DERMATOPHYTES

In-house screening test kit for simple and fast identification of dermatophyte infections on dogs and cats

Biovet®

1-888-8BIOVET

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DERMATOPHYTES

Overview

DERMATOPHYTES A fast, simple and easy to perform test, which enables the veterinarian to confirm the diagnosis of dermatophyte infections.

Dermatophytosis, generally referred to as tinea or ringworm, is a cutaneous infection caused by different genera of fungi collectively called the 'dermatophytes'. The main fungi responsible for dermatophytosis in domestic animals are *Microsporum canis*, *Trichophyton mentagrophytes* and *Microsporum gypseum*.

Dermatophytosis is a zoonotic skin disease. Children, the elderly and immunocompromised people are special at-risk populations, but anyone in frequent contact with infected pets risks contracting the disease. Dermatophytosis is in fact highly contagious.

Indications

Pets should be tested for dermatophytosis:

- When clinical signs compatible with the disease are apparent.
- When a pet owner develops skin disease and there is the possibility that the pet could be the source.
- During treatment for dermatophyte infections.
- If the pet has been newly acquired from a breeding facility; if pets habitually go outside the home; and if the pets "work" closely with humans, like herding dogs.

Specifications

- The kit is made of 10 upright glass bottles with screw-cap lids.
- Culture medium responds to colony growth of *E. floccosum, M. audouini, M.canis, M. gypseum, T. mentagrophytes, T. rubrum*, and *T. tonsurans* fungi.
- Positive results are indicated by a pH color change marker in the culture medium.
- Shelf life is 36 months when stored in a refrigerator or 20 months when stored at room temperature.

Description

- Required sample: Animal hair or skin scrapings from lesion border.
- Place the sample on the edge of the culture medium against the inside surface of the flask. Do not put the sample in the medium.
- Close the bottle again without fully tightening the cap. Air exchanges are essential.
- Hands on time is about 3 minutes.
- Incubate at room temperature.
- Visual color change indicator for easy and accurate results providing greater confidence in diagnostic decisions. Positive result evaluation as early as 72 hours after inoculation.

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DERMATOPHYTES

Screening system for veterinary dermatophytes

INTERPRETATION CHART

M.CANIS

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Zoophilic
Localization Ectothrix
Hair fluorescence: Yellow-green
Dog: Common
Cat: Common
Humans: Very Common
Colonial morphology: Cottony, white and yellow at the periphery.
Microscopic morphology: Large spindle shaped macroconidia. Rare pyriform microconidia.

M.GYPSEUM

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Common
Cat: Occasionnal
Humans: Occasionnal
Colonial morphology: Powdery colonies, leather-like surface, yellow-brown centre with cinnamom fringed margins.
Microscopic morphology: Abundant spindle shaped macroconidia with 4-6 septae. Rare or absent microconidia.

T.MENTAGROPHYTES

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Zoophilic
Localization Ectothrix (small spores)
Hair fluorescence: No or weak
Dog: Common
Cat: Occasionnal
Humans: Common
Colonial morphology: Flat, granular, powdery, cottony colonies, originally white, then creamy, yellow to pink.
Microscopic morphology: Uncommon or abundant macroconidia according to the isolated strain, pyriform, with few septae. Small, round microconidia, arrowly attached to hyphae as pine needles.

M.AUDOUINII

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Anthropophilic
Localization: Ectothrix
Hair fluorescence: Yellow-green
Dog: Rare
Cat: No
Humans: Occasionnal
Colonial morphology: Flat, velvety colonies, green to brownish in the centre.
Microscopic morphology: Rare claved microconidia, on stalks on hyphae. Rare macroconidia, large and spindle shaped when present.

E.FLOCCOSUM

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Anthropophilic
Localization: Hair not invaded
Hair fluorescence: No
Dog: Rare
Cat: No
Humans: Common
Colonial morphology: Felty colonies, originally white, then velvety and powdery, yellow to greenish.
Microscopic morphology: Abundant macroconidia with 2-6 septae, on hypahe or in clusters, pyriform with smooth wall.

