Short Communication

Mycoflora assessment in drinking tap water (Sari, Iran)

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Abstract

Background and Objective: Fungi are widely distributed in nature and they are usually present in attomospher but other sources such as water play an important role in their ecology. This study was done to evaluate mycoflora assessment in drinking tap water in Sari, North of Iran. The tap water collected form Sari water distribution system for fungi.

Materials and Methods: In this descriptive study, a volume of 100 ml of tap drinking water samples (n=60) were collected in sterile bottles. All water samples passed through sterile 0.45 micrometer filters. The filters were placed directly on Malt extract agar and incubated at 27°C for 3-7 days. Routine mycological techniques were applied to identify the grown fungi.

Results: Out of 468 grown fungal colonies, eight different fungal genera were identified. The total mean cfu per 100 ml for the positive samples were 8.4. *Aspergillus* (37.4%) and *Penicillium* (27.3%) were the most common isolated fungi. *Rhizopus* (0.6%) had the lowest frequency. Among *Aspergillus* species, *A. flavus* had the highest frequency.

Conclusion: Our result showed that various fungi were present in the tap drinking water. We propose fungi should be considered as part of the microbiological analysis parameters in drinking tap water.

Keywords: Dinking tap water, Fungi, Sari

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