

Identification flow charts

Bergey's Manual of Determinative Bacteriology

All of the unknowns will fall into the following groups in Bergey's Manual of Determinative Bacteriology (The pink book on the shelf in the laboratory).

GROUP 4

Description: Gram Negative, Aerobic/Microaerophilic rods and cocci

Key differences are: pigments/fluorescent, motility, growth requirements, denitrification, morphology, and oxidase, read Genera descriptions

Examples: *Acinetobacter*, *Pseudomonas*, *Beijerinckia*, *Acetobacter*

GROUP 5

Description: Facultatively Anaerobic Gram negative rods

Key differences are: growth factors, morph., gram rxn., oxidase rxn., read Genera descriptions

Examples: Family Enterobacteriaceae and Vibrionaceae

GROUP 17

Description: Gram-Positive Cocci

Key differences are: oxygen requirements, morph., growth requirements (45°C and supplements), read Genera descriptions

Examples: *Micrococcus*, *Staphylococcus*, *Streptococcus*, *Enterococcus*, *Lactococcus*, *Aerococcus*

GROUP 18

Description: Endospore-Forming Gram positive rods and cocci

Key differences are: oxygen requirements, motility, morph, catalase

Examples: *Bacillus*, *Clostridium*

GROUP 19

Description: Regular, Nonsporulating Gram positive rods

Key differences are: morph., oxygen require, catalase

Examples: *Lactobacillus*, *Listeria*

GROUP 20

Description: Irregular, Nonsporulating Gram-positive rods

Key differences are: catalase, motility, morph., read Genera descriptions

Examples: *Actinomyces*, *Corynebacterium*, *Arthrobacter*, *Propionibacterium*

GROUP 21

Description: Weakly Gram-Positive Nonsporulating Acid Fast Slender Rods

Key differences are: acid fast, growth

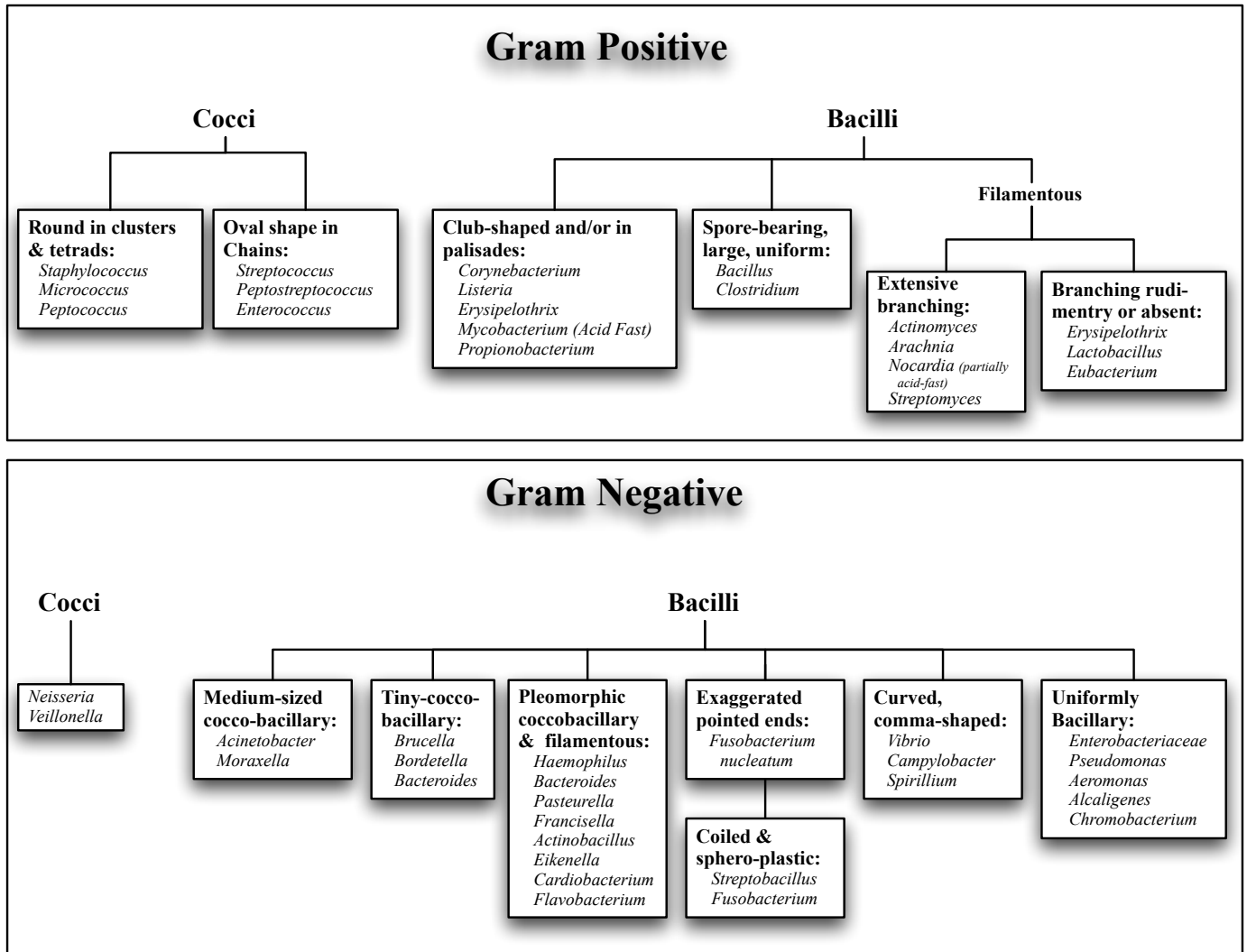
Examples: *Mycobacterium*

Identification flow charts

Differentiation via Gram stains and cell morphology.

