

## Technical Information

### Phyto Tbb Agar Base

**Product Code: PHM1017**

**Application:** Semi-selective medium for the detection of *Xanthomonas campestris pv.vesicatoria* and *Xanthomonas vesicatoria* on seeds of pepper and tomato.

### Composition\*\*

Ingredients	Grams/Litre
Potassium dihydrogen phosphate	0.80
Di-potassium hydrogen phosphate	0.80
Ammonium chloride	1.00
Lactose	10.00
Trehalose	4.00
Thiobarbituric acid	0.10
Yeast extract	0.50
Agar	15.00
<b>Total</b>	<b>32.20 gm/liter</b>

\*\*Formula adjusted standard to suit the performance parameter

### Principle And Interpretation

Bacterial spot is caused by the bacterium *Xanthomonas campestris pv. Vesicatoria*, which usually affects tomato and pepper. This pathogen can be isolated on standard microbiological media and produces yellow, mucoid slow growing colonies .It is one of the most destructive diseases in climates where high temperature and frequent rainfall occur during the growing season. Visual symptoms include necrotic spots which may appear on leaves, stems and fruits, which are initially seen on the undersides of the leaves as water soaked areas. They enlarge and then turn dark brown.(2)

Tween medium was designed for the detection of *Xanthomonas campestris pv.vesicatoria* and *Xanthomonas vesicatoria* on seeds of pepper and tomato (1).

Yeast extract supplies nitrogenous compounds and vitamins to the organism.Lactose and Trehalose are the carbohydrate sources.

### Directions

Suspend 32.2 grams in 1000 ml distilled water containing 10 ml Tween 80. Heat to boiling to dissolve the medium completely. Sterilize the medium by autoclaving at 15 lbs pressure (121°C) for 15 minutes .Cool to 45-50°C and aseptically add the rehydrated contents of one vial of CCFTNB supplement-1 (PHS1013) Mix well and pour into sterile Petri plate .

### Quality Control

**Appearance:**

Cream to yellow coloured, homogeneous, free flowing powder.

**Gelling:**

Firm, comparable with 1.5% Agar gel.

**Colour and Clarity of prepared medium:**

Yellow coloured, clear to opalescent gel forms in Petri plates

**Reaction:**

Reaction of 3.22% w/v aqueous solution is pH 6.6 at 25°C.

**Cultural Response:**

Cultural characteristics observed with added CCFTNB supplement-1, after an incubation at 30-32°C for 5-6 days

Organism (ATCC)	Growth	Colony Colour
<i>Xanthomonas campestris pv.vesicatoria</i>	luxuriant	yellow ,mucoid
<i>Xanthomonas vesicatoria</i>	luxuriant	yellow ,mucoid

### Storage and Shelf Life

Store below 30°C and the prepared medium at 2 - 8°C. Use before expiry date on the label.

### Further Reading

- McGuire, R.G., Jones, J.B., and Sasser, M. 1986. Tween medium for semiselective isolation of *Xanthomonas campestris pv. Vesicatoria* from soil and plant material. Plant Dis. 70:887-891.
- Steven T.Koike, Peter Gladders, Albert o. Paulus, Vegetable diseases, a colour handbook Pg.199-201

### Disclaimer :

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