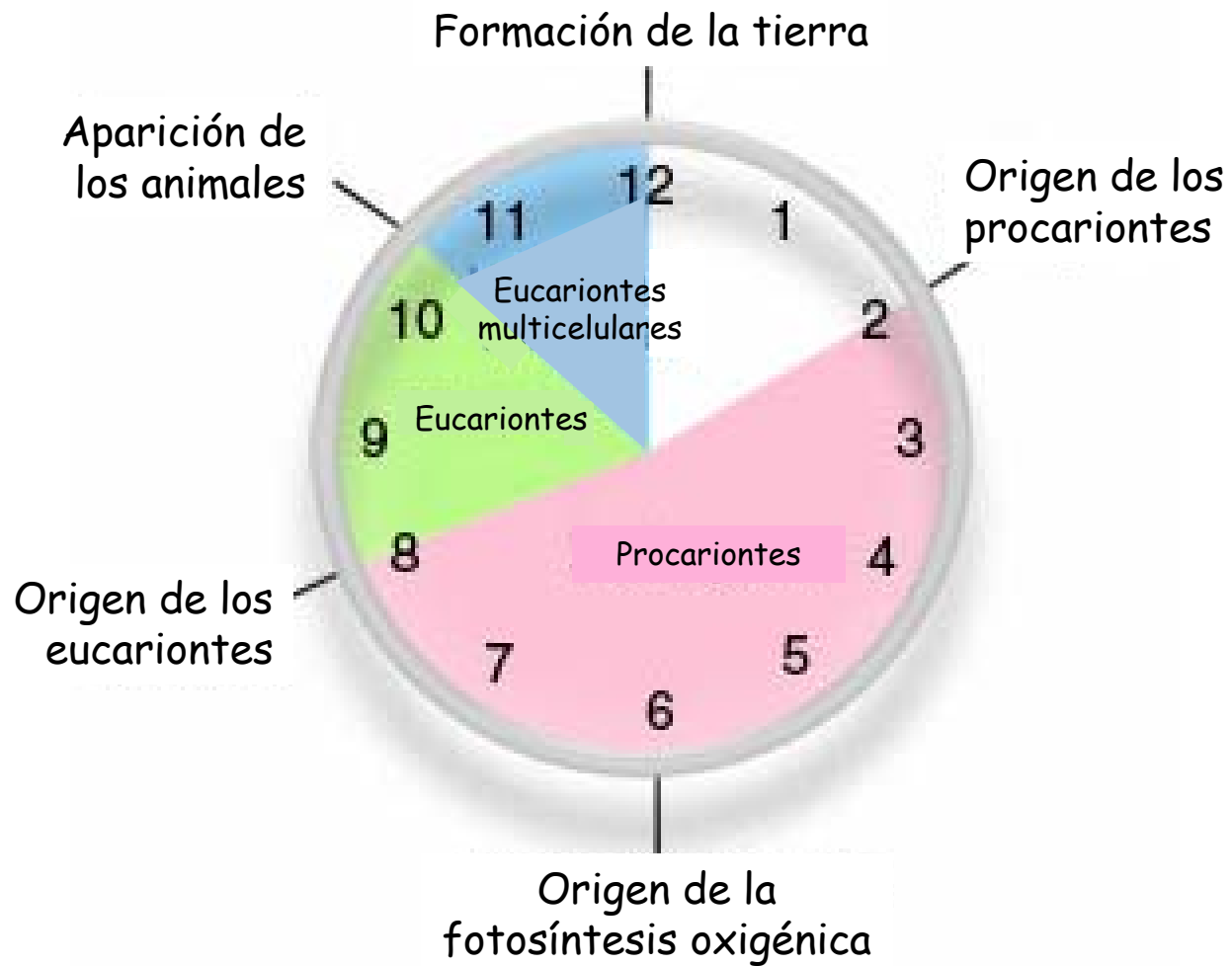


Microbiología General 2006 - 2007

Grupos de microorganismos
importantes en agronomía



Taxonomía y filogenia

Identificación
Clasificación
Nomenclatura

Historia evolutiva de los
microorganismos

Clasificación
filogenética

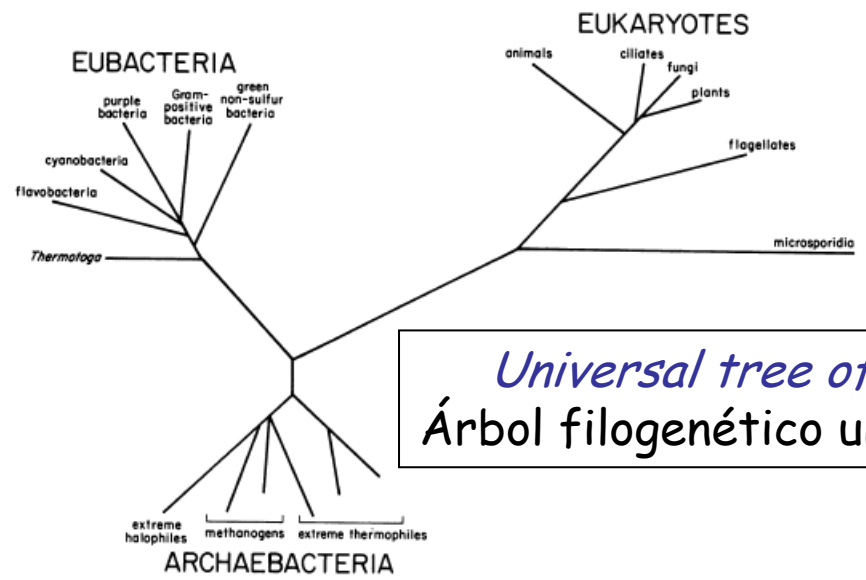
Clasificación que refleja la historia
evolutiva de los microorganismos

