

1. Gram negative.....	2
Gram positive.....	8
2. Cocci.....	<i>Neisseria meningitidis.</i>
Bacilli.....	3
3. Oxidase positive.....	Enterobacteriaceae
Oxidase negative.....	4
4. Glucose fermentation with acid, no gas.....	<i>Pseudomonas sp.</i>
Glucose fermentation with acid and gas.....	5
5. Motile.....	6
Non motile.....	<i>Aeromonas sp.</i>
6. Maltose fermentation with acid and gas.....	<i>Escherichia sp.</i>
Maltose not fermented	7
7. H ₂ S production positive	<i>Citrobacter sp.</i>
H ₂ S production negative	<i>Klebsiella pneumoniae</i>
8. Cocci.....	12
Bacilli.....	9
9. Spore forming.....	10
Non spore forming.....	11
10. Obligate anaerobe.....	<i>Clostridium sp.</i>
Obligate aerobic or facultative.....	<i>Bacillus sp.</i>
11. Catalase positive.....	<i>Lactobacillus sp.</i>
Catalase negative.....	<i>Corynebacterium sp.</i>
12. Catalase positive.....	13
Catalase negative.....	15
13. Mannitol fermentation.....	<i>Staphylococcus aureus</i>
No mannitol fermentation	14
14. Glucose fermentation.....	<i>Micrococcus luteus</i>
No glucose fermentation.....	<i>Staphylococcus epidermidis</i>
15. Indol positive.....	<i>Streptococcus pyogenes</i>

16. Indol negative.....*Streptococcus pneumonia*

Enterobacteriaceae

1. Lactose fermentation with acid and gas.....2
Lactose fermentation negative.....*Yersinia pestis*
2. Indole positive.....3
Indole negative.....5
3. Citrate positive.....4
Citrate negative.....*Escherichia coli*
4. H₂S negative.....*Klebsiella oxytoca*
H₂S positive.....Unknown *Escherichia* species (see note)
5. Trehalose fermentation negative.....Unknown *Yersinia* species
(see note)
Trehalose fermentation with acid and gas*Proteus mirabilis*

Pseudomonas sp.

1. Motile.....2
Non motile.....*Pseudomonas cichorii*
2. Methyl red negative.....3
Methyl red positive.....8
3. Indol negative4
Indol positive.....9
4. Voges-Proskauer negative5
Voges-Proskauer positive Unknown *Pseudomonas sp.* (see note)
5. H₂S positive6
H₂S negative.....7

- 6. Lipase negative.....*Pseudomonas aeruginosa*
Lipase positive.....*Pseudomonas putida*
- 7. Starch hydrolysis negative*Pseudomonas syringae*
Starch hydrolysis positiveUnknown *Pseudomonas sp.* (see note)
- 8. Obligate aerobe.....*Pseudomonas chlororaphis*
Obligate anaerobe..... Unknown *Pseudomonas sp.* (see note)
Facultative anaerobe.....*Pseudomonas fluorescens*
- 9. Optimal temperature 37°C..... *Pseudomonas tutzeri*
Optimal temperature 45°C.....*Pseudomonas pseudoalcaligenes*

Bacillus sp.

- 1. Starch hydrolysis positive.....2
Starch hydrolysis negative.....6
- 2. Voges-Proskauer negative3
Voges-Proskauer positive Unknown *Bacillus sp.* (see note)
- 3. Cell diameter > 1 um.....4
Cell diameter < 1 um.....*Bacillus anthracis*
- 4. Citrate negative.....*Bacillus polymxa*
Citrate positive.....5
- 5. Nitrate reduction.....*Bacillus subtilis*
No nitrate reduction.....*Bacillus licheniformis*
- 6. Catalase positive.....7
Catalase negative.....8
- 7. Nitrate reduction*Bacillus pasteurii*
No nitrate reduction.....*Bacillus sphaericus*
- 8. Citrate positive Unknown *Bacillus sp.* (see note)
Citrate negative*Bacillus larvae*