



December 23, 2009

MOLD TESTS OF BLUE WAVE CLEAN AIR™ PURIFIER

TEST LOCATION

In November 2009, tests were conducted to determine Blue Wave technology's ability to reduce airborne mold spores. The tests were performed, with owner's permission, at a home at [REDACTED] Street, San Diego, CA 92109. The home is known to have heavy mold infestation, which originates in a moist 2 foot tall crawlspace below ground level.

TEST PROTOCOL

A small Blue Wave air purifier prototype was placed in the crawl space. Blue Wave Corp. worked together with Pro-Lab Inc., which provided the test Petri dishes and analyzed the type and quantity of mold present after the Petri dishes were exposed to the mold infested air, before and after Blue Wave treatment.

MOLD SPORE SAMPLING

The most prevalent mold that was found was "*penicillium*".

The following 3 tests were performed:

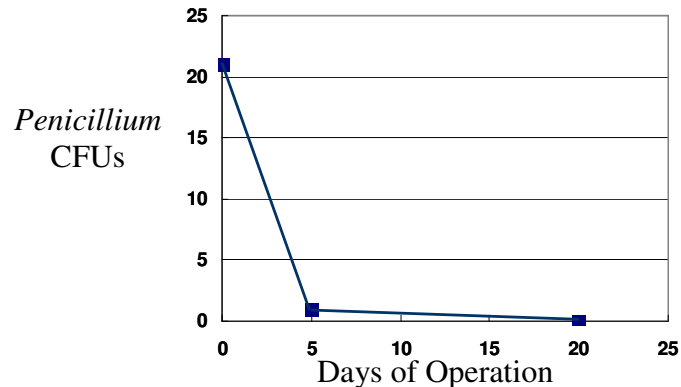
1. Untreated air before the Blue Wave unit was installed. The mold count was: *penicillium* – 21 CFU
2. Treated air immediately after exiting the Blue Wave unit. At this point, the air was exposed to the Blue Wave technology for only 1 pass (approx. 1/10 second). The mold count was: *penicillium* – 0 CFU (a 100% reduction).
3. The Blue Wave unit was left in the crawlspace for 5 continuous days. At this point, the Blue Wave unit was removed and the air sample was taken from the crawlspace. The mold count was: *penicillium* – 1 (a 95% reduction).
4. The Blue Wave unit was left in the crawl space for 15 more days of operation. At that point the unit was removed, and an air sample was again taken. The mold count was: *penicillium* – 0 CFU (a 100% reduction).



SIGNIFICANCE

The significance of this test study is two-fold:

1. The Blue Wave technology is able to eliminate the presence of *penicillium* mold, a common and dangerous mold spore, from mold-infested air spaces.
2. The *penicillium* family of molds is well known, has been widely studied and lots of scientific data is available about the various strains of this mold spore. Of specific interest to Blue Wave is the UV susceptibility (pathogens resistance to ultra-violet light) of *penicillium*. The required doses of UV for a 99.9999% (6 log) reduction for the various *penicillium* mold spores ranges from 78 – 264 mJ/cm². This data establishes that the Blue Wave air purifier has a minimum UV intensity of 78 mJ/cm².



CONCLUSION

This series of tests proves that:

1. Blue Wave technology, even in this small preliminary prototype, is so powerful that it can destroy *penicillium* mold spores 100% in just 1 pass through the unit.
2. In 5 days of continuous operation in a heavily mold infested crawlspace, the Blue Wave air purifier was able to reduce *penicillium* mold counts by 96%. In 20 days, the *penicillium* mold count in the air was reduced to 0.

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