vasari Veneziano	7.5	42%

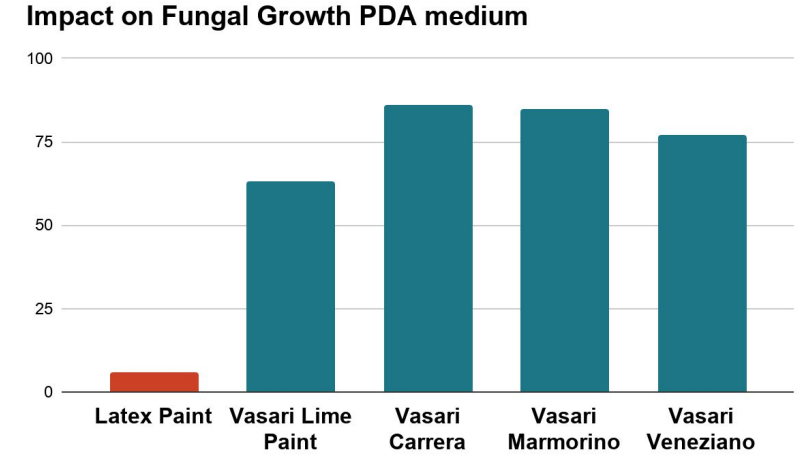


Sample images of petri dish tests

	TSA medium Fungal colony	Percentage Decrease	
Control sample	70		
Leading Latex Paint	47	Latex Paint	26%
Lime Paint	18	Lime Paint	76%
Carrera	16	Carrera	76%
Marmorino	18	Marmorino	82%
Veneziano	17	Veneziano	66%

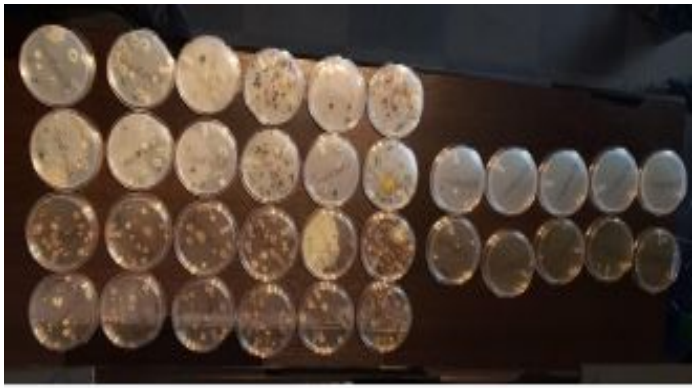
	PDA medium for Fungal colony	Percentage Decrease	
Control sample in laboratory	66		
Leading Latex Paint	65	Latex Paint	6%
Lime Paint	23	Lime Paint	63%
Carrera	10	Carrera	86%
Marmorino	8	Marmorino	85%
Veneziano	10	Veneziano	77%





Conclusion

The boxes with Vasari Lime Coatings were 400-500% more effective in eliminating mold, fungi and airborne microbes than a leading 'anti-microbial' latex paint. This includes bacterial diseases and bacteria such as bacillus, pseudomonas, and staphylococcus.



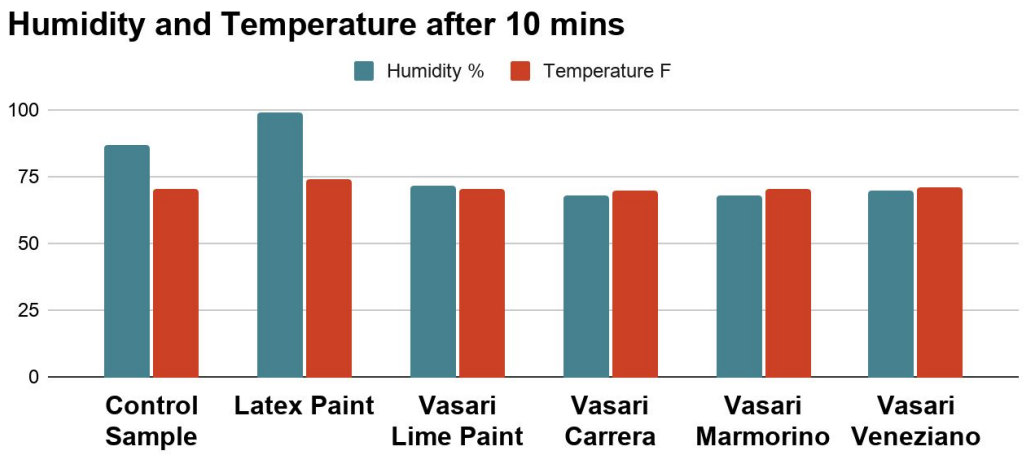
To insure accuracy, 40 tests were conducted on microbial resistance of lime coating in sealed plaster and paint boxes.

Dr. Ruyang Han conducting tests on microbial resistance of lime coatings vs. conventional paint.

Humidity and temperature tests

One cup of water at 100 degrees fahrenheit (37.7 C) was placed in sealed 30cm x 30cm x 30cm coated boxes for 10 minutes. Humidity and temperature were measured.

	Humidity %	Temperature F
Control sample	87	70.7
Latex Paint	99	74.1
Lime Paint	72	70.5
Carrera	68	70.1
Marmorino	68	70.6
Veneziano	70	70.9



Conclusion

The boxes with Vasari Lime Coatings were 14-18% more effective in reducing humidity compared to the Latex Painted box.The boxes with Vasari Lime Coatings reduced the temperature by 3.5 F° (2 °C) compared to the Latex Painted box.

Microbial, humidity and temperature testing were conducted in coated and sealed boxes. Humidity and temperature were digitally recorded in repeated testing.

VASARI
LIME PLASTER & PAINT