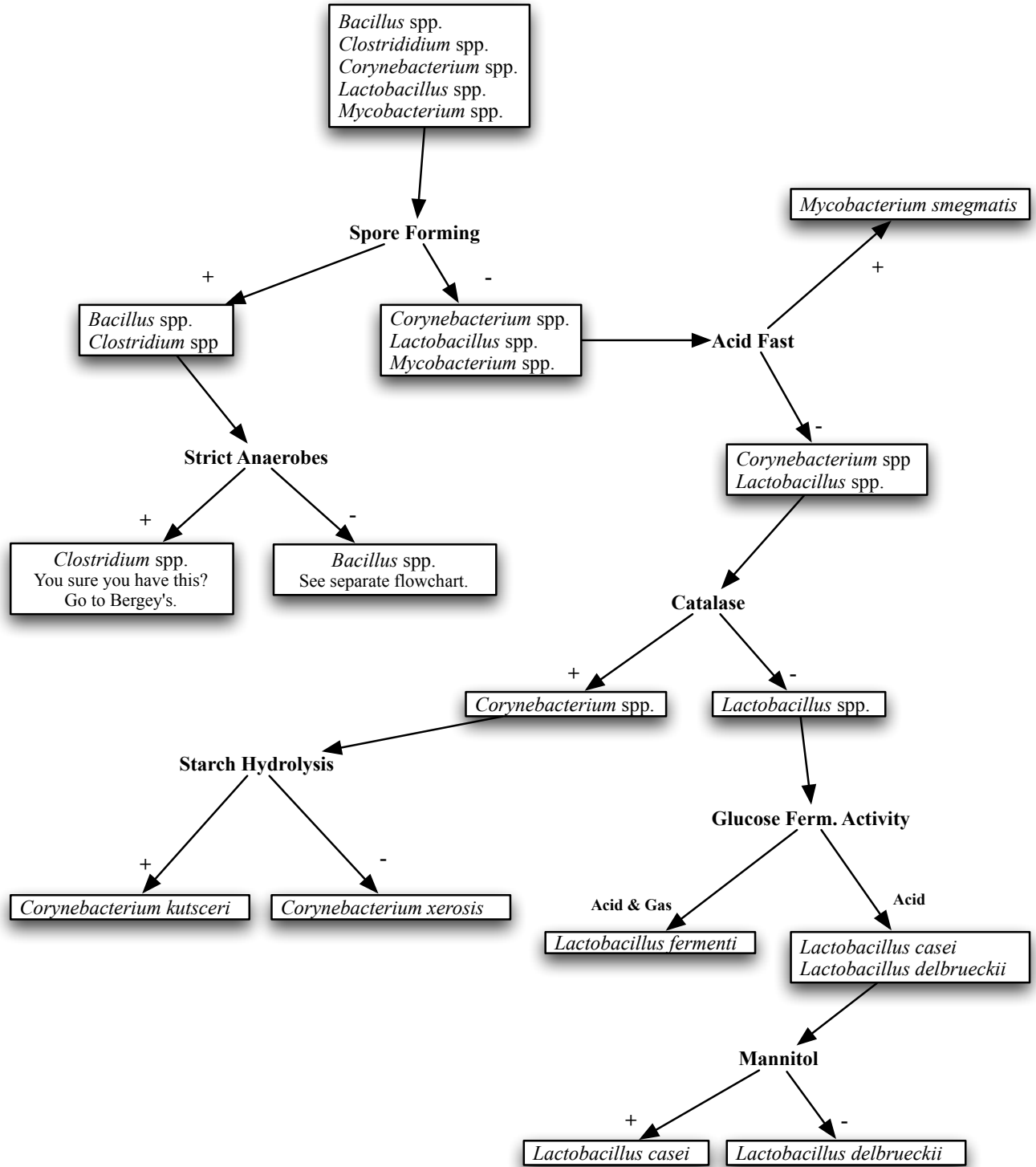
Gram Stain & Morphological Flowchart

Some Examples



