

Klebsiella pneumoniae

(2001/8/26 2001/7/4)

.Klebsiella pneumoniae

(% 0.01)

K. pneumoniae

K. pneumoniae

Study on Selectivity of Acriflavine Dye Added to Some Culture Media for Cultivation of *Klebsiella Pneumoniae* Isolated from Different Sources

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ABSTRACT

Four culture media were prepared and tested for their ability to support the growth of *Klebsiella pneumoniae* . The tested media were violet red bile agar , orange leaf agar , essential salts agar and date extract agar. Acriflavine dye was added to all media in 0.01% as a selective material for this bacterium. Seven isolates of *K . pneumoniae* for different pathogenic cases were used and compared their growth and recovery percentages on the tested media in comparison with nutrient agar, other bacterial species were also cultured for comparison. The results indicated that acriflavine violet red bile agar is the best of the tested media for the cultivation of *K .pneumoniae* then come

acriflavine orange leaf agar. Also acriflavine violet red bile agar showed a good selectivity for this bacterium in comparison with the other species used in the study.

(Defined or Synthetic

(Complex Media)

Media)

.(Prescott et al., 1996; Cruckchank et al., 1975)

(Fastidious G⁻

(Neutral

MacConkey .Bacteria)

red-Bile Salt Agar)

Teague Holt-Harris

(Koneman et al.,

(Methylene Blue and Eosin)

1997)

(MacConkey Agar)

(Coliform Bacteria)

(Eosin Methylene Blue Agar)

(Violet Red Bile Agar)

(Endo Agar)

Edwards and)

(Bromothymol Blue Agar)

.(Prescott et al., 1996 ; Ørskov, 1981 ; Ewing, 1972

K.pneumoniae

(Ørskov, 1981)

(myo-Inositol)

(Methyl Violet Agar)

(MacConkey-Inositol-

Seidler Bagley

.(Ørskov, 1984)

.(1984) Ørskov

Carbenicillin Agar)

(1981)

Bruce

(Worfel-Ferguson)

(1990)

Fung Chein

.(Edwards and Ewing, 1972)

(Acriflavine)

(Violet Red Bile Agar)

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-:

K.pneumoniae

Violet Ret Bile Agar

Orange Leaf Agar

Essential Salts Agar

Date Extract Agar

0.01)%(

(Acriflavine)

.(Chein and Fung, 1990) *K.pneumoniae*

Acriflavine Violet Red Bile Agar (AVRB)

Oxoid

. 0.01) (

Acriflavine Orange Leaf Agar (AOL)

(1997)

(24) ° (50)

(50)

(17.5)

(5)

³ (500)

(1)

(Whatman No.1)

0.01) (

1) (:

. 2) ((³ 2.5) (Bromocresol Purple)

. (10)

(7.3-7.2)

Acriflavine Essential Salts Agar (AES)

(0.3)

:

(0.1)

(0.7)

(0.1)

(10)

(0.5)

(1.0)

(20) ³ (25)

(10) (7.3-7.2)

Acriflavine Date Extract Agar (ADE)

50 (50)

(1)

(Whatman No.1)

(³ 2.5)

(0.01)

:

(10)

(7.3-7.2)

(2)

K.pneumoniae

K.pneumoniae 52142

M. morganii Ps.aeruginosa E. coli

(Streaking Method)

(24-18) ° (37)

(Chein and Fung, 1990)

(24)

Chein

(1990) Fung

³ / (⁴10⁻³10)

Phosphat Buffer Salin(PBS)

(Cruckshank et.al.,1975)

(24- ° (37)

18)

(Recovery Percentage)

%100

(Chein and Fung, 1990)

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K.pneumoniae

(1973) Miller Fung (Acriflavine Dye)

(1990) Fung Chein Klebsiella

(Violet Red Bile Agar) 0.01) (

.K.pneumoniae

(1)

(5)

(AVRB)

(5-4)

(100-85)

(AOL)

.(1990) Fung Chein

(3-2)

K.pneumoniae

(AES)

(ADE)

(1997)

(³ / 1.15)

Klebsiella

(Ørskov, 1981)

(1)

(1985)

(80)

.(1985) 2.2

(AES)

K.pneumoniae

:1

ADE	AES	AOL	AVRB		
68.5	70	68	100		52142
48.5	44	55	98		1
16.5	35	52	85		2
13.5	24.5	48	69		3
11	21	24	63		4
5>	5>	5>	5>		5
5>	5>	5>	5>		6

: AVRB

: AOL

: AES

: ADE

K.pneumoniae

(AVRB)

Pseudomonas

(2)

Escherichia coli(0.0) *Morganella morganii aeruginosa*

(49.7)

K.

pneumoniae

:2

ADE	AES	AOL	AVRB		
32	53	47.3	49.7		<i>E.coli</i>
6	9	51	0.0		<i>Ps.aeruginosa</i>
0.0	0.0	2.3	0.0		<i>M.morganii</i>

: AVRB

: AOL

: AES

: ADE

- .1997 ,
 .1-6 2 8 .
 .1985 ,
 .144-113
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