

Crystal Violet Pectate Agar



Medium used for the isolation and cultivation of pectinolytic microorganisms.

• CONTENTS (Liter)

Pectin	5.0 g
Yeast Extract	1.0 g
Ammonium Sulfate	2.0 g
Phosphates	3.5 g
Crystal Violet	0.0015 g
Agar	12.0 g
Final pH = 7.2 ± 0.2 at 25°C	

• PROCEDURE

Suspend 23.5 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

Crystal Violet Pectate Agar is a medium used for the isolation and cultivation of pectinolytic microorganism. Pectin is a substrate of pectinase. Yeast extract provides necessary nutrients and vitamin B complex. Ammonium sulfate is the source of nitrogen. Phosphates are buffering agents in the medium. Crystal violet inhibits the growth of Gram-positive bacteria. Agar is the solidifying agent. Pectinase activity is detected by flooding the plate with 1% hexadecyltrimethyl ammonium bromide solution. Pectinolytic microorganisms are identified by clear zone after adding the solution.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 36 ± 1°C for 24 - 72 hours. Pour 1% hexadecyltrimethylammonium bromide solution over cultured plate. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige to light purple

Prepared medium

Appearance : slightly opalescent, may have a slight precipitate

Color: very light purple

Incubation conditions: 36 ± 1°C / 24 - 72 hours

Microorganism	ATCC	Inoculum CFU	Growth	Clear zone
<i>Erwinia carotovora</i>	15713	50-100	good	+
<i>Erwinia chrysanthemi</i>	11663	50-100	good	+

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2 - 8°C.

• REFERENCES

1. R.F. McFeeters, L.Hankin, and G.H. Lacy, 2001, Compendium for the Microbiological Examination of Foods. 4th Ed. APHA.
2. L. Hankin, M. Zucker D.C. Sands. 1971. Improved Solid Medium for the detection and enumeration of pectolytic bacteria.

• PACKAGE

Cat. No : MB-C0833 Crystal Violet Pectate Agar	500 G
---	-------