Reservoirs that Crz1 screened in the two-phase model expressed high levels of secreted proteins, which may indicate a possible role in the transmission of the disease.

Methods: A total of 678 skin and hair samples from animals including sheep (n = 190), cows (n = 79, goats (n = 69), rabbits (n = 43), dogs (n = 29), and domestic chickens (n = 27) were collected and subjected to ITS-1 and ITS-2 sequencing. The likelihood for isolation of a specific species or genotype with regard to the type of animal was evaluated using the chi-square test.

Results: We obtained 1534 DNA sequences. ITS-1RJ and ITS-2 region sequencing revealed the presence of T. septentrionalis (n = 42; all four cows), T. mentagrophytes Type V (sheep: n = 95; goat: n = 4; cat: n = 2; horse: T. mentagrophytes Type B* (n = 3) and T. mentagrophytes Type VI (n = 2). These results were in agreement with our previous findings and are consistent with those reported in the literature.

Conclusions: This study provides new insights into the epidemiology of dermatophyte infections in livestock and wildlife, and highlights the potential for cross-species transmission of dermatophytes. Further studies are needed to better understand the role of reservoirs in the transmission of dermatophytes.