



International Journal of Veterinary Sciences and Animal Husbandry



ISSN: 2456-2912

NAAS Rating (2026): 4.61

VET 2026; 11(5): 316-319

© 2026 VET

www.veterinarypaper.com

Received: 11-02-2026

Accepted: 19-03-2026

AV Sivanjali

M.V.Sc. Scholar, Department of
Veterinary Medicine, NTR
College of Veterinary Science,
Gannavaram, Sri Venkateswara
Veterinary University, Tirupati,
Andhra Pradesh, India

Dr. N Lakshmi Rani

Professor and University Head,
Department of Veterinary
Medicine, NTR College of
Veterinary Science,
Gannavaram, Andhra Pradesh,
India

Dr. Y Chaitanya

Assistant Professor, Department
of Veterinary Clinical Complex,
NTR College of Veterinary
Science, Gannavaram, Andhra
Pradesh, India

Dr. K Rambabu

Associate Professor & Head,
Department of Veterinary
Surgery & Radiology, NTR
College of Veterinary Science,
Gannavaram, Andhra Pradesh,
India

Corresponding Author:

AV Sivanjali

M.V.Sc Scholar and Department
of Veterinary Medicine, NTR
College of Veterinary Science,
Gannavaram, Sri Venkateswara
Veterinary University, Tirupati,
Andhra Pradesh, India

Studies on occurrence of fungal dermatitis in cats

AV Sivanjali, N Lakshmi Rani, Y Chaitanya and K Rambabu

DOI: <https://www.doi.org/10.22271/veterinary.2026.v11.i5e.3288>

Abstract

Dermatological cases in cats reported to Veterinary Clinical Complex, Gannavaram, were investigated from July 2025 to March 2026. The occurrence of fungal dermatitis was assessed and analysed with respect to age, sex, and breed. Out of a total of 1183 cats examined, 44 were diagnosed with fungal dermatitis accounting for 3.72% of the total cases with higher occurrence in cats below one year age and majority were males.

Keywords: Fungal dermatitis, cats, prevalence, *Microsporum canis*, Persian cats, feline dermatology

Introduction

Skin disorders are among the most common health issues in felines, often causing significant discomfort and concern for owners. Moreover, dermatological cases frequently require longer diagnostic procedures and extended treatment compared to many other clinical conditions (AL-Sultan *et al.*, 2024) [1]. Feline fungal dermatitis is an important dermatological condition caused by dermatophytes yeasts and moulds affecting cats worldwide. It involves infection of the skin, hair and sometimes claws by various pathogenic fungi. Because cats live in close contact with humans and other animals, fungal skin diseases carry both veterinary and public health significance. These infections range from superficial involvement of keratinized tissues to deeper or systemic invasion in rare cases (Alsaad., 2021) [2]. Fungal dermatitis occurs with variable clinical signs, including alopecia, pruritis, hyperpigmentation, scaling and characteristic circular lesions. These ring-shaped lesions, often accompanied by crusting, have led to the common term “ringworm” in cats. Prolonged inflammation in affected may result in permanent hair loss. More over cats acts as significant reservoirs of *M. canis*, facilitating transmission of infection to humans in close contact (Colombo *et al.*, 2001; Nunez *et al.*, 2025) [3, 4]. The present study was undertaken to study the occurrence and risk factors involved in causing fungal dermatitis in cats.

Materials and Methods

Cats presented to Veterinary Clinical Complex with dermatological problems were screened for fungal etiology. Samples including hair plucks, skin scrapings, and crust materials were collected aseptically. Wood’s lamp examination was performed in a dark room to detect apple-green fluorescence suggestive of dermatophytosis. Direct microscopic examination was conducted using 10% potassium hydroxide (KOH) preparation to identify fungal hyphae, arthrospores, or spores under the microscope. For fungal isolation, the collected samples were inoculated onto Sabouraud’s Dextrose Agar (SDA) supplemented with chloramphenicol and cycloheximide and incubated at room temperature for up to 2–3 weeks. The fungal isolates obtained were identified based on colony morphology, pigmentation, growth characteristics, and microscopic appearance using lactophenol cotton blue staining.

Results and Discussion

During the period under study (July 2025 to March 2026), a total 1183 feline cases were registered at Veterinary Clinical Complex, Gannavaram. Out of these 83 cats (7.02%) diagnosed with dermatological affections were screened and 44 cats were confirmed as fungal

dermatitis which accounted for 3.72 per cent of the total cases.

