



Innovations—Rapid Assessment of Mold: Contamination on Environmental Surfaces

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A rapid tool for assessing levels of total fungal contamination on surfaces has been developed and patented by scientists at the University of Copenhagen. This MycoMeter-Test is based on the fluorometric detection of N-acetylhexosaminidase and is extremely specific for fungal contamination, with cross-reactivity from bacteria practically zero, and few false-positive materials. Using sterile cotton swabs for sample collection, the portable test kit comes with all required components, including disposable templates for standardization of samples, all necessary reagents, and a photometer for reading results. Incubation time is only 30 minutes, allowing rapid onsite evaluation. Existing research data show that assessment results can fall into one of three levels: Level A (mold levels are not above normal background levels); Level B (mold levels are above background levels due to presence of spores and/or old mold growth); and Level C (mold levels are above background levels due to active fungal growth). Levels equate with defined numerical value ranges.

The rapidness of the test makes it an extremely desirable diagnostic tool where decisions need to be made quickly, without the typical wait of several days to a week or more for traditional culture techniques. I have seen the MycoMeter-Test used to evaluate a variety of different surfaces and materials, and find it can easily be incorporated into a customized program of contami-

nation control. For example, it can be used to measure acceptability of surface cleanliness in a wide variety of applications, such as assessment of sanitization procedures before, after, and relative to mold remediation of a water-damaged building, validation of a cleanroom production facility, decontamination of a biohazard containment laboratory or bone marrow transplant unit, and many others.

The MycoMeter-Test was presented at Healthy Buildings 2000 in Finland, and a brief paper has been published in the conference proceedings (*Proceedings of Healthy Buildings 2000*, Vol. 1, pp. 589-590). While the MycoMeter-Test is currently available from Mycotec, Copenhagen, Denmark (www.mycotec.dk), additional applied research is planned for the United States to further fine-tune the technology. An eventual system of American distributors is also planned. And while the current cost of an individual test is approximately the same as for a fungal culture, I would expect that cost to decrease as the product becomes more widely utilized and production volume increases. In summary, I view this as an exciting and innovative product to be utilized in a multitude of biological contamination control programs and related applications. I look forward to reviewing additional field performance data on the MycoMeter-Test in the near future, and bringing you an updated report.