basada en comparación de
secuencias de

RNA 16S

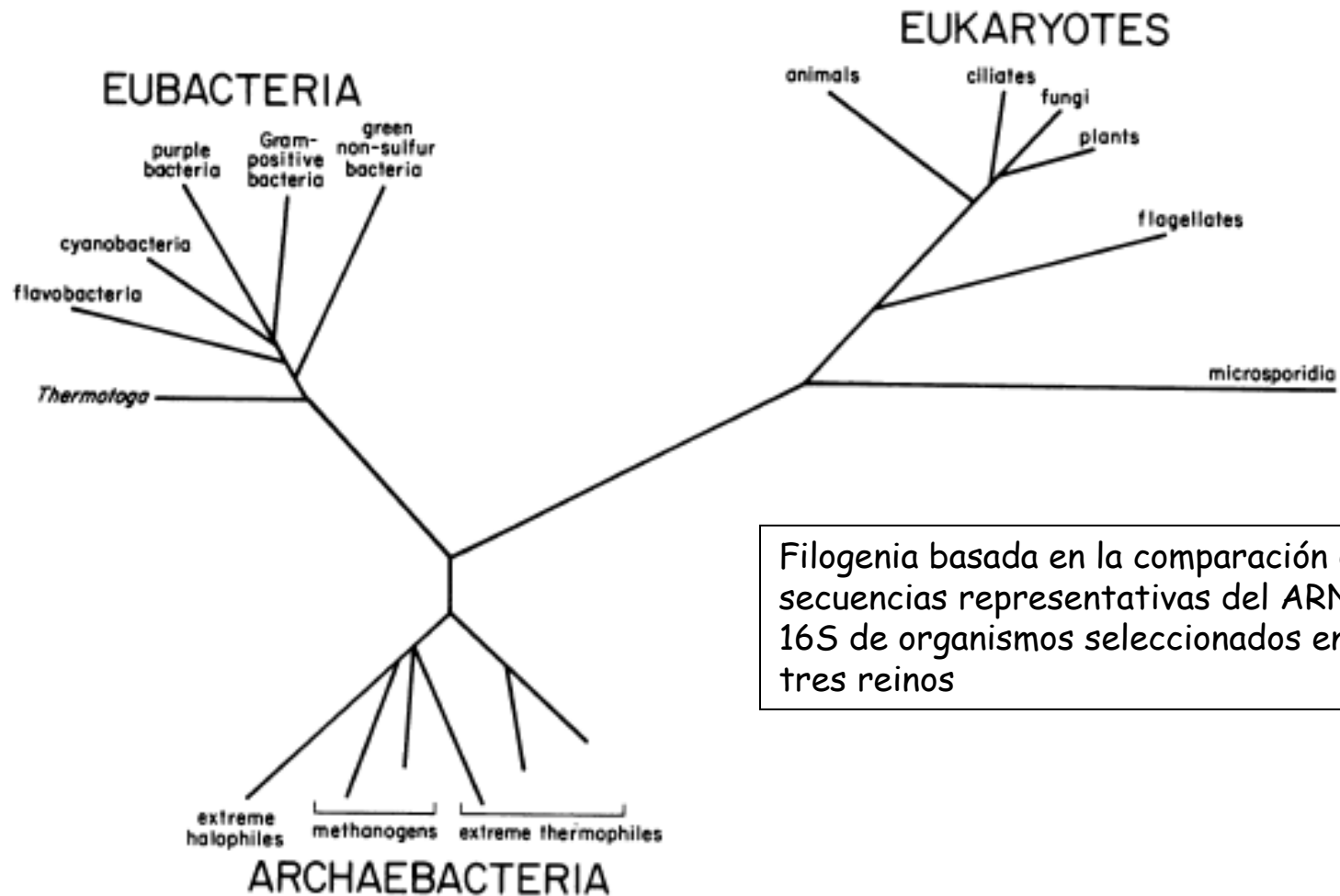
Genomas

Grupos de
genes



Universal tree of life
Árbol filogenético universal

Universal tree of life
Árbol filogenético universal

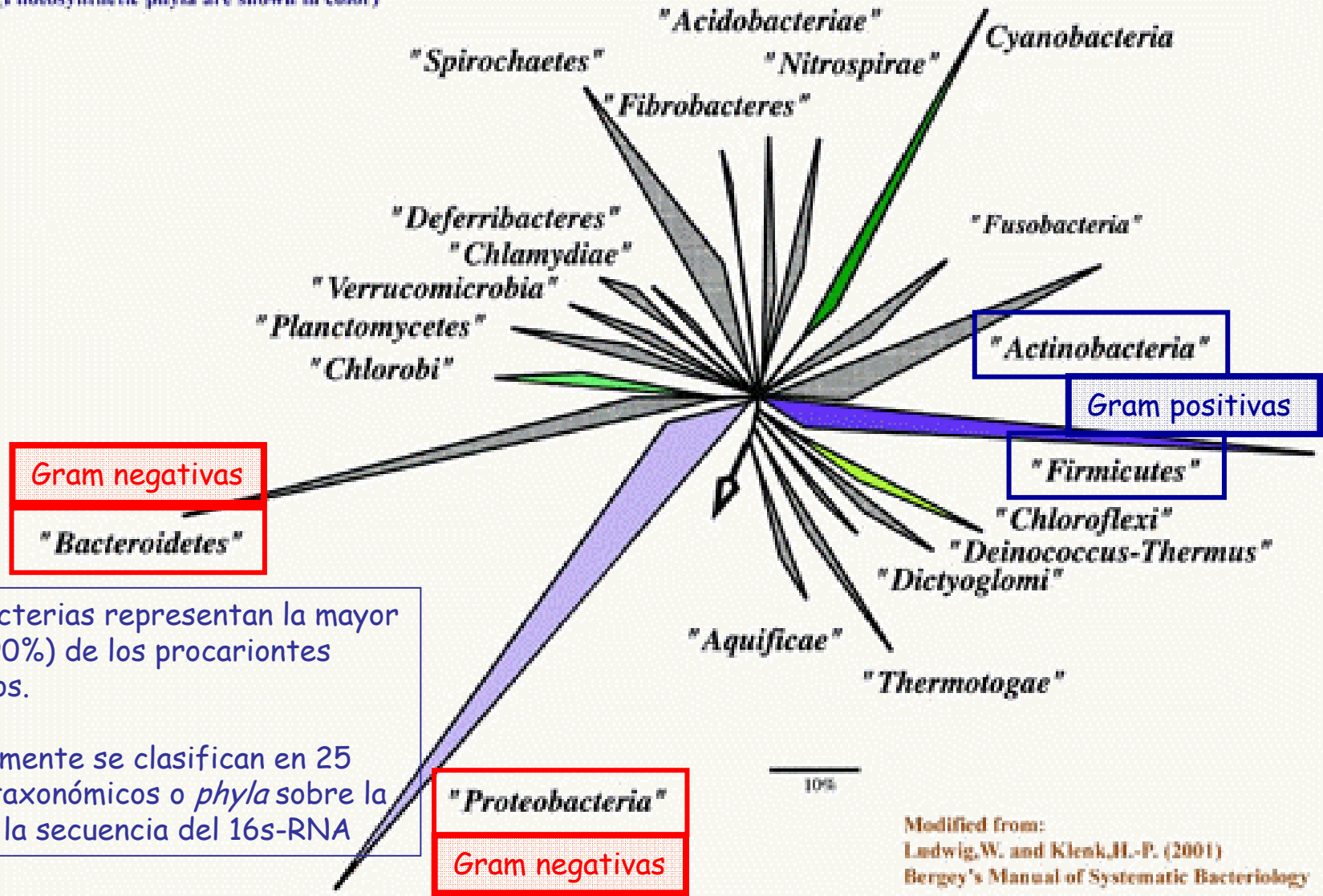