Gram Positive Rods ID Flowchart

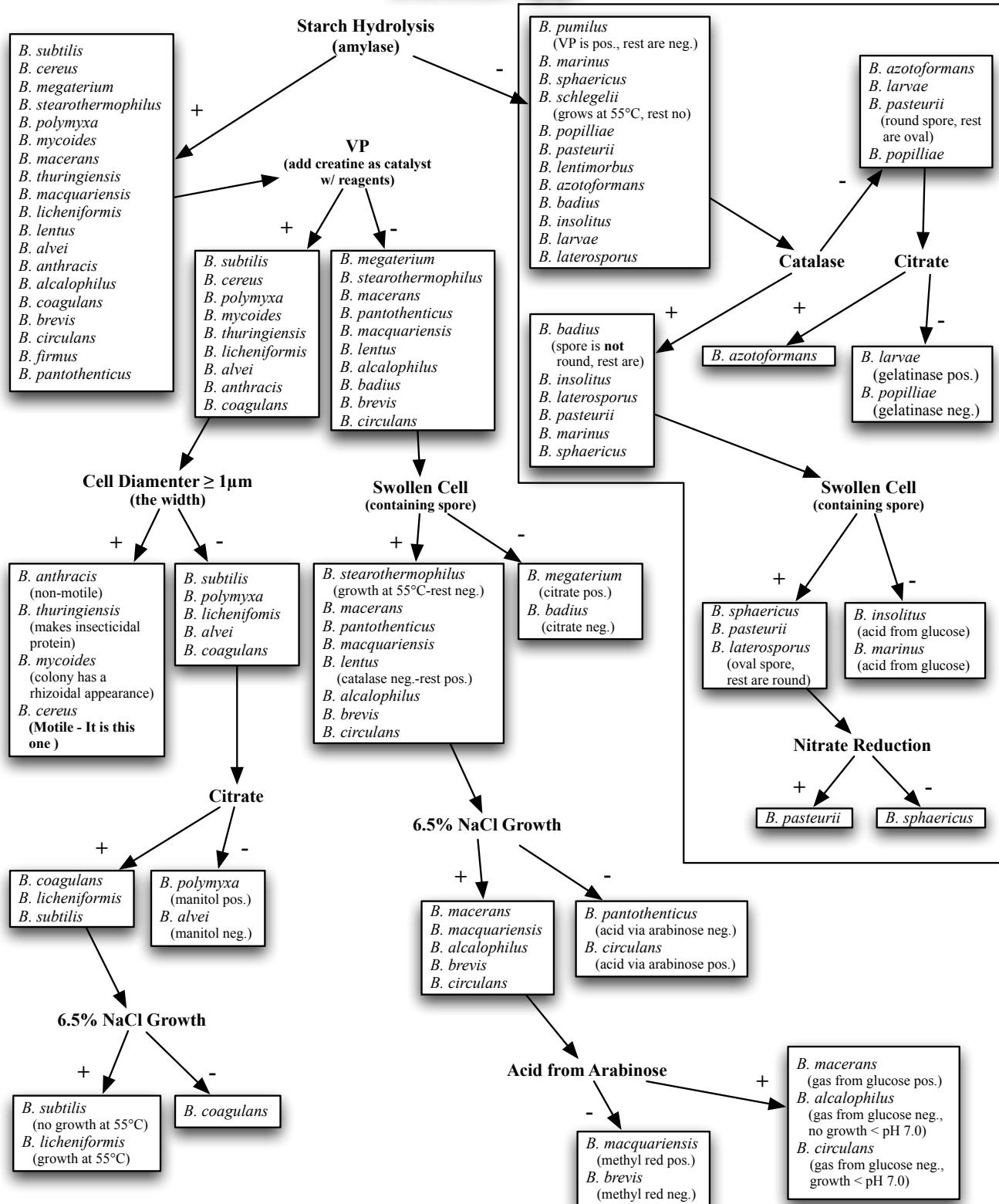
Gram Positive Rods



