InTray™ Dermatophyte (DM) Test

VALUE

High Throughput – Once the device is inoculated no other preparation is required saving time

Cost Savings – Reduces laboratory materials and medical waste

HIgh Specificity – Selective for the growth of dermatophytes by inhibiting the growth of both gram-positive and gram-negative bacteria

BENEFITS

Convenient - Combines collection, culture, and observation into one device

Easy to use - Minimal lab procedures and equipment needed

Easy to store - One year shelf life at room temperature

Easy observation - No fogging or condensation on the InTray™ viewing window

Safe - Fully enclosed InTray™ system prevents contamination and reduces exposure to collected samples

PRODUCT SPECIFICS

Storage - Room Temperature (18-25 C°)

Shelf Life - 27 months

Incubation - 1 to 14 days at Room Temperature

Quantity Sold - 5 pack

PRODUCT BIO

BioMed's InTray™ DM culture serves as a microbiology sample collection, transport, and culture device allowing for simultaneous detection and observation of the Dermatophyte fungal group. **By combining several procedures into a single device, BioMed's patented InTray™ DM saves time and money, while reducing exposure to collected samples.**

The patented InTray™ system consists of an outer, re-sealable label with an optically clear, anti-fog window covering the media creating an airtight seal over the 1" diameter surface. The innovative design of the InTray™, with its unique, high-performance viewing window, can be placed directly under a microscope, while remaining sealed. The InTray™ removes the need to prepare slides or expose the sample once the device has been inoculated. **By combining both growth and observation into one fully enclosed system, BioMed's InTray™ DM removes the need for multiple procedures, increases throughput and decreases the cost of laboratory materials and medical waste.**

Additionally, the InTray's™ design lends itself to high performance in off-site locations or in austere environments. **InTray™ DM stores for up to 27 months at room temperature (18-25 °C) and cultures at this temperature removing the need for an incubator.**

The InTray™ DM produces distinctive morphology between Dermatophyte species and increases specificity by inhibiting the growth of both gram-positive and gram-negative bacteria. **InTray™ DM's specially formulated media makes detection and preliminary identification easy while inhibiting potential interference in obtaining accurate results.**

QUALITY CONTROL

InTray™ DM meets the Clinical and Laboratry Standards Institute Approved Standard for commercially prepared media as required by CLIA '88. At the time of manufacture, quality control tests are preformed on each lot of InTray™ DM. Testing repeats through the end of the shelf life assuring the highest quality product.

BACKGROUND

Dermatophytes are a specific group of fungi that cause common skin, nail and hair infections in both humans and animals. **Dermatophytes are zoonotic, meaning they can be transmitted from human to animal, vice-versa, and can even contaminate areas of the environment.** Infections caused by these fungi are commonly referred to as "tinea," "ringworm," and "athlete's foot" depending on the location of infection and genera of the fungus. Areas infected are usually itchy and are prone to redness, scaling or fissuring. Abscesses can occur and in some cases infected areas may also develop secondary bacterial infections. More aggressive infections can lead to cellulitis resulting in fever, chills or shaking, as well as soreness in the infected area.

The types of fungus that receive the dermatophyte label are made up of the three genera: Microsporum, Epidermophyton and Trichophyton. In total there are 40 species within these three genera. Dermatophytes are known as anamorphic or imperfect fungi because they do not fit into the commonly established taxonomic classifications of fungi. This is because their sexual form of

BIOMED

CORPORATE OVERVIEW

BioMed Diagnostics, Inc., a boutique biotech firm and an industry leader for the past 20 years, develops and produces *in vitro* diagnostic devices. BioMed's point of care ready tests provide accurate diagnostic tools to scientists and research professionals worldwide for the identification of bacteria, parasites and fungi. The company formed out of a mercy mission conducted by a group of physicians to Central America. There they discovered the need for robust diagnostic tools designed especially for use in austere environments. Their experience unleashed the inspiration for BioMed's innovative products that support medical professionals, veterinarians, research teams, and environmental and industry scientists.

BIOMED DIAGNOSTICS

1388 Antelope Road
White City, Oregon 97503

p 541.830.3000
f 541.830.3001

www.biomeddiagnostics.com

info@biomeddiagnotics.com

InTray™ Dermatophyte (DM) Test

reproduction has not been observed; scientists only know of their asexual form of reproduction, the way, in which, this group of fungi produces their spores.

Dermatophytes thrive in moist, protected areas of the skin. These places tend to be where there are original skin folds, such as near hair and nails. Dermatophytes prefer these areas due to the reliance on obtaining nutrients from keratinized material. Once the organisms colonize they cause inflammation due to the host's reaction to their metabolic by-products. Dermatophytes are usually restricted to the nonliving cornified layer of the epidermis since they are unable to penetrate viable tissue.

DIRECTIONS

To inoculate the InTray™ DM, pull back the lower right corner of the label adjacent to the clear window until the protective seal is completely visible. Remove the seal by pulling the tab, discard the seal but **do not remove the white filter strip over the vent hole.**

Obtain a small amount of specimen and place on top of the 1" medium well. With hair samples, several (3-6) small pieces, about 2cm long, should be cut from the infected portion for inoculation onto the surface of the medium. Skin scrapings should be taken with a sharp blade from the outer ridge of an active lesion. Both nail pieces and scrapings from beneath the nail may be cultured. For best results, cut nails into small pieces. Veterinarians may use "tooth brush" method. For surface sanitation testing, invert the InTray™ over the area to be tested and touch the surface by lightly pressing down the agar portion of the tray.

Reseal the InTray™ by returning the label to its original position so the optically clear anti-fog window covers the medium. Press the edges of the label against the plastic tray to ensure an airtight seal. Once inoculated, incubate the InTray™ DM at room temperature.

DETECTION

InTray™ DM is formulated to produce a red color in the presence of growing dermatophytes, which will appear within 1-14 days after inoculation. The medium is formulated to produce distinctive colony growth with typical identifying characteristics, both macro and microscopically. For examination using a microscope, simply place the InTray™ DM on the microscope and observe.

REFERENCES

1. Dyer, N. W. and C. L. Stoltenow. 2007. Bovine trichomoniasis a veneral disease of cattle. www.ag.mdsu.edu/pubs/ansci animpest/v1342w.htm . Accessed on Feb. 23, 2011.

2. Parsonson, I.M., B.L. Clark and J.h. Duffy. 1976. Early pathogensis and pathology of Tritrichomonas foetus infection in virgin heifers. Journal of Comparative Pathology 86: 59-66

3. Stockdale, H.D. 2008. Biological characterization of Tritrichomonas foetus of bovine and feline origin. Auburn University, p. 1-15.