Filogenia basada en la comparación de secuencias representativas del ARN 16S de organismos seleccionados en los tres reinos

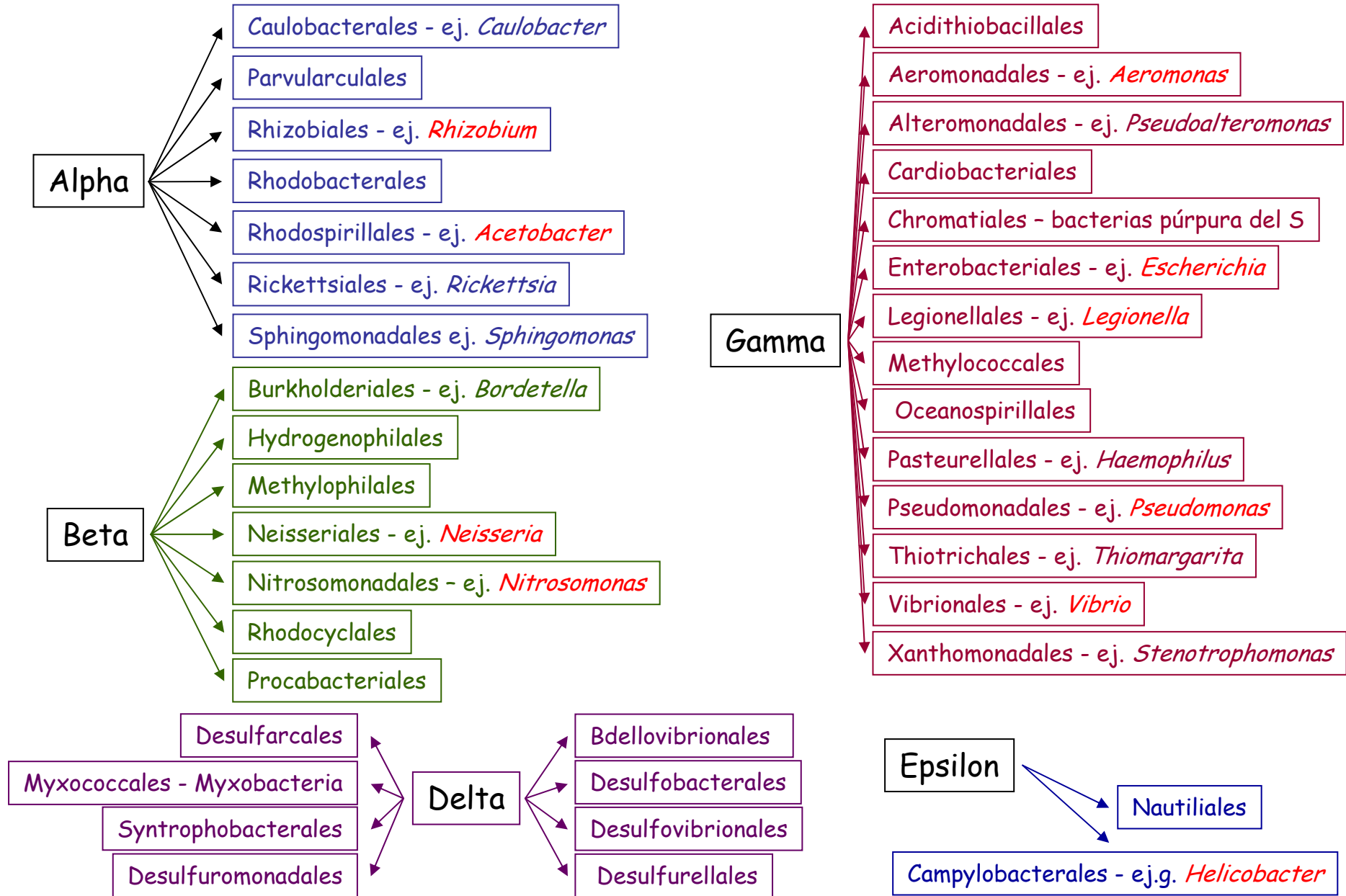
El Reino *Archaeobacteria* pasó a denominarse *Archaea* con posterioridad a la publicación de este trabajo