The prevalence of dermatological disorders observed in the present study was 7.02 per cent, which was in close agreement with the findings of Scott *et al.* (2013) who reported dermatological cases in 6.4 per cent of the total cats examined. However, higher prevalence was recorded by Scott and Paradis (1990) [5] and Hill *et al.* (2006) [6]. The comparatively lower incidence observed in the present study might be attributed to the grooming behaviour and normal skin microbiota of cats. Among the dermatological disorders, fungal dermatitis was the predominant etiology accounting for 53.01 per cent of cases, followed by parasitic infections (28.91%), bacterial dermatitis (13.25%) and non-infectious causes (4.82%) as show in Table 1. Similar predominance of fungal infections was reported by Shokri and Khosravi (2016) [7] and Alautaish *et al.* (2024) [8]. In contrast, parasitic skin diseases were reported as the major cause by Silvestre *et al.* (2024) [9]; Ashwini and Kumar (2023) [10] and Al-Sultan *et al.* (2024) [1]. The occurrence of fungal dermatitis in the present study was 3.72 per cent of the total feline cases examined, which was in accordance with the findings of Hobi *et al.* (2011) [10] who reported fungal etiology in 2.1 per cent of cats. Variations in prevalence and etiology among different studies might be due to differences in geographical location, climatic conditions, managemental practices, environmental hygiene and immune status of the animals.

Table 1: Etiological agents detected in dermatological disorders in cats (n=83)

S. No	Pathogen detected	Number of infected animals	Percentage (%)
1	Fungus /yeast	44	53.01
2	Parasites	24	28.91
3	Bacteria	11	13.25
4	Non infectious	4	4.82
	Total	83	100.00
	Monomicrobial	54	65.06
	Mixed	29	34.94

Dermatophytes were the predominant fungal isolates recovered from cats with fungal dermatitis in the present study. Among the dermatophytes, *Microsporum spp* showed the highest occurrence (46.43%), followed by *Trichophyton spp* (39.29%) and *Epidermophyton spp* (14.29%). Among the individual isolates, *Microsporum canis* was the most predominant species (20.45%), followed by *Trichophyton mentagrophytes* (18.18%), while *Microsporum nanum*, *Trichophyton rubrum* and *Epidermophyton spp* were isolated in fewer cases. Similar findings were reported by Seker and Dogan (2011) [11], Murmu *et al.* (2015) [12] and Jarjees and Issa (2022) [13], who identified *M. canis* and *T. mentagrophytes* as the major dermatophytes associated with feline dermatophytosis. The predominance of *M. canis* observed in the present study may be attributed to its highly contagious nature, persistence of infective spores in the environment and close contact among cats in confined conditions.

Malassezia pachydermatis was isolated in 18.18 per cent of cats and produced white to cream coloured colonies on Sabouraud's dextrose agar with characteristic peanut-shaped cells on microscopic examination. Comparable observations were reported by Scott *et al.* (2013) [14] and Shokri and Khosravi (2016) [7], who documented the involvement of *Malassezia* species in feline fungal dermatitis. In addition, saprophytic fungi such as *Aspergillus spp*, *Penicillium spp*,

Rhizopus spp, *Fusarium spp* and *Alternaria spp* were also isolated in a few cases, indicating possible environmental contamination. Similar findings were reported by Zenad *et al.* (2015) [15] and Minnat and Khalf (2019) [16]. The relatively higher occurrence of *Trichophyton spp* in the present study was in agreement with Ridzuan *et al.* (2021) [17], who reported higher prevalence of *Trichophyton* isolates in stray cats. Variations in fungal isolation rates among studies may be influenced by geographical location, environmental conditions, season and management practices, as reported by Diren Sigirci *et al.* (2019) [18] and Lopes *et al.* (2024) [19].

