

DICHOTOMOUS KEY FOR IDENTIFICATION OF UNKNOWNNS

I. Gram Stain

A. Gram-positive

1. If cocci → Go to II
2. If bacilli → Repeat Gram stain; unknowns do not include Gram-positive bacilli

B. Gram-negative

1. If cocci → Repeat Gram stain; unknowns do not include Gram-negative cocci
2. If bacilli → Go to VI

II. Catalase Test

A. Catalase (+) → Go to III

B. Catalase (–) → Go to IV

III. Coagulase Test

A. Coagulase (+) → *Staphylococcus aureus*; confirm by growth and fermentation on MSA

B. Coagulase (–) → *Staphylococcus epidermidis*; confirm by growth on MSA

IV. Bile Esculin Test

A. Bile esculin (+) → *Enterococcus faecalis*; confirm by gamma hemolysis on BAP

B. Bile esculin (–) → Go to V

V. CAMP Test

A. CAMP (+) → *Streptococcus agalactiae*

B. CAMP (–) → *Streptococcus salivarius*; confirm by alpha hemolysis on BAP

VI. Nitrate Reduction

A. Nitrate (+) → Go to VII

B. Nitrate (–) → Go to VIII

VII. Oxidase Test

A. Oxidase (+) → Go to VIII

B. Oxidase (–) → Proceed with IMViC and urease testing; consult Table 10.1 to confirm

VIII. Cetrinide Agar

A. Heavy growth → *Pseudomonas aeruginosa*; confirm by UV and pyocyanin pigment

B. Poor to no growth → *Alcaligenes faecalis*