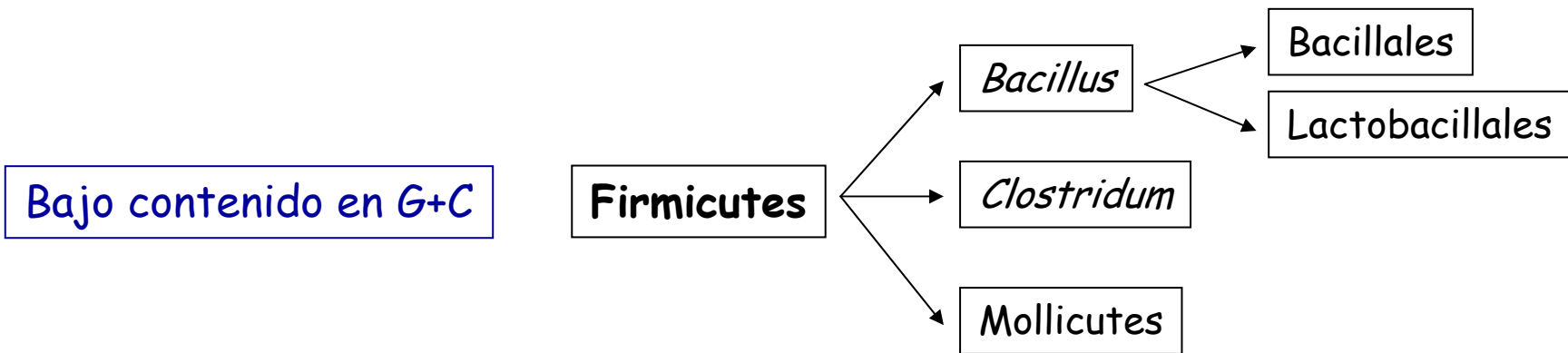
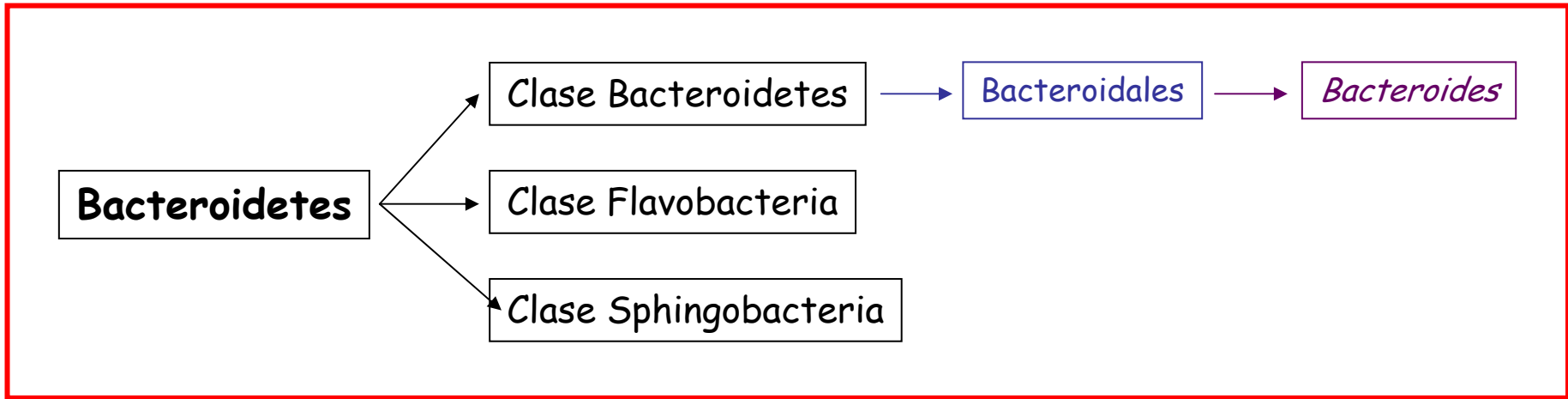
16S rRNA Tree

(Photosynthetic phyla are shown in color)



