**Objectives:** Dermatophytes are keratinophilic molds that infect keratinized tissues such as skin, hair, and nails. Their transmission depends on their anthropophilic (human-associated), zoophilic (animal-associated), or geophilic (soil-associated) nature. Dermatophyte infections are common among patients attending dermatology clinics and can present with a wide range of clinical manifestations.

Dermatophytes are mainly classified into three genera: *Trichophyton*, *Epidermophyton*, and *Microsporum*. *Microsporum* species primarily infect hair and skin, Epidermophyton affects skin and nails, while Trichophyton can infect hair, skin, and nails. Transmission occurs through direct contact with infected individuals, animals, or contaminated soil. Anthropophilic species usually cause milder, chronic infections, whereas zoophilic species are associated with more pronounced inflammatory responses.

Recent studies have focused on comparing the performance of available diagnostic methods (direct microscopy, culture) and assessing the correlation between clinical and microbiological diagnoses. The aim of this study is to investigate the species diversity and distribution density of dermatophytes over a ten-year period.

**Materials and Methods:** Between January 1, 2015, and April 1, 2025, hair, skin, and nail samples were collected from patients suspected of dermatophytosis at İnci Laboratories, Central Branch, Baku, Azerbaijan. Initially, all samples were subjected to direct microscopic examination after preparation with 10% potassium hydroxide (KOH).

For samples requiring culture, double plating was performed on Sabouraud Dextrose Agar. One set of cultures was incubated at room temperature (25°C) and the other at 37°C for a period of three weeks. Plates were inspected at least once a week, and cultures with no growth after three weeks were considered negative.

Colonies exhibiting growth were evaluated both macroscopically and microscopically. In macroscopic assessment, parameters such as colony growth rate, surface texture, surface color, and reverse pigmentation were recorded. For microscopic evaluation, preparations were made using the cellophane tape method and stained with lactophenol cotton blue.

All sample results obtained between January 1, 2015, and April 1, 2025, were retrospectively reviewed through the hospital’s electronic database system.

**Results**:According to the results of the ten-year study, positivity was detected in 186 out of 925 fungal cultures (20.1%). Among the samples in which dermatophytes were identified, 87 were from male patients (46.7%) and 99 were from female patients (53.2%). The most frequently identified dermatophytes in positive fungal cultures were *Trichophyton tonsurans* (1.06%), *Trichophyton rubrum* (84.4%), *Trichophyton mentagrophytes* (12%), *Trichosporon mucoides* (0.3%), *Trichophyton verrucosum* (0.3%), *Microsporum canis* (1.06%), and *Microsporum gypseum* (1.77%). Only one sample (0.7%) showed the presence of *Epidermophyton*.( **Figure1**)

**Conclusions:**According to the results of the study, *Trichophyton rubrum* has been identified as the most prevalent cause of dermatophytosis in our country. Therefore, it is believed that, alongside clinical evaluation, the application of both macroscopic and microscopic examination methods would be beneficial and helpful in guiding clinicians.