Table 2: Frequency of fungal isolates from cats with dermatitis (n=44)

S. No	Fungi species	No of cats affected	Percentage (%)
I	Dermatophytes	28	63.64
	<i>Microsporum canis</i>	9	20.45
	<i>Microsporum nanum</i>	4	9.09
	<i>Trichophyton mentagrophytes</i>	8	18.18
	<i>Trichophyton rubrum</i>	3	6.82
	<i>Epidermophyton</i>	4	9.09
II	Non dermatophytes	16	36.36
A	Yeasts	8	18.18
	<i>Malassezia pachydermatitis</i>	8	18.18
B	Saprobe fungi	8	18.18
	<i>Aspergillus spp</i>	2	4.54
	<i>Penicillium spp</i>	2	4.54
	<i>Rhizopus spp</i>	2	4.54
	<i>Fusarium spp</i>	1	2.27
	<i>Alternaria spp</i>	1	2.27

Age-wise occurrence of fungal dermatitis revealed a higher prevalence in kittens below one year of age (43.18%), followed by cats aged between one and two years (34.09%), whereas comparatively lower occurrence was observed in cats aged two to five years (13.64%) and above five years (9.09%) (Table 2). Similar observations were reported by Cafarchia *et al.* (2004) [20], Seker and Dogan (2011) [11] and Katirae *et al.* (2021) [21]. The increased susceptibility of young cats might be due to their playful behaviour, increased exposure to contaminated environments, immature immune system, irregular grooming habits and frequent close contact with infected animals or littermates.

Table 2: Age wise distribution of fungal dermatitis in cats (n=44)

S. No.	Age	No of cats affected	Percentage (%)
1	Upto 1 year	19	43.18
2	1-2 years	15	34.09
3	2-5 years	6	13.64
4	>5 years	4	9.09
	Total	44	100.00

Gender-wise prevalence revealed that female cats (63.64%) were more commonly affected than male cats (36.36%) (Table 3). Among both sexes, intact cats showed higher prevalence compared to neutered or spayed cats. Similar findings were reported by Cafarchia *et al.* (2004) [20]; Seker and Dogan (2011) [11] and Mohanraj *et al.* (2023) [22]. In contrast, higher prevalence in male cats was documented by Falahati *et al.* (2003) [23]; Patel *et al.* (2005) [24] and Alpın and Özgür (2009) [24] which they attributed to differences in sebum composition. The variations observed among studies might be associated with hormonal influences, reproductive status, environmental exposure, immune status and

management practices.

Table 3: Gender wise distribution of fungal dermatitis in cats (n=44)

S. No	Gender and reproductive status	No of cats affected	Percentage (%)
1	Male	16	36.36
	Intact	10	62.5
	Neutered	6	37.5
2	Female	28	63.64
	Intact	20	71.43
	Spayed	8	28.57

Breed-wise occurrence depicted in Table 4, that Persian cats were predominantly affected (63.64%), followed by domestic shorthair cats (20.45%) and crossbred cats (15.91%). Similar findings were reported by Sattasathuchana *et al.* (2020) [25] and Myers *et al.* (2021) [26]. The increased susceptibility of Persian cats could be attributed to breed-specific factors such as long hair coat, grooming difficulties and retention of fungal spores on the hair shaft. Long-haired cats (81.82%) were more commonly affected than short-haired cats (18.18%), which was in accordance with the findings of Nitta *et al.* (2016) [27]; Bajwa (2020) [28] and Zaki *et al.* (2021) [29]. Long hair coats may favour persistence of fungal spores and increased moisture accumulation, thereby predisposing the animals to fungal infections.

Table 4: Breed wise distribution of fungal dermatitis in cats (n=44)

S. No	Breed	No of affected cats	Percentage (%)
1	Persian	28	63.64
2	Short hair desi breed	9	20.45
3	Cross breed	7	15.91
	Total	44	100.00

Among the managerial factors in cats associated with fungal dermatitis, irregular grooming, poor sanitation and multi-cat housing conditions appeared to play an important role. Majority of the affected cats were regularly bathed; however, grooming practices were irregular in most cases. Similar findings were reported by Bajwa (2020) [28] who stated that poor grooming hygiene and contaminated grooming equipment increased the risk of fungal infection. Most affected cats were from sheltered environments (75%) and multi-cat households (65.91%), which supported the findings of Mignon and Losson (1997) [30], Minnat and Khalf (2019) [16] and Al-Sultan *et al.* (2024) [1]. High population density, stress, closer contact between animals and environmental contamination might have contributed to the increased prevalence in such households. In the present study, 59.09 per cent of affected cats had cohabitation with other pets, further indicating the role of close contact in disease transmission. Urban cats showed higher prevalence (63.64%) than rural cats, possibly due to increased indoor housing, crowding and environmental contamination in urban settings.