Identification flow charts

Bacillus spp. ID Flowchart

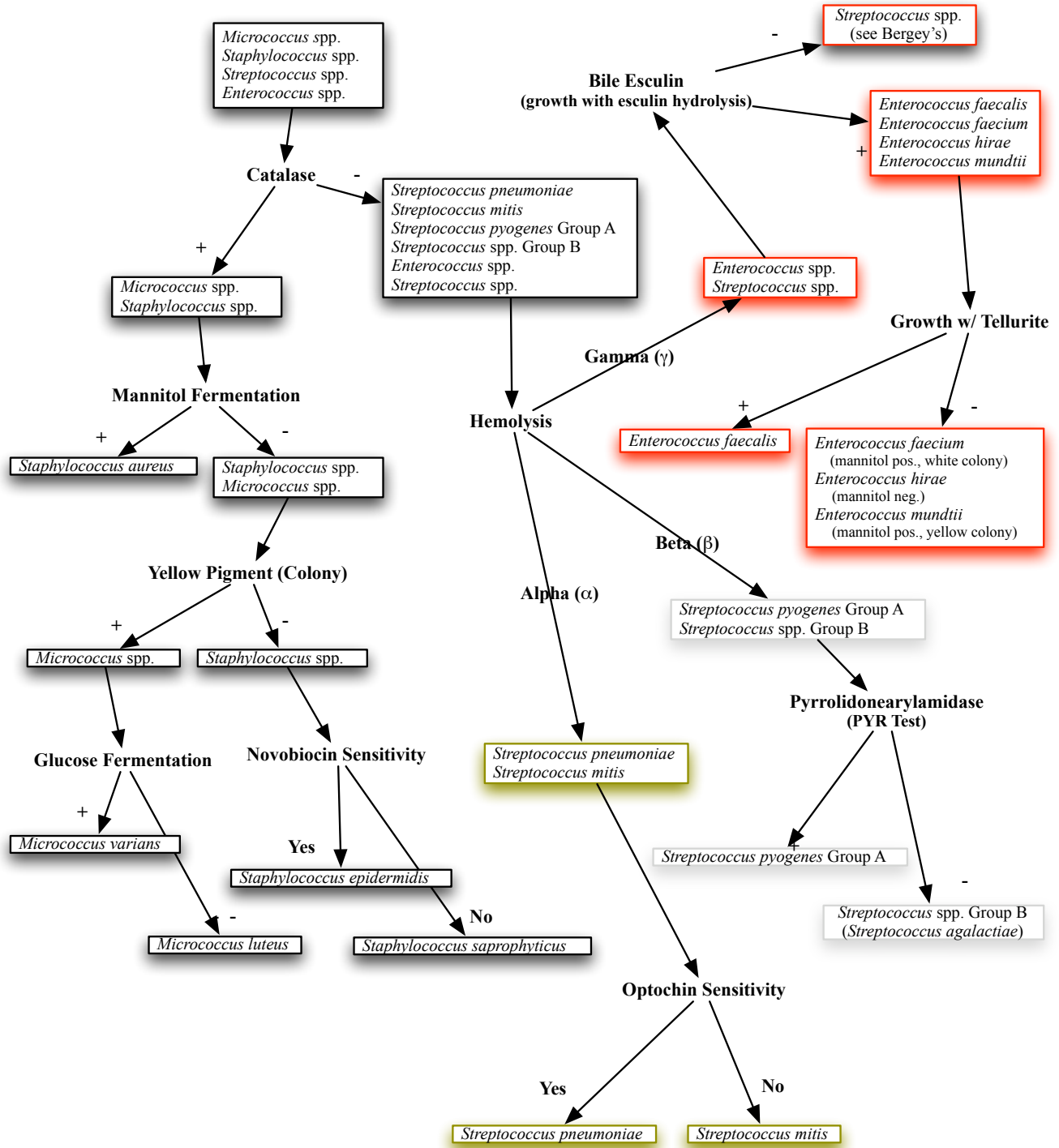
Bacillus spp.



