

IAQ Labs is pleased to introduce to you an innovative diagnostics sampling method which addresses the shortfall of the current air sampling method.

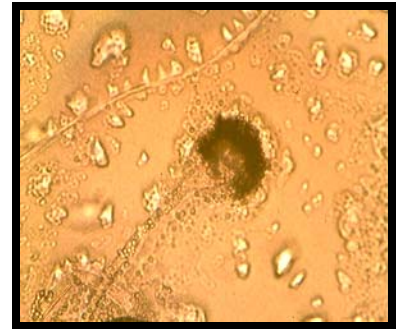
Background

Culturable sampling methods require that the spores in the air are alive, survive the sampling process, germinate on the sampling media, and compete well with other species present on the growth media. The non selective growth media may favor growth of some fast growing micro organisms. It also provides counts indicative of how many spores are viable and present in the air.

Culturable sampling does not indicate the presence of non-viable spores, which may also be capable of producing allergies or irritation.

Overview

Non-culturable spore trap samplers draw measured volumes of air through the sampling device for a specified length of time. The collection surface is a coated glass slide. Particles in the air (spores, dust, etc.) impact onto the sticky surface and are "trapped" for later analysis. Spore trap samplers are capable of capturing all spores and particulate matter in the air. Consequently, it is possible to accurately characterize problem environments where spores are present but either are no longer viable or are species that do not culture well (i.e. *Stachybotrys*). **These are two situations where culturable sampling techniques, if used alone, may miss a potential IAQ problem.**



Culturable sampling

Culturable sampling is one of the most common methods of volumetric air sampling, and the most commonly used culturable sampling devices. The sampler works by drawing measured volumes of air through an instrument that contains a petri dish with culture media. Spores that impact onto the plate are then allowed to incubate and grow, after which the colonies may be counted and identified.

Our philosophy regarding the interpretation of biological air samples is formed primarily by two guiding principles. First, an effective interpretation is based on the comparison of indoor and outdoor samples. There are currently no guidelines or regulations to indicate "safe" or "normal" spore levels, however, we typically expect indoor counts to be 30 to 80 percent of outdoor spore counts, with the same general distribution of spore types present.

It can also be used to provide a bacterial count.