Table 5: Factors associated with the occurrence of fungal dermatitis in cats (n=44)

S. No.	Managerental practices		Number of cats	Percentage (%)
1	Bathing	Regular	37	84.09
		Not regular	7	15.91
2	Grooming	Regular	13	29.54
		Not regular	31	70.45
3	Hair coat	Long hair coat	36	81.82
		Short hair coat	8	18.18
4	Housing	sheltered	33	75
		Free roaming	11	25
5	Habitat	Urban	28	63.64
		Rural	16	36.36
6	House hold type	Multi cat house hold	29	65.91
		Single cat house hold	15	34.09
7	Housing disinfection	Water only	28	63.64
		Chemical/Disinfection	16	36.36
8	Interaction with pets	Present	26	59.09
		Absent	18	40.91
9	Vaccination	Regular	27	61.36
		Not regular	17	38.64
10	Deworming	Regular	32	72.73
		Not regular	12	27.27

Conclusion

Fungal dermatitis was identified as the most common dermatological disorder in cats presented during the study period. Young kittens, female cats, intact animals, Persian breed and long-haired cats were found to be more susceptible to fungal infections. Managerial factors such as multi-cat households, sheltered housing, cohabitation with other pets, irregular grooming and poor sanitation practices appeared to increase the risk of infection. The study highlights the importance of early diagnosis, proper grooming, environmental hygiene and regular health care practices for effective prevention and control of fungal dermatitis in cats.

Conflict of Interest

Not available

Financial Support

Not available

Reference

- Al-Sultan II, Al-Mashadanie N, Shalsh FJ, Al-Mahdi AY. Clinical cases of feline dermatoses presented at veterinary clinic in Malaysia. *Egyptian Journal of Veterinary Sciences*. 2024;56(8):1769-1774.
- Alsaad KM. Some skin problems in cats: a review. *IOSR Journal of Agriculture and Veterinary Science*. 2021;14(8):37-45.
- Colombo S, Cornegiani L, Vercelli A. Efficacy of itraconazole as a combined continuous/pulse therapy in feline dermatophytosis: preliminary results in nine cases. *Veterinary Dermatology*. 2001;12:347-350.