Identification flow charts

Gram Positive Cocci ID Flowchart

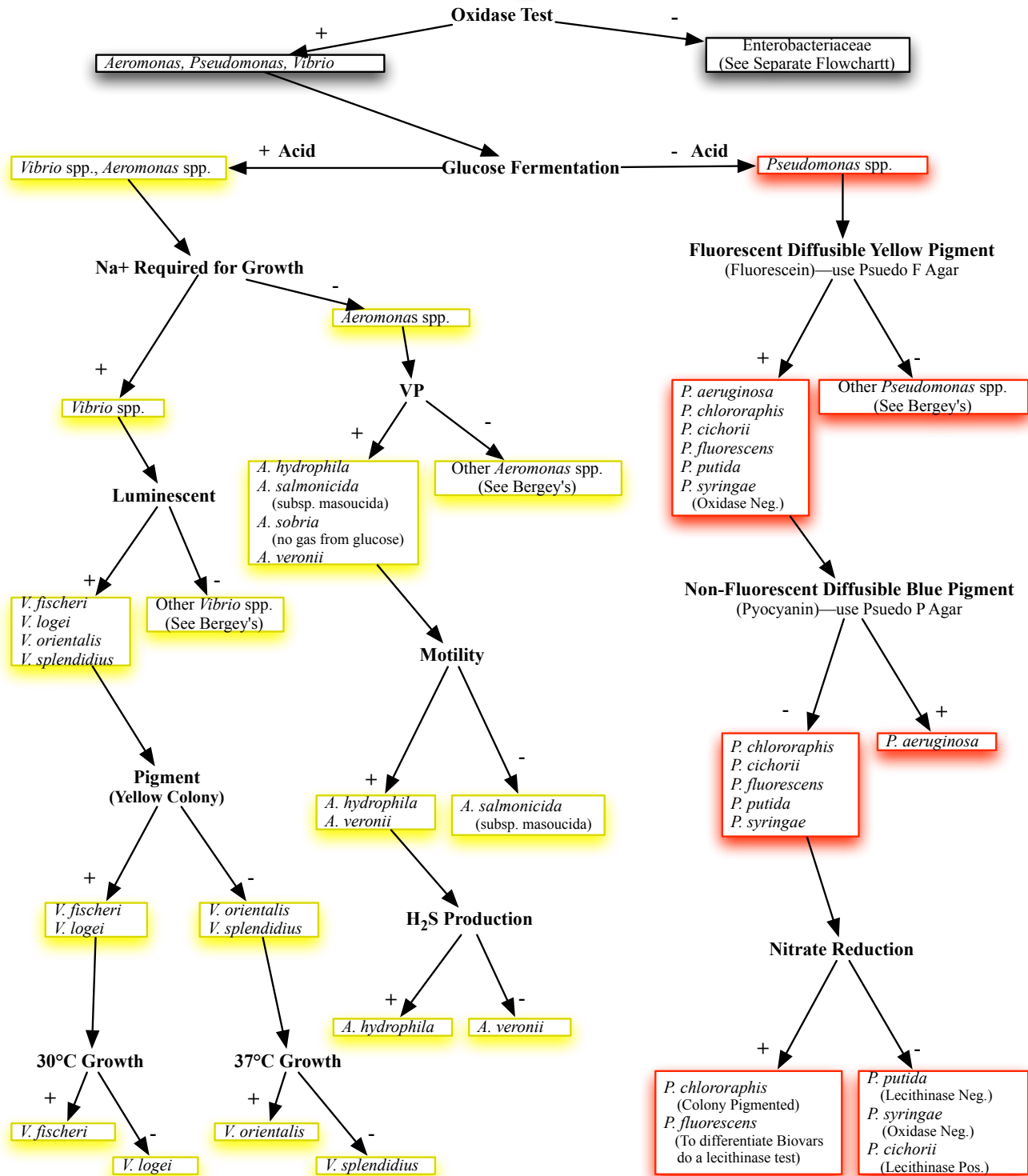
Gram Positive Cocci



Identification flow charts

Gram Negative Rods ID Flowchart

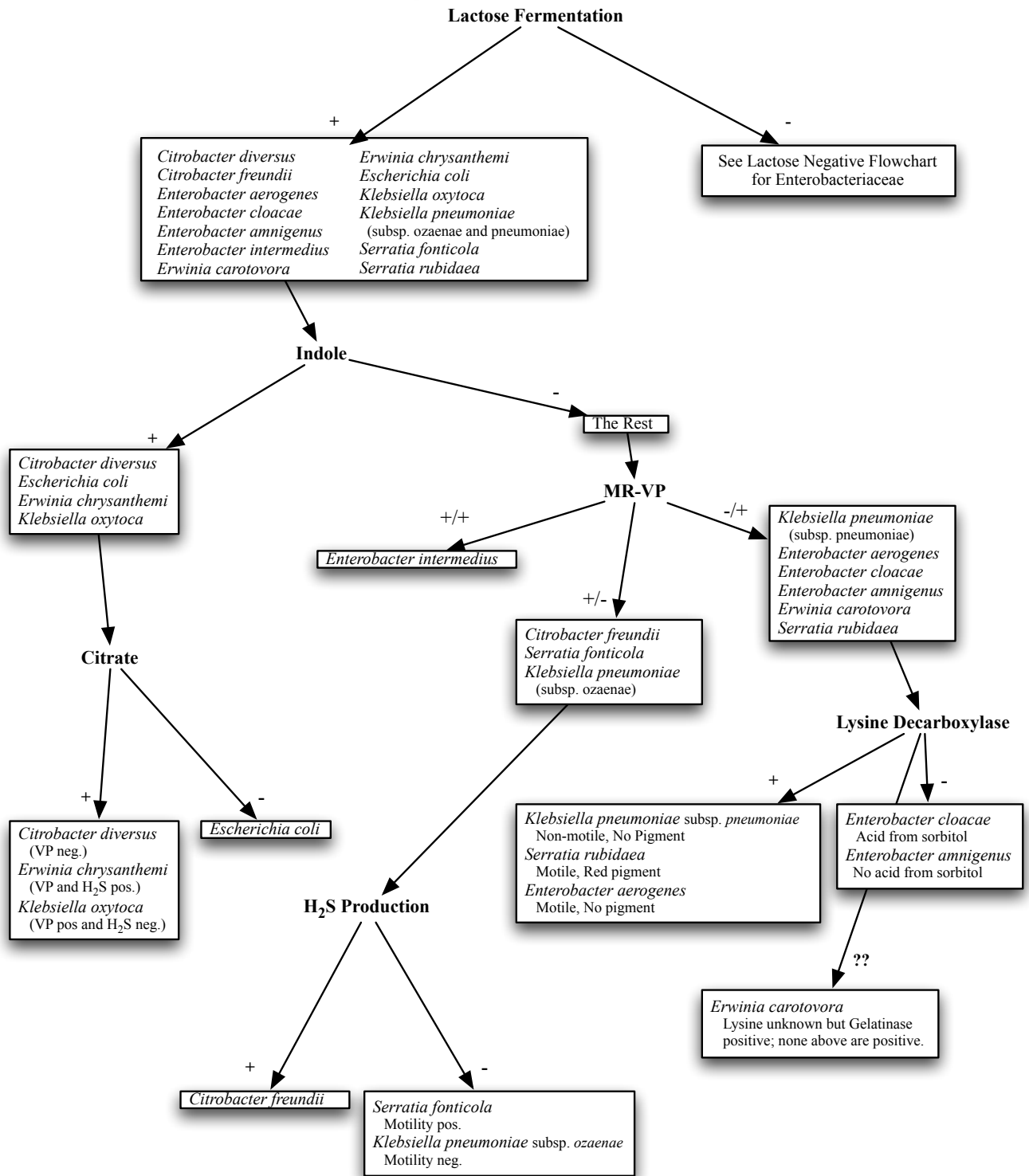
Gram Negative Rods



Identification flow charts

Family Enterobacteriaceae Lactose Positive ID Flowchart

Family Enterobacteriaceae



Identification flow charts

Family Enterobacteriaceae Lactose Negative ID Flowchart

Family Enterobacteriaceae Continued
Lactose Negative Flow Chart

