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RAPID ISOLATION AND IDENTIFICATION OF FUNGI FROM BOTTLED WATER PRODUCTION SYSTEM.

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Analyses of fungi by conventional methods are time consuming. At least two weeks are required for growth and identification of even the most rapidly growing fungi. Where initial contamination levels may be very low as in bottled water, it is difficult to obtain representative samples using traditional sampling and isolation techniques. The major problem report by bottlers is the failure to detect contaminations during routine quality control analysis. The fungi manifests in the bottles when the product has reached the retailer, exactly the point of maximum exposure to the consumer. One way to avoid these problems is to decrease the time of fungal incubation using modified media. In order to adapt the existing mycological media, *Penicillium brevicompactum* was used to spike bottled water. The recovery of viable fungal was determined. Modifications in strength of Neopeptone Glucose Rose Bengal Aureomycin Agar were assessed. The fluorescent dyes (*e.g.* calcofluor white) and other substrates for specific enzymatic activities were also used as potentially diagnostic supplements.

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