



## Molecular typing of dandruff pathogens and evaluated the antifungal activity of plant extracts

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**Abstract : Background :** Dandruff is a common dermatological problem, dispersed flaking of the scalp and hair. Various intrinsic and environmental factors such as skin surface fungal colonization, individual susceptibility, are affecting.

The etiology of dandruff is not well understood. The study aims to verify the unequivocal understanding of the fungal relationship with dandruff by identification of filamentous fungi, *Candida* and survey of the bacterial companionship of dandruff of hair samples and investigate the antifungal activity of water extracts of some medicinal plants in isolated fungi. A total of 280 hairs scalp samples, and hair swabs were collected from patients attended in Hilla hospitals and private clinics in the Babylon province (n= 152 hair samples, n= 74 dandruff samples, n= 54 scalp swabs). Clinical samples were cultured on Sabouraud dextrose agar (SDA) medium with / without antibiotics based on standard cultured methods. *Candida* spp. was preliminarily identified based on CHROMagar medium. Molecular typing of isolated yeasts via amplification ITS region and sequence analysis and multiple alignment was performed and constructed the phylogeny tree.

**Keyword:** Dandruff, Molecular typing, fungi, Plant extract activity.

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