



Trichophyton Agar No.6

M536

Trichophyton Agar No.6 is used for differentiation of *Trichophyton* species.

Composition**

Ingredients	Gms / Litre
Ammonium nitrate	1.500
Dextrose	40.000
Monopotassium dihydrogen phosphate	1.800
Magnesium sulphate	0.100
Agar	15.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 58.4 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to cool in a slanted position.

Principle And Interpretation

Nutritional tests were originally described by George and Camp (2) as an aid in the routine identification of *Trichophyton* species that seldom produce conidia or that resemble each other morphologically (2). Certain species have distinctive nutritional requirements, whereas others do not.

The method employs a casein basal medium that is vitamin-free (Trichophyton Agar-1, M531) to which different vitamins are added i.e. inositol (Trichophyton Agar-2, M532), thiamine and inositol (Trichophyton Agar-3, M533), thiamine (Trichophyton Agar-4) (M534) and nicotinic acid (Trichophyton Agar-5) (M535). The method also employs an ammonium nitrate basal medium (Trichophyton Agar-6, M536) to which histidine is added (Trichophyton Agar-7, M152) (1). The various additives added help to determine the specific vitamin and amino acid requirements of the isolates.

The *Trichophyton* fungi are closely related to the genus *Microsporum*. *Microsporum* fungi are also saprophytic, parasitic and pathogenic in the skin, hair and nails of man and other animals. Trichophyton Agar-6 medium is also used for cultivating *Microsporum* species especially *Microsporum gallinae* which grow well at 37°C within 48 hours.

Nutritional requirements are determined by inoculating a control medium and a medium enriched with a specific vitamin or amino acid with *Trichophyton* isolates that have been presumptively identified by gross colony characteristics and microscopic morphology (1, 2, 3-6). Moderate to heavy growth in the vitamin- or amino acid-enriched medium compared to little or no growth in the basal medium indicates that the isolate requires that nutrient.

Quality Control

Appearance

White to light yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in tubes as slants

Reaction

Reaction of 5.84% w/v aqueous solution at 25°C. pH : 6.8±0.2

pH

6.60-7.00

Cultural Response

M536: Cultural characteristics observed after an incubation at 25-30°C for 1 week.

