

## **Moulds in housing: Visual Inspection and Spore Counts Comparison - Implications for Future Strategies in the Public Health Setting**

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### **Summary:**

**Objectives.** Among the problems of health related to living conditions presented to a public consulting centre for environmental medicine in Vienna, the main point at issue was damp housing and mould growth. On answering this demand indoor exposure to fungal spores was identified by visual semi-quantitative assessment of fungal growth on the one hand and quantitative measurement of viable spores on the other hand. The validity and practicability of this approach was investigated.

**Method:** We applied these two simple methods in a standardised form and compared the results in a field study, which has been conducted between 1995 and 1999. In 197 rooms in Viennese flats (183 of which were claimed to be “mouldy”) fungal spore concentrations were measured by RCS-impactor and Rose-Bengal-agar. Outdoor measurements were taken simultaneously outside the buildings and were used for reference.

**Results:** Independent classification of visible growth of mould in flats correlated significantly ( $r=0.635$ ;  $p<0.0001$ ) with the ratio of indoor/outdoor concentration of fungal spores.

**Conclusions.** It is usually possible to classify the severity of the problem just by local inspection. Visible plaques should always be an indication for sanitary measures. However, spore counting is indicated for quantifying health relevant exposures, for scientific comparisons and in documentation and follow up such as for litigation purposes. Quantitative data bear more credibility and so help to prove the need of sanitation.

**Key words:** fungal spores, damp housing, moulds

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