## Hygicult Y&F (Easicult M)

# Passion for building health

# Hygicult® Y&F (Easicult M) as a vital part of the investigation work

Aidian's Hygicult Y&F (Easicult M), the on-site culturing method for molds and yeasts, is a vital part of the investigation work, when an expert of Novorite Oy solves mold problems in homes and buildings. Hygicult Y&F (Easicult M) is an easy-to-use tool for sampling and sample transport in different settings.

### Demanding problem solving

Investigating housing health is challenging. Many factors influence indoor air problems, where one significant cause is mold. Unfortunately, mold problems in buildings are common in many countries. Microbial problems are often caused by moisture that is captured in the building structures, and cannot dry fast enough. Significant microbe problems in buildings always need to be repaired because both living and dead microbe growth can be harmful to health. The competence of the investigator is crucial for success. Solving mold problems requires both understanding of structural engineering and deep microbiological expertise. It is very important to:

- $\boldsymbol{\cdot}$  take samples from the right places
- $\cdot$  interpret the results in the correct way
- · define the reparation measures correctly

## The crucial investigation phase

Novorite has clear principles. The analytics must ensure that the source of the problem is detected. Samples from indoor air is not enough. A clean indoor air sample does not guarantee mold-free structures. And, mold spores in the air do not always indicate problems. There can be even 10 000 spores of mold in one cubic meter of outdoor air without anyone getting ill. Investigation of symptomatic households starts by a thorough moisture inspection and by analyzing the risk structures and suspicious observations. Based on these, decisions on sampling is made. Samples are taken from structures and the air conditioning system is examined. Novorite's investigation is based on cultivation on Hygicult Y&F (Easicult M) and microscopy of the sample. Cultivation with Hygicult Y&F (Easicult M) shows the yeasts and molds in the sample, and allows the growth to be further analyzed. The microscopy gives quick results, it shows both

living and dead microbes as well as anaerobic microbes. Often microbes can be identified by direct microscopy. Microscopy is demanding and sets high requirements for the equipment and the know-how. Here Hygicult Y&F (Easicult M) serves as a parallel sample and confirms the result as the microscopy sample sometimes may be unrepresentative and only the cultivation shows the mold growth. Special focus is on microbes typical for moisture problems.

#### Renovating successfully

The target can be renovated when the problematic areas have been found. The aim is to remove all contaminated material. By sampling throughout the process, Novorite ensures that the renovation level is high enough. Novorite expert is underlining that extensive renovation can be unnecessary, especially if the recommendation for renovation is based on assumptions or insufficient evidence of the damage or damaged area.



Microbial problems are often caused by moisture.

#### Literature

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This report is based on an interview with Simo Valjakka (MSc), Novorite Oy.