T.RUBRUM

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Anthropophilic
Localization: Ectothrix (rare invasion of hair)
Hair fluorescence: No
Dog: Reported
Cat: No
Humans: Very Common
Colonial morphology: Flat, powdery, cottony or velvety colonies, originally creamy-white, then dark pink.
Microscopic morphology: Uncommon thin and elongated macroconidia. Abundant, thin, lateral microconidia formed on macroconidia, single or in grape-like clusters.

T.TONSURANS

Type: Dermatophyte
Media color change: Yes (to purple)
Habitat: Anthropophilic
Localization Ectothrix (large spores)
Hair fluorescence: No
Dog: Occasionnal
Cat: Occasionnal
Humans: Common
Colonial morphology: Powdery velvety
colonies, originally fl at, then in clusters.
Creamy to light brown or yellow to pink.
Microscopic morphology: Rare macroconidia, pyriform and irregular. Abundant microconidia on stalks on

CONTAMINANTS
NEGATIVE

PENICILLIUM sp.

Type: Contaminant
Media color change: No
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Not reported
Cat: Not reported
Humans: Reported (Onychomycosis)
Colonial morphology: Velvety blue-green colonies with white margins.
Microscopic morphology: Brush-like conidiophora. Chains of unicellular conidia, round or elliptic, smooth or rough.

PAECILOMYCES sp.

Type: Contaminant
Media color change: No
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Not reported
Cat: Not reported
Humans: Not reported
Colonial morphology: Powdery to velvety colonies, originally whitish, then yellowbrownish, gray to green or violet.
Microscopic morphology: Micelium with septae and single sterigmatae, along hyphae with typical long spindle shaped conidia.

ASPERGILLUS sp.

Type: Pathogen, not dermatophyte
Media color change: No
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Not reported
Cat: Not reported
Humans: Reported (Onychomycosis, skin infections)
Colonial morphology: Flat velvety colonies, originally white, then brown to black.
Microscopic morphology: Micelium with septae, long conidiophora with vesicle-like tips. Chains of round to elliptic unicellular conidia.

CANDIDA ALBICANS

Type: Pathogen, not dermatophyte
Media color change: No
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Rare
Cat: Not reported
Humans: Very Common
Colonial morphology: Creamy, round, smooth, soft, glossy, yellow colonies without aerial hyphae.
Microscopic morphology: Large round chlamidospores, with thick wall.

BACTERIA

Type: Pathogen, not dermatophyte
Media color change: No
Habitat: Geophilic
Localization: Ectothrix, may invade the hair
Hair fluorescence: No
Dog: Common
Cat: Common
Humans: Common
Colonial morphology: Flat, smooth, creamy colonies.
Microscopic morphology: Variable according to bacterial type.

CLADOSPORIUM sp.

Type: Pathogen, not dermatophyte
Media color change: No
Habitat: Geophilic
Localization: Ectothrix
Hair fluorescence: No
Dog: Not reported
Cat: Not reported
Humans: Not reported
Colonial morphology: Green-olive to brown or black colonies. Velvety or leather-like surface.
Microscopic morphology: Lateral and terminal conidiophora with long chains of conidia with flat wall.

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In-house screening test kit for simple and fast identification of dermatophyte infections on dogs and cats

FAST

A test kit for fast identification of dermatophyte infections on dogs and cats

SIMPLE

Contains an easy-to-interpret color indicator that changes from yellow to red when dermatophyte fungi are present in the patient sample

PRACTICAL

Ready-to-use test. No preparation required. 3 minute hands-on time. Room temperature storage

RELIABLE

Visual color change indicator for easy and accurate results, providing greater confidence in diagnostic decisions. Positive result evaluation as early as 72 hours after inoculation

SPECIFIC

Protected against contaminants and enriched with specific nutrients that facilitate the growth of dermatophytes

Available at BIOVET at 1-888-8BIOVET or order@biovet-inc.com

PRODUCT CODES
BIOVET TRM-560

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