

# **Technical Information**

### Oak Wilt Fungus Agar

**Product Code: DM 1669** 

Application: - Oak Wilt Fungus Agar is recommended for cultivation of Oak Wilt fungus.

### Composition\*\*

| •  |                  |  |
|--|------------------|--|
| Ingredients                                    | Gms / Litre      |  |
| Malt extract                                   | 17.000           |  |
| Mycological peptone                            | 3.000            |  |
| Oxgall   | 15.000           |  |
| Agar   | 15.000           |  |
| Final pH ( at 25°C)                            | 5.7±0.2          |  |
| **Formula adjusted standardized to suit perfor | manco naramotors |  |

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

### Principle & Interpretation

Oak wilt is a lethal fungal disease that occurs due to fungal growth in water conducting vessels (xylem) of red, live and white oak tree families.

Oak Wilt Fungus Agar is a modification of the media developed by Gallway and Bergers (1) and used for cultivation of oak wilt fungus. Oak wilt is caused by a fungus, *Ceratocystis fagacearum*. After infection by this fungus, the trees contract oak wilt and die and the oak wilt fungus forms fungal mats under the bark of these dead trees.

Oak Wilt Fungus Agar supports good growth of *Ceratocystis fagacearum*. Malt extract supplies an acidic environment and nutrients required for metabolism of the fungus. Mycological peptone assists luxuriant growth of the fungus with typical morphology and pigmentation. Oxgall restricts spreading of fungal colonies. The acidic pH of the medium favours the growth of fungus.

### Methodology

Suspend 50 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boiling to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°) for 15 minutes.

### **Quality Control**

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity

Yellow coloured clear to slightly opalescent gel without any precipitate forms in Petri plates

#### Reaction

Reaction of 5.0% w/v aqueous solution at 25°C. pH: 5.7±0.2

#### pH Range

5.50-5.90

#### Cultural Response

DM1669: Cultural characteristics observed after an incubation at 25-30°C after 48-72 hours.





| C | Organism                             | Growth         |
|---|--------------------------------------|----------------|
| * | *Aspergillus brasiliensis ATCC 16404 | good-luxuriant |
| S | Saccharomyces cerevisiae ATCC 9763   | good-luxuriant |
| C | Ceratocystis fagacearum              | good-luxuriant |
|   |                                      |                |

**Key:** Formerly known as Aspergillus niger

# Storage and Shelf Life

**Dried Media:** Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label. **Prepared Media:** 2-8° in sealable plastic bags for 2-5 days.

## **Further Reading**

1. Gallway L. D. and Burgers R., 1952, Applied Mycology and Bacteriology; 3rd Ed., Leronard Hill., London pg. 54 and 57.

### Disclaimer:

- User must ensure suitability of the product(s) in their application prior to use.
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