APPENDICES

APPENDICES

Appendix 1 : A GN and GP Microplate with 95 Carbon Source Utilisation Tests.

GN MicroPlate™

A1 water	A2 α-cyclodextrin	A3 dextrin	A4 glycogen	A5 tween 40	A6 tween 80	A7 N-acetyl-D-galactosamine	A8 N-acetyl-D-glucosamine	A9 adonitol	A10 L-arabinose	A11 D-arabitol	A12 cellobiose
B1 i-erythritol	B2 D-fructose	B3 L-fucose	B4 D-galactose	B5 gentiobiose	B6 α-D-glucose	B7 m-inositol	B8 α-D-lactose	B9 lactulose	B10 maltose	B11 D-mannitol	B12 D-mannose
C1 D-melibiose	C2 β-methyl D-glucoside	C3 D-psicose	C4 D-raffinose	C5 L-rhamnose	C6 D-sorbitol	C7 sucrose	C8 D-trehalose	C9 turanose	C10 xylitol	C11 methyl pyruvate	C12 mono-methyl succinate
D1 acetic acid	D2 cis-aconitic acid	D3 citric acid	D4 formic acid	D5 D-galactonic acid lactone	D6 D-galacturonic acid	D7 D-gluconic acid	D8 D-glucosaminic acid	D9 D-glucuronic acid	D10 α-hydroxybutyric acid	D11 β-hydroxybutyric acid	D12 γ-hydroxybutyric acid
E1 p-hydroxy phenylacetic acid	E2 itaconic acid	E3 α-keto butyric acid	E4 α-keto glutaric acid	E5 α-keto valeric acid	E6 D,L-lactic acid	E7 malonic acid	E8 propionic acid	E9 quinic acid	E10 D-saccharic acid	E11 sebacic acid	E12 succinic acid
F1 bromo succinic acid	F2 succinamic acid	F3 glucuronamide	F4 alaninamide	F5 D-alanine	F6 L-alanine	F7 L-alanyl-glycine	F8 L-asparagine	F9 L-aspartic acid	F10 L-glutamic acid	F11 glycyl-L-aspartic acid	F12 glycyl-L-glutamic acid
G1 L-histidine	G2 hydroxy L-proline	G3 L-leucine	G4 L-ornithine	G5 L-phenylalanine	G6 L-proline	G7 L-pyroglutamic acid	G8 D-serine	G9 L-serine	G10 L-threonine	G11 D,L-carnitine	G12 γ-amino butyric acid
H1 uracanic acid	H2 inosine	H3 uridine	H4 thymidine	H5 phenyl ethylamine	H6 putrescine	H7 2-amino ethanol	H8 2,3-butanediol	H9 glycerol	H10 D,L-α-glycerol phosphate	H11 glucose-1-phosphate	H12 glucose-6-phosphate

GP MicroPlate™

A1 water	A2 α-cyclodextrin	A3 β-cyclodextrin	A4 dextrin	A5 glycogen	A6 inulin	A7 mannan	A8 tween 40	A9 tween 80	A10 N-acetyl-D-glucosamine	A11 N-acetyl-D-mannosamine	A12 amygdalin
B1 L-arabinose	B2 D-arabitol	B3 arbutin	B4 cellobiose	B5 D-fructose	B6 L-fucose	B7 D-galactose	B8 D-galacturonic acid	B9 gentiobiose	B10 D-gluconic acid	B11 α-D-glucose	B12 m-inositol
C1 α-D-lactose	C2 lactulose	C3 maltose	C4 maltotriose	C5 D-mannitol	C6 D-mannose	C7 melezitose	C8 β-methyl D-glucoside	C9 α-methyl D-galactoside	C10 β-methyl D-galactoside	C11 3-methyl glucose	C12 α-methyl D-glucoside
D1 β-methyl D-glucoside	D2 α-methyl D-mannoside	D3 palatinose	D4 D-psicose	D5 D-raffinose	D6 L-rhamnose	D7 D-ribose	D8 salicin	D9 sedoheptulose	D10 D-sorbitol	D11 stachyose	D12 sucrose
E1 D-tagatose	E2 D-trehalose	E3 turanose	E4 xylitol	E5 D-xylose	E6 acetic acid	E7 cis-hydroxybutyric acid	E8 trans-hydroxybutyric acid	E9 β-hydroxybutyric acid	E10 γ-hydroxybutyric acid	E11 α-keto glutaric acid	E12 α-keto valeric acid
F1 lactamide	F2 D-lactic acid methyl ester	F3 L-lactic acid	F4 D-malic acid	F5 L-malic acid	F6 methyl pyruvate	F7 mono-methyl succinate	F8 propionic acid	F9 pyruvic acid	F10 succinamic acid	F11 succinic acid	F12 N-acetyl L-glutamic acid
G1 alaninamide	G2 D-alanine	G3 L-alanine	G4 L-alanyl-glycine	G5 L-asparagine	G6 L-glutamic acid	G7 glycyl-L-glutamic acid	G8 L-pyroglutamic acid	G9 L-serine	G10 putrescine	G11 2,3 butanediol	G12 glycerol
H1 adenosine	H2 2'-deoxy adenosine	H3 inosine	H4 thymidine	H5 uridine	H6 adenosine 5'-monophosphate	H7 thymidine 5'-monophosphate	H8 uridine 5'-monophosphate	H9 glucose 1-phosphate	H10 glucose 6-phosphate	H11 glucose-6-phosphate	H12 D,L-α-glycerol phosphate

Appendix 2 : Identification of Bacterial Isolate K1B1 Based on Biolog's Microlog Computer Programme.

