Soya Peptone Yeast Extract Agar

Soya Peptone Yeast Extract Agar is recommended for selective isolation of dermatophytes especially *Trichophyton verrucosum* and other pathogenic fungi.

**Composition**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Gms / Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papaic digest of soyabean meal</td>
<td>10.000</td>
</tr>
<tr>
<td>Yeast extract</td>
<td>5.000</td>
</tr>
<tr>
<td>Dextrose</td>
<td>40.000</td>
</tr>
<tr>
<td>Streptomycin</td>
<td>0.030</td>
</tr>
<tr>
<td>Chloramphenicol</td>
<td>0.050</td>
</tr>
<tr>
<td>Agar</td>
<td>17.000</td>
</tr>
<tr>
<td><strong>Final pH (at 25°C)</strong></td>
<td>6.6±0.2</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters**

**Directions**

Suspend 72.08 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 118°C for 15 minutes. Mix well and pour into sterile Petri plates.

**Principle And Interpretation**

Dermatophytes are a group of parasitic fungi requiring keratin for growth. They have an ability to infect and survive on the top layer of skin, having dead cells thereby causing superficial infection of skin, hair and nails.

Dermatophytes include *Epidermophyton*, *Microsporum* and *Trichophyton*. The organisms colonize the keratin tissues and inflammation is caused by host response to metabolic byproducts. McDonough and Georg et al (1, 2) recommended addition of antibiotics, chloramphenicol and streptomycin to inhibit bacterial growth and assist primary isolation of dermatophytes and fungi.

The medium contains papaic digest of soyabean meal, yeast extract and dextrose, all of which provide essential nutrients for the fungal growth. Chloramphenicol and streptomycin have inhibitory action on bacteria (3, 4). Temperature of incubation may affect the sensitivity of certain systemic pathogenic fungi to chloramphenicol (5). It is therefore recommended that incubation should be carried out at 25-30°C.

**Quality Control**

**Appearance**
Cream to yellow homogeneous free flowing powder

**Gelling**
Firm, comparable with 1.7% Agar gel.

**Colour and Clarity of prepared medium**
Light amber coloured clear to slightly opalescent gel forms in Petri plates

**Reaction**
Reaction of 7.2% w/v aqueous solution at 25°C. pH : 6.6±0.2

**pH**
6.40-6.80

**Cultural Response**
M935: Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.

<table>
<thead>
<tr>
<th>Organism</th>
<th>Inoculum (CFU)</th>
<th>Growth</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Candida albicans</em></td>
<td>50-100</td>
<td>good-luxuriant</td>
<td>&gt;=50%</td>
</tr>
</tbody>
</table>

*Please refer disclaimer Overleaf.*
HiMedia Laboratories

Technical Data

Staphylococcus aureus  
ATCC 29213  
>=10³  inhibited  0%

Trichophyton verrucosum  
ATCC 36058  
good-luxuriant

Storage and Shelf Life
Store between 15-25°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

Disclaimer:
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