Cutaneous fungal infection often poses challenges for clinicians for it is not readily distinguishable from other skin diseases with similar clinical features. In such cases, mycological tests such as KOH smear examination or culture test, provide relatively easy and accurate tools for diagnosing cutaneous fungal infection.

However, these tests show significant disparity in sensitivity and specificity according to the level of experience and precision of the operator, as well as the anatomic site of collection of the scales and the methods of sampling. Furthermore, with lower-level residents performing most of these procedures in each of the training hospitals, detection errors due to lack of standardized guidelines are expected. Therefore, thorough understanding and studying of mycological examination are needed, and insights into superficial cutaneous mycosis and its differential diagnosis is called for, in order to facilitate more precise and standardized mycological detection test and accurate diagnosis of cutaneous mycoses.

Hence, the authors seek to address the issues regarding mycological tests including KOH smear and culture tests and the differential diagnosis of various cutaneous mycoses, in an attempt of better understanding and insight into the fungal diseases.