4. Nunez A, Silva V, Pereira MG, Castro R. Antifungal susceptibility testing of *Microsporum canis* isolated from the skin of dermatologically healthy cats. *Open Veterinary Journal*. 2025;15(8):3823-3830.
5. Scott DW, Paradis M. A survey of canine and feline skin disorders seen in a university practice: Small Animal Clinic, University of Montréal, Saint-Hyacinthe, Québec (1987-1988). *Canadian Veterinary Journal*. 1990;31(12):830-830.
6. Hill PB, Lo A, Eden CAN, Huntley S, Morey V, Ramsey S, *et al.* Survey of the prevalence, diagnosis and treatment of dermatological conditions in small animals in general practice. *Veterinary Record*. 2006;158(16):533-539.
7. Shokri H, Khosravi AR. An epidemiological study of animal dermatomycoses in Iran. *Journal of Medical Mycology*. 2016;26:170-177.
8. Alautaish HHN, Naji HA, Saud ZAH, Ghalib BG. Clinical study of common bacterial, fungal and parasitic skin diseases in cats. *Advances in Life Sciences*. 2024;11(3):580-584.
9. Silvestre GS, Gutschow MERP, Meira J, Custodio CS, Motheo TF, Pereira ML. Prevalence of dermatopathies in dogs and cats in the highland of Santa Catarina State, Brazil. *Acta Veterinaria Brasilica*. 2024;15(3):220-224.
10. Hobi S, Linek M, Marignac G, Wilhelm S, Alleaume C, Fondati A, *et al.* Clinical characteristics and causes of pruritus in cats: a multicentre study on feline hypersensitivity-associated dermatoses. *Veterinary Dermatology*. 2011;22(5):406-413.
11. Seker E, Dogan N. Isolation of dermatophytes from dogs and cats with suspected dermatophytosis in Western Turkey. *Preventive Veterinary Medicine*. 2011;98(1):46-51.
12. Murmu S, Debnath C, Pramanik AK, Mitra T, Jana S, Dey S, *et al.* Detection and characterization of zoonotic dermatophytes from dogs and cats in and around Kolkata. *Veterinary World*. 2015;8(9):1078-1078.
13. Jarjees KI, Issa NA. First study on molecular epidemiology of dermatophytosis in cats, dogs, and their companions in the Kurdistan region of Iraq. *Veterinary World*. 2022;15(12):2971-2978.
14. Scott DW, Miller WH, Erb HN. Feline dermatology at Cornell University: 1407 cases (1988-2003). *Journal of Feline Medicine and Surgery*. 2013;15(4):307-316.
15. Zenad MM, Badawi NM, Wali ARAJ. Cross sectional study on cutaneous mycotic infections of dogs and cats in Baghdad. *World's Veterinary Journal*. 2015;5(4):66-73.
16. Minnat TR, Khalf JM. Feline dermatophytosis: epidemiological, clinical and laboratory features in Baghdad Governorate, Iraq. *Biochemical Cellular Archives*. 2019;19(2):4025-4033.
17. Ridzuan P, Ruth M, Siti-Arffah K. Isolation of dermatophytes from infected stray cats in Selangor. *Jurnal Berkala Epidemiologi*. 2021;9(3):231-238.
18. Diren Sigirci B, Metiner K, Celik B, Basaran Kahraman B, Ikiz S, Bagcigil A, *et al.* Dermatophytes isolated from dogs and cats suspected dermatophytoses in Istanbul, Turkey within a 15-year period: an updated report. *Kocatepe Veterinary Journal*. 2019;12(2):116-121.
19. Lopes R, Garces A, Silva A, Brilhante-Simoes P, Martins A, Cardoso L, *et al.* Dermatophytosis in companion animals in Portugal: a 12-year retrospective study. *Microorganisms*. 2024;12(8):1727-1727.
20. Cafarchia C, Romito D, Sasanelli M, Lia R, Capelli G, Otranto D. The epidemiology of canine and feline dermatophytoses in southern Italy. *Mycoses*. 2004;47(11-12):508-513.
21. Katirae F, Kosari YK, Soltani M, Shokri H, Minooieanhighi MH. Molecular identification and antifungal susceptibility patterns of dermatophytes isolated from companion animals. *Journal of Veterinary Research*. 2021;65(2):175-182.
22. Mohanraj N, Arumugam AP, Padmanaban V, Nehru BS, Subramanian V. Successful management of dermatophytosis in a desi short hair domestic kitten. *Small Animal Advances*. 2023;2(3):33-37.
23. Falahati M, Akhlaghi L, Lari AR, Alaghebandan R. Epidemiology of dermatophytoses in an area south of Tehran, Iran. *Mycopathologia*. 2003;156:279-287.
24. Alpın G, Özgür NY. Mycological examination of *Microsporum canis* infection in suspected dermatophytosis of owned and ownerless cats and its asymptomatic carriage. *Journal of Animal and Veterinary Advances*. 2009;8(4):803-806.
25. Sattasathuchana P, Bumrungrun C, Thengchaisri N. Comparison of subclinical dermatophyte infection in short- and long-haired cats. *Veterinary World*. 2020;13(12):2798-2798.
26. Myers AN, Older CE, Diesel AB, Lawhon SD, Rodrigues Hoffmann A. Characterization of the cutaneous mycobiota in Persian cats with severe dermatophytosis. *Veterinary Dermatology*. 2021;32(4):319-388.
27. Nitta CY, Daniel AGT, Taborda CP, Santana AE, Larsson CE. Isolation of dermatophytes from the hair coat of healthy Persian cats without skin lesions from commercial catteries located in São Paulo metropolitan area, Brazil. *Acta Scientiae Veterinariae*. 2016;44:1-7.
28. Bajwa J. Feline dermatophytosis: clinical features and diagnostic testing. *Canadian Veterinary Journal*. 2020;61(11):1217-1220.
29. Zaki FHM, Airin CM, Nururrozi A, Indarjulianto S. A review: the prevalence of dermatophytosis on cats in Indonesia and Turkey. *BIO Web of Conferences*. 2021;33:06004-06004.
30. Mignon BR, Losson B. Prevalence and characterization of *Microsporum canis* carriage in cats. *Journal of Medical and Veterinary Mycology*. 1997;35:249-256.

How to Cite This Article

Sivanjali AV, Rani NL, Chaitanya Y, Rambabu K. Studies on occurrence of fungal dermatitis in cats. *International Journal of Veterinary Sciences and Animal Husbandry*. 2026;11(5):316-319.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.