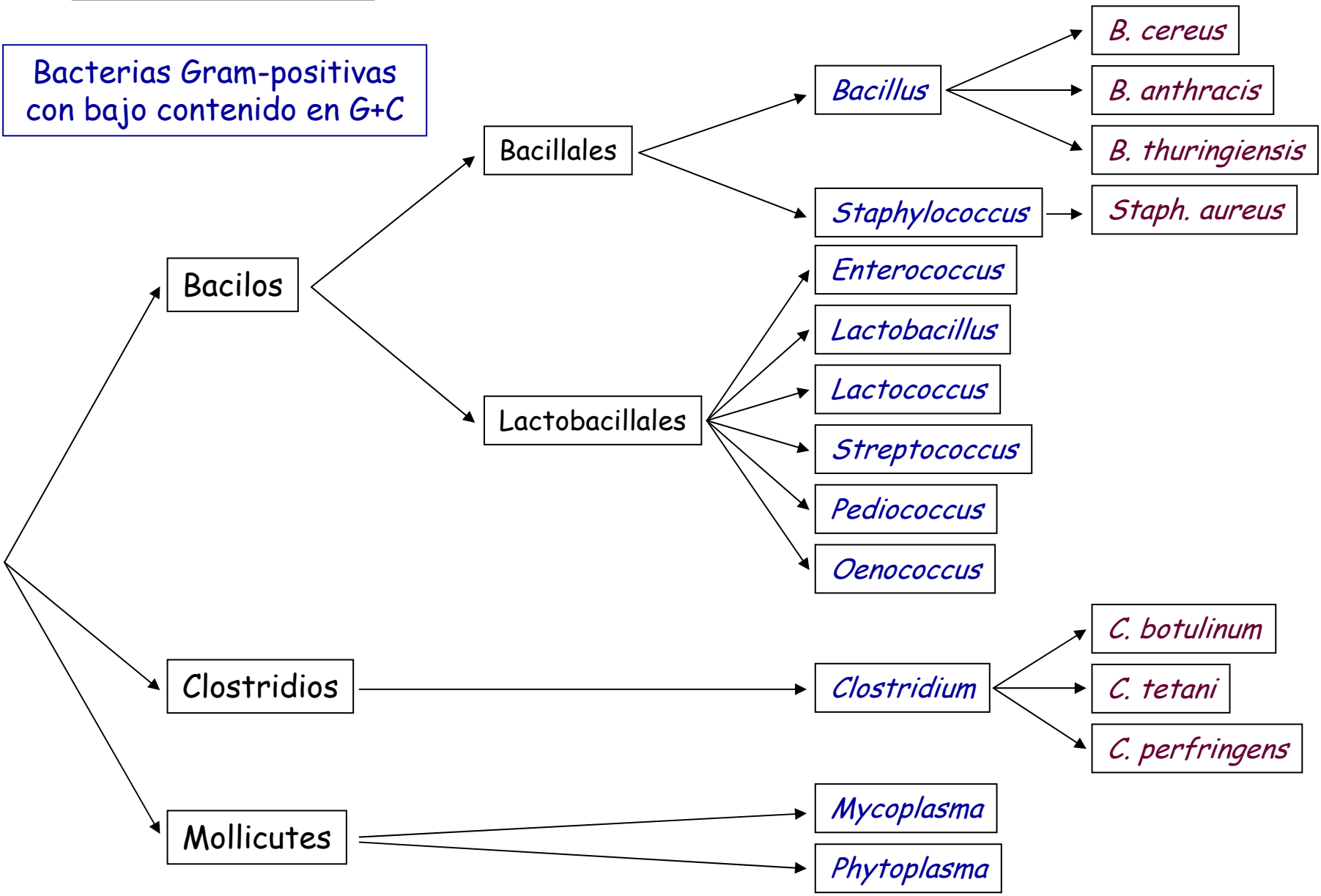
Proteobacterias





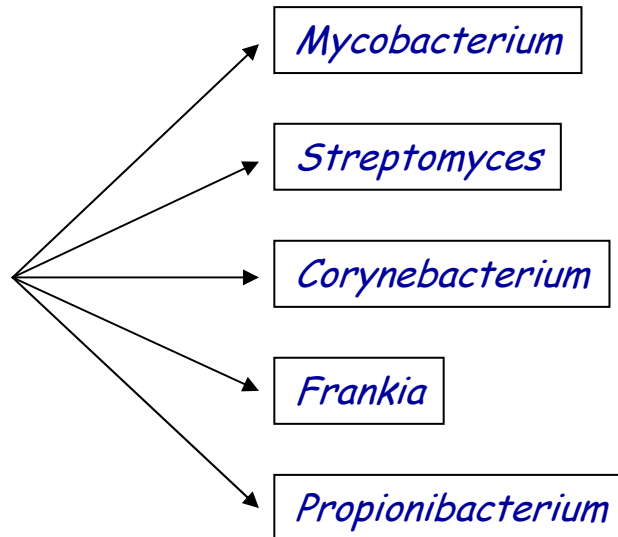
Firmicutes

Bacterias Gram-positivas
con bajo contenido en G+C

