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Effective express method for testing preparations to protect textiles from biological damage

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Abstract

In this article we are proposing modified version of the disco-diffusion method for testing biocidal activity. This method, widely used in antibiotics, was adapted for assessing the fungicidal stability in textiles. It allows us to obtain information from many samples within a short time (3-7 days) and to use certain species of fungi for certain aims. In our case we tested samples of fabrics stained and treated with synthesized chemical substances, particularly pyrazole contained azodyes and colloidal silver nano particles. Test cultures for artificial infestation were chosen from a list of ones frequently found on damaged textiles. Two examples of the application of this express method are provided, and advantages and disadvantages are discussed.