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MICROLOG (TM) 3 RELEASE 3.50

Date          : 31/05/97
Hour          : 24
Plate Type    : GN
Media Type    : MA 2216E
Plate #       : 8
Strain Name   : K1B1
Strain #      : ?
Other Info    : ?
Input Mode    : Reader : BIOLOG MICROSTATION
Data Base     : MicroLog GN

POSITIVE/NEGATIVE DATA
 XXX  = percent change in optical density versus A1 control well
<XXX> = positive, {XXX} = borderline, XXX = negative
-XXX  = percent change negative
 XXX+ = data negative or borderline, "=>" ID choice positive > 90% of time
 XXX- = data positive or borderline, "=>" ID choice positive < 10% of time

      1      2      3      4      5      6      7      8      9      10     11     12
   +-------------------------------------------------------------------------------
A  |   0      9   { 45-    34    -23    -31     5   < 67-     9   { 55-  { 28-    31
B  |   0   < 60> { 30-  < 58>    16   < 73>  -11     21      9   < 60>    17   < 53>
C  |  14      8   < 70>    3      4     26   { 29}   10   { 50}    3    < 58> { 38}
D  | { 37+    8     -1    -23     7     25     12      4     15     -19   < 83>  18
E  |  -52   -43    -12     32     5   < 59>    2   { 44}    10      9    -68   < 61>
F  | { 29+ < 79>     8   < 63>    19   { 36} < 49> < 63> { 38} < 67>    12   { 32-
G  |  -2      0     -4      8     2     11     29     -8   < 77>  -11     12     17
H  |  30   < 53> { 35} { 44+   -33     13     -2      6     21      7     13     27

 BIO-NUMBER : 1024-2505-1012-0002-0121-2464-0010-2400


  SPECIES IDENTIFICATION     : DELEYA AESTA

   CLOSEST SPECIES :.............................SIM....DIST...AVG....MAX
=> 1)  DELEYA AESTA                               0.798  3.035  1.250  3.313
   2)  XANTHOMONAS CAMPESTRIS PV VITIANS C        0.000  6.039  0.500  2.088
   3)  VIBRIO HOLLISAE                            0.000  6.171  0.906  3.881
   4)  XANTHOMONAS ORYZAE PV ORYZICOLA B          0.000  6.182  1.047  4.153
   5)  JANTHINOBACTERIUM LIVIDUM A                0.000  6.686  0.625  4.137
   6)  SUTTONELLA INDOLOGENES                     0.000  6.892  0.417  5.637
   7)  JANTHINOBACTERIUM LIVIDUM B                0.000  7.149  0.688  2.931
   8)  VIBRIO ORDALII                             0.000  7.166  0.208  2.325
   9)  XANTHOMONAS CAMPESTRIS PV VESICATORIA B    0.000  7.239  1.500  2.725
  10)  XANTHOMONAS CAMPESTRIS PV TRANSLUCENS      0.000  7.448  0.688  2.737
   other :                                        -----  -----  -----  -----
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Appendix 3 : Identification of Bacterial Isolate M1B26 Based on Biolog's Microlog Computer Programme.

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MICROLOG (TM) 3 RELEASE 3.50

Date          : 31/05/97
Hour          : 24
Plate Type    : GN
Media Type    :  MA 2216E
Plate #       : 15
Strain Name   : M1B26
Strain #      : ?
Other Info    : ?
Input Mode    : Reader : BIOLOG MICROSTATION
Data Base     : MicroLog GN

POSITIVE/NEGATIVE DATA
 XXX  = percent change in optical density versus A1 control well
<XXX> = positive, {XXX} = borderline, XXX = negative
-XXX  = percent change negative
 XXX+ = data negative or borderline, "=>" ID choice positive > 90% of time
 XXX- = data positive or borderline, "=>" ID choice positive < 10% of time

