



**DISTRIBUTION, CHARACTERIZATION AND IDENTIFICATION
OF SUPERFICIAL FUNGAL PATHOGENS ISOLATED
FROM VARIOUS BODY SITES OF SYMPTOMATIC
AND ASYMPTOMATIC FARMERS OF
INDANG AND AMADEO, CAVITE**

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ABSTRACT

Superficial fungal infections are extremely common on tropical countries like the Philippines and the warm and humid condition favour the growth of pathogenic fungi. Thus, this study assessed the distribution of superficial fungal pathogens isolated from various body sites of symptomatic and asymptomatic farmers of Indang and Amadeo, Cavite. A total of 701 clinical specimens, comprised of toenails, fingernails, hairs and skin scrapings from arm and foot were collected. Direct microscopic examination (KOH mount) revealed a high KOH positive on skin scrapings taken from the symptomatic farmers. Sixty-eight farmers exhibited symptoms of tinea corporis, tinea unguium, tinea pedis and tinea capitis while 105 farmers were asymptomatic to fungal infections. Affected farmers belong to age groups of 38 – 46 and 56 – 64 and have been engaged in farming for more than 12 years. Male farmers are prone to infection as compared to females and they had history of diabetes, arthritis and hypertension. This was significantly different from the percent KOH positive on toenails and fingernails taken from asymptomatic farmers. Results also revealed that not all KOH positive samples were cultured positive. Fungal isolates were identified belonging to four genera. *Trichophyton* was the only dermatophyte and known as a causative agent of dermatophytoses while *Fusarium*, *Aspergillus* and *Penicillium* were all non-dermatophytic fungi. *Trichophyton* was common on asymptomatic farmer and found predominantly in most clinical samples except from hair while the non-dermatophytic fungi were isolated from foot and arm scrapings on asymptomatic farmers and from toenails and fingernails of symptomatic farmers. Statistical analysis revealed that gender, years engaged in farming and medical history were found to have a significant association with the presence of fungal infection. However, no significant differences were observed on the distribution of fungal isolates among symptomatic and asymptomatic farmers of Indang and Amadeo, Cavite.



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