

THE INFLUENCE OF ESSENTIAL OILS ON MOULD STRAINS ISOLATED FROM POULTRY FARMS

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Summary. The present work was designed to assess the influence of essential oil on mould strains isolated from poultry farms. Seven mould strains isolated from poultry farm: *Paecilomyces variotii*, *Cladosporium herbarum*, *Fusarium moniliforme*, *Aspergillus versicolor*, *Aspergillus fumigatus*, *Aspergillus niger*, *Aspergillus oryzae* and seven essential oils: *Malaleuca alternifolia*, *Picea abies* L., *Citrus paradisi*, *Citrus aurantium*, *Eucalyptus globulus*, *Mentha piperitha*, *Thymus vulgaris* were investigated. It was shown that essential oils *Thymus vulgaris* and *Mentha piperitha* on mould strains created 40 mm diameter inhibition zone. In addition, high antifungal activity was obtained using *Malaleuca alternifolia* essential oil. The antifungal influence of remaining essential oils was markedly lower. However, in the MIC determination assay 0.5% concentration of *Thymus vulgaris* essential oil had significant antimould activity. The lowest antifungal activity was shown by *Picea abies* and *Citrus paradisi* essential oils, which created 10 mm diameter inhibition zones.

Key words: essential oils, mould strains, antimould activity.