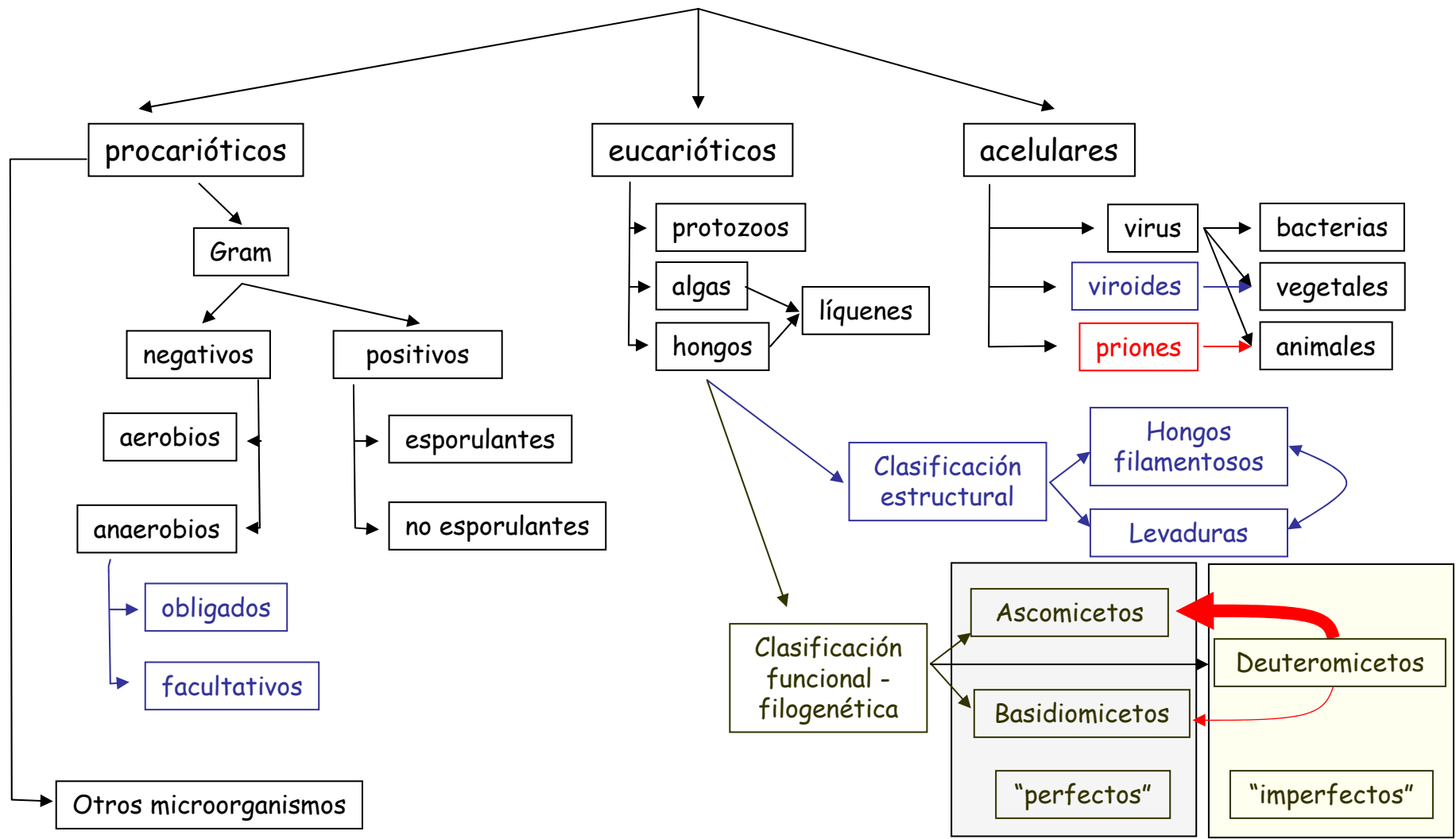


Actinobacteria

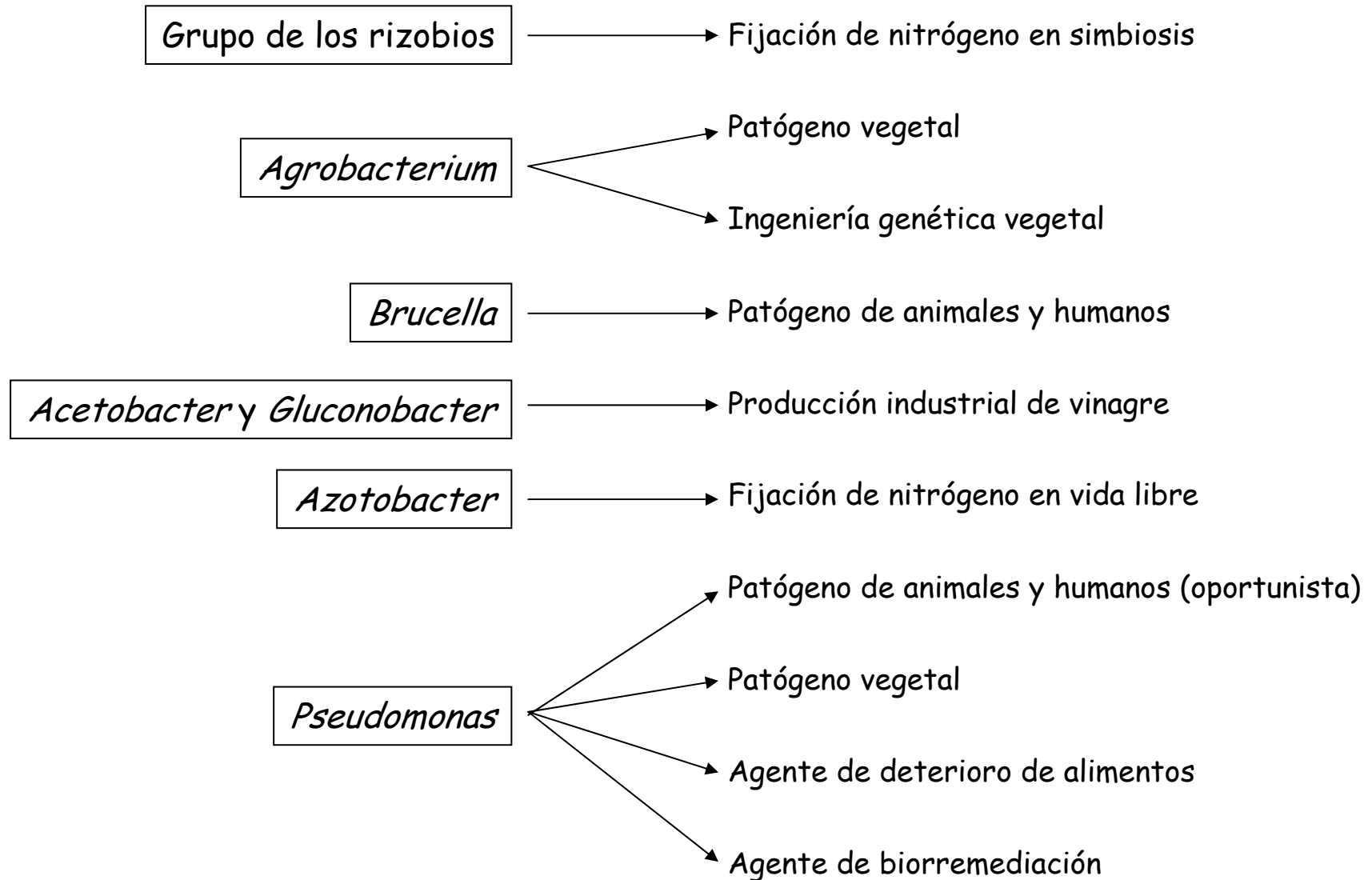
Bacterias Gram-positivas
con alto contenido en G+C



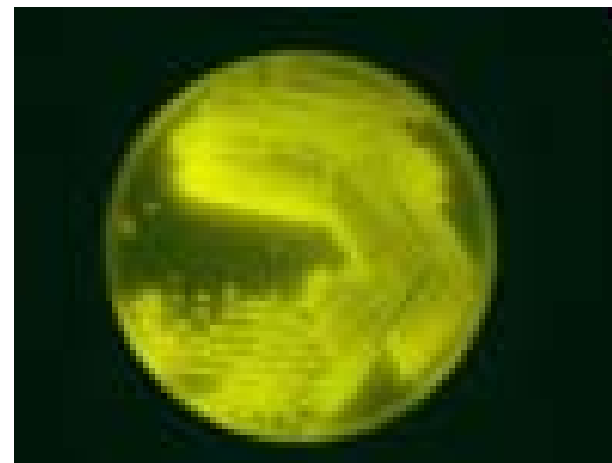
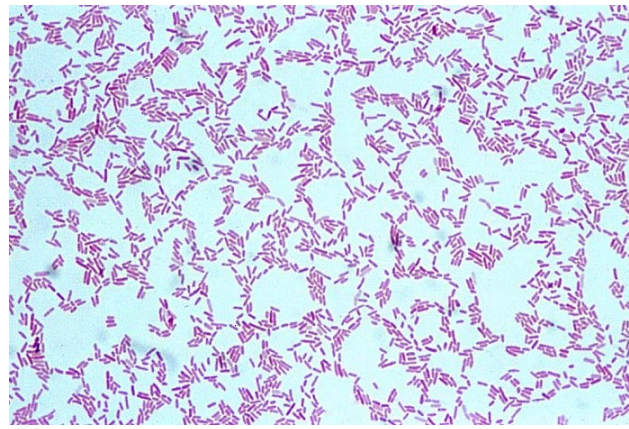
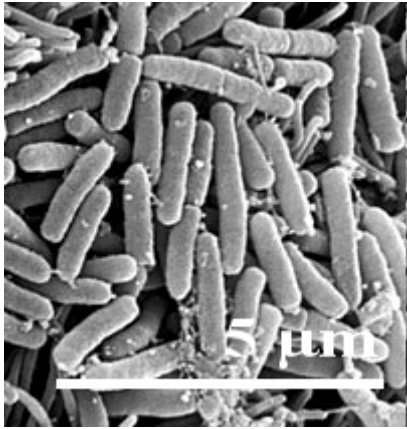
Grupos de microorganismos más importantes en agronomía



Microorganismos Gram negativos aerobios



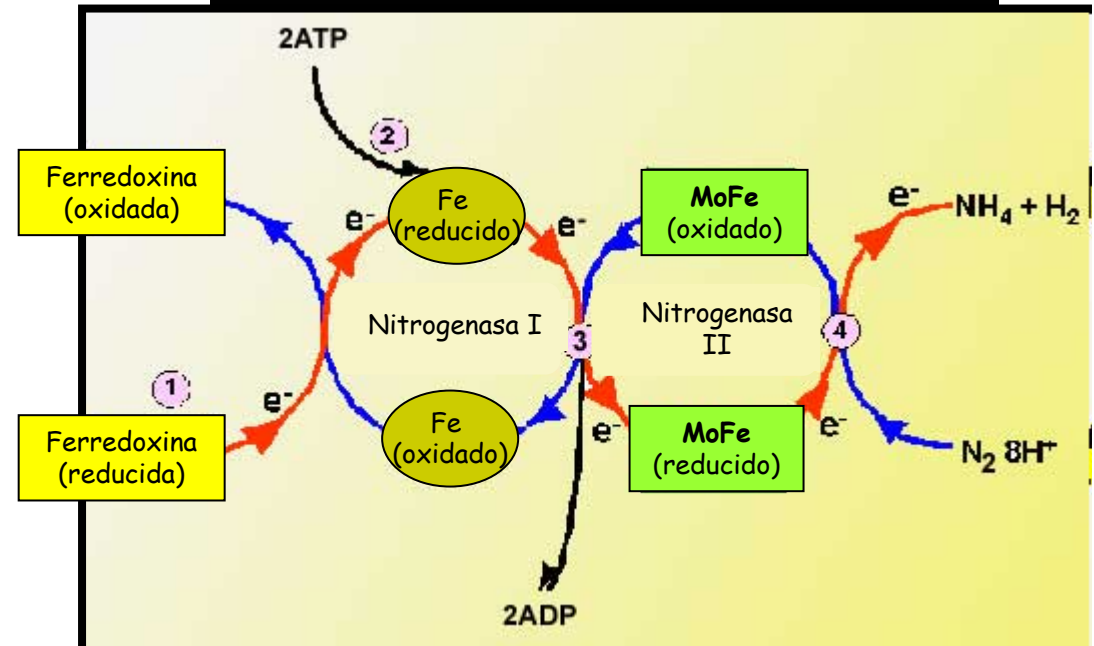
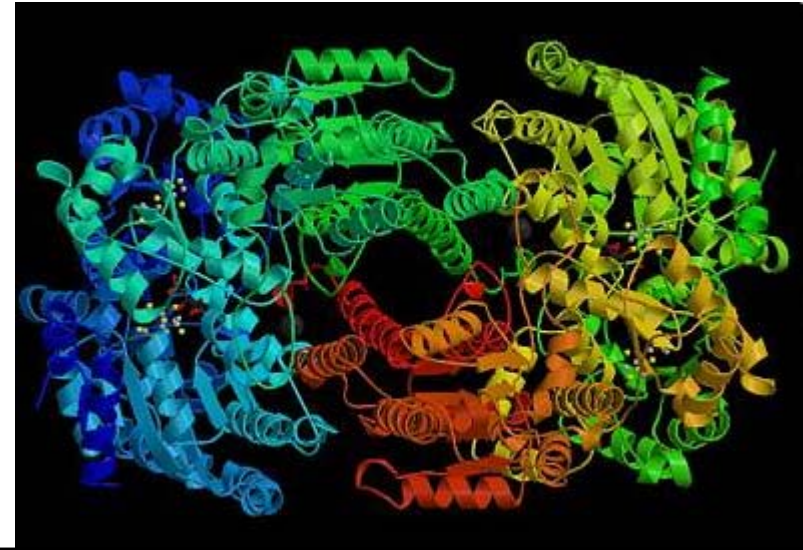
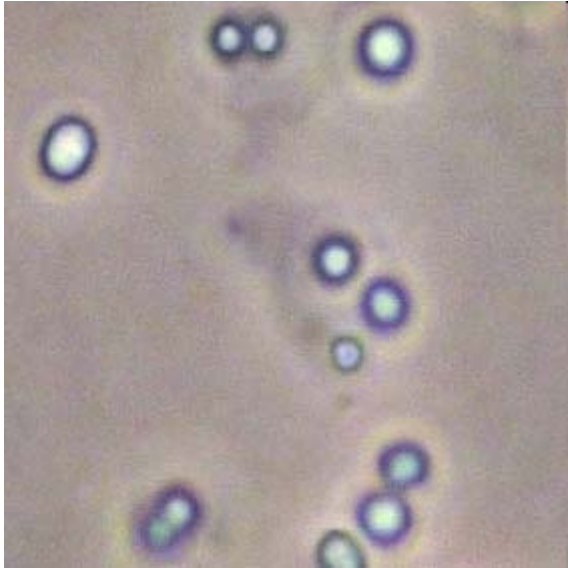
Pseudomonas



Pseudomonas



Azotobacter



Brucella

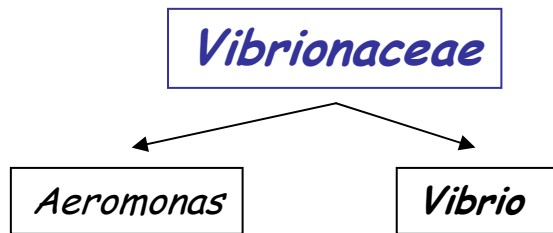
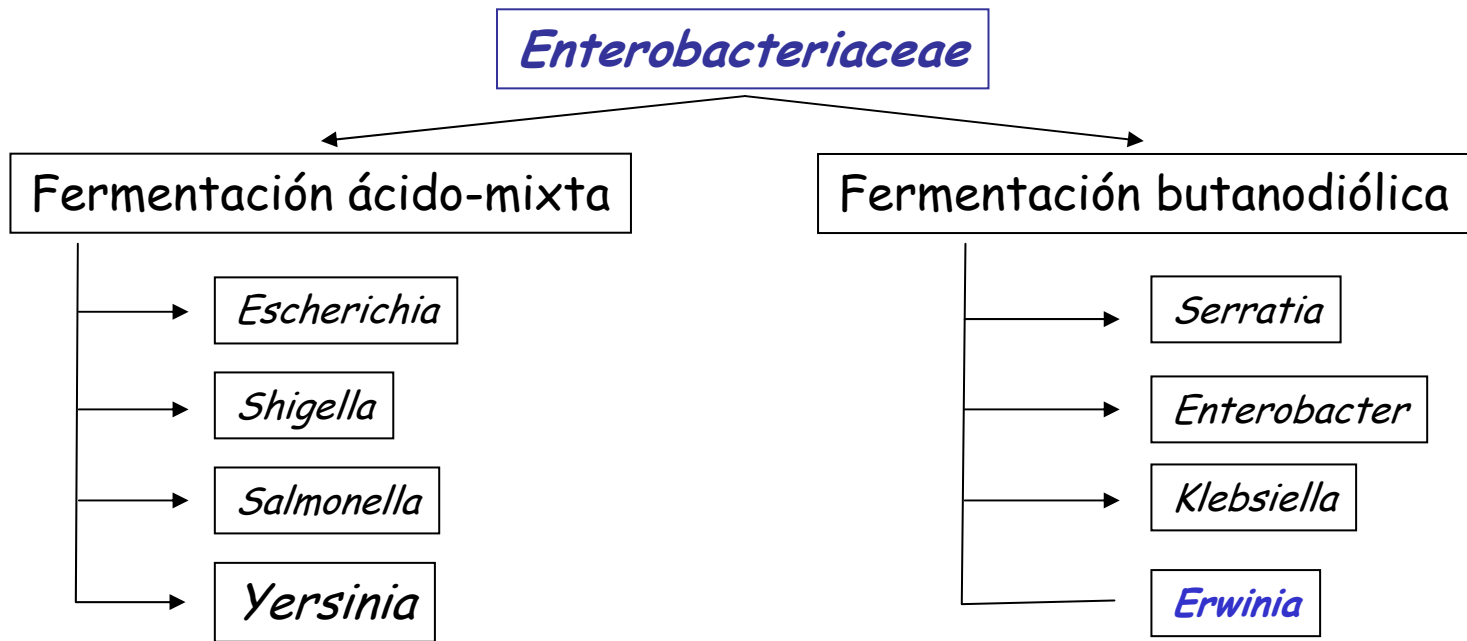


B. mellitensis