     1      2      3      4      5      6      7      8      9     10     11     12
  +------------------------------------------------------------------------------
A |    0     10  { 61- { 41-   -26   -43     10  { 58-     8 <102- { 29- { 46-
B |   -5  < 77> { 23- { 47}     2  < 75>   -2     17     27  { 51}     3  < 70>
C |   17     14  { 68}     6     3  { 31- { 42}     4  { 66}     11  < 80> { 38}
D | { 38+    11      1   -31     3     25     10     1      12    -5  <116>    11
E |  -46   -34     -1     34     9  { 47+     9  { 42}     11     9    -55  < 79>
F | { 39+ < 74>     3  < 72>    20  { 46} { 37} < 88>     27  <107>     14  { 39-
G |    4    -4     -8      3    -6     23  { 44-     18  <107>     14     13     10
H |   27  { 57} { 37} { 52+   -25      8      5     -5  { 28-     14     19  { 44-

 BIO-NUMBER : 1024-2505-1012-0002-0001-2424-0010-2400


  SPECIES IDENTIFICATION     : DELEYA AESTA

   CLOSEST SPECIES :.....................SIM....DIST...AVG....MAX
=> 1)  DELEYA AESTA                      0.874  1.851  1.250  3.313
   2)  XANTHOMONAS ORYZAE PV ORYZICOLA B 0.001  4.182  1.047  4.153
   3)  JANTHINOBACTERIUM LIVIDUM B       0.001  4.315  0.688  2.931
   4)  XANTHOMONAS CAMPESTRIS PV VITIANS C 0.000  4.779  0.500  2.088
   5)  BRUCELLA ABORTUS STRAIN 19        0.000  4.829  0.646  2.769
   6)  AEROMONAS DNA GROUP 11            0.000  5.140  0.813  3.819
   7)  BRUCELLA ABORTUS BIOVAR 2         0.000  5.159  1.563  5.563
   8)  JANTHINOBACTERIUM LIVIDUM A       0.000  5.395  0.625  4.137
   9)  VIBRIO HOLLISAE                   0.000  5.421  0.906  3.881
  10)  PSEUDOMONAS BEIJERINCKII          0.000  5.492  0.083  2.350
   other :                               -----  -----  -----  -----
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Appendix 4 : Identification of Bacterial Isolate M1B29 Based on Biolog's Microlog Computer Programme.

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MICROLOG (TM) 3 RELEASE 3.50

Date         : 31/05/97
Hour         : 24
Plate Type   : GN
Media Type   :  MA 2216E
Plate #      : 3
Strain Name  : M1B29
Strain #     : ?
Other Info   : ?
Input Mode   : Reader : BIOLOG MICROSTATION
Data Base    : MicroLog GN

POSITIVE/NEGATIVE DATA
 XXX  = percent change in optical density versus A1 control well
<XXX> = positive, {XXX} = borderline, XXX = negative
-XXX  = percent change negative
 XXX+ = data negative or borderline, "=>" ID choice positive > 90% of time
 XXX- = data positive or borderline, "=>" ID choice positive < 10% of time

      1      2      3      4      5      6      7      8      9     10     11     12
   +-------------------------------------------------------------------------------
A  |   0     19     31     19  { 37}   -2    -10      3     14  { 38-  { 60}   28
B  |   8  < 92>    11  { 59}    6  <101>  { 47}    11  { 41}  { 64}  < 82>  { 52}
C  |   5     -7  { 79}    5      8     11      3      8  { 46}   10  < 90>  { 39+
D  |  22  { 60}  { 67}   -1     22     15  { 76+     7     -7     -1  < 98>  { 32}
E  | -27    -52      2  { 72}   -1  { 50}  { 47-  { 46-     15      3    -31  { 57+
F  | < 86> < 82>      2  { 33-  { 53+  { 42}  < 82> < 78> < 85>  { 78+    19  < 88>
G  |   8     -3     26  { 45-     7  { 53}  { 45}    6  { 65}   22     16  { 45}
H  |  -4  { 68}  { 47}   10    -23     16     24     18  { 74+   25      1     15

 BIO-NUMBER : 0002-2507-1002-3042-0400-6275-0010-2010


  SPECIES IDENTIFICATION     : DELEYA MARINA

    CLOSEST SPECIES :.............................SIM....DIST...AVG....MAX
=>  1)  DELEYA MARINA                              0.975  0.373  1.125  3.475
    2)  ALCALIGENES FAECALIS SS HOMARI             0.000  3.741  0.750  2.338
    3)  DELEYA AESTA                               0.000  4.389  1.250  3.313
    4)  ACINETOBACTER CALCOACETICUS/GEN  1         0.000  4.574  0.750  2.900
    5)  XANTHOMONAS BROWN BLOTCH                   0.000  4.722  0.750  1.106
    6)  BURKHOLDERIA SOLANACEARUM B                0.000  4.759  0.250  3.313
    7)  PSYCHROBACTER IMMOBILIS                    0.000  4.833  1.438  3.397
    8)  ACIDOVORAX FACILIS A                       0.000  4.845  0.363  2.244
    9)  JANTHINOBACTERIUM LIVIDUM B                0.000  4.883  0.688  2.931
   10)  XANTHOMONAS CAMPESTRIS PV VITIANS C        0.000  5.020  0.500  2.088
    other :                                        -----  -----  -----  -----
```