

# K5125 mKM Medium

Crop: **Carrot (*Daucus carota*)**Disease: **Bacterial leaf blight**Pathogen: ***Xanthomonas hortorum* pv. *carotae***

mKM medium (modified KM-1 medium) is used to detect *Xanthomonas hortorum* pv. *carotae* (*Xccar*). Contaminated seed lots can be detected by dilution plating of the bacterial extract on mD5A and another semi-selective medium. Suspected isolates are then transferred to YDC. Finally, the identity of the suspected isolates can be determined by PCR. The colonies of *Xccar* on mKM plates are light-yellow cream, light brown to peach yellow, glistening, round and about 2 – 4 mm in diameter.

## COMPOSITION OF MEDIA K5125: mKM MEDIUM

COMPOUND	GRAM/LITER
Agar	18.0
Potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> )	1.2
Di-potassium hydrogen phosphate (K <sub>2</sub> HPO <sub>4</sub> )	1.2
Ammonium chloride (NH <sub>4</sub> Cl)	1.0
Lactose monohydrate	10.0
Threhalose anhydrous.	4.0
2-Thiobarbituric acid	0.2
Yeast Extract	0.5

## METHOD

- Dissolve 36.1 grams of the ingredients in distilled water and adjust volume to 1000 ml and adjust pH to 6.6.
- Autoclave the solution (121 °C, 15 psi, 15 minutes).
- Prepare sterile antibiotic solutions and add the following amounts per liter medium:
  - 35 mg nystatin (N0138)
  - 10 mg cephalixin monohydrate (C0110),
  - 50 mg bacitracin (B0106)
  - 2 mg tobramycin sulphate (T0153)
- Allow medium to cool down to ca. 45 °C – 50 °C and add antibiotics.
- Mix gently to avoid air bubbles and pour plates (15-20 ml per 9.0 cm plate).

## Reference:

Kim, H.K., Sasser, M. and Sands, D.C. 1982. Selective medium for *xanthomonas hortorum* pv. *translucens* Phytopathology 72:936. (Abstrn)

## K5125 mKM MEDIUM

K5125.1000

1 kg

For prepared and ready to use plates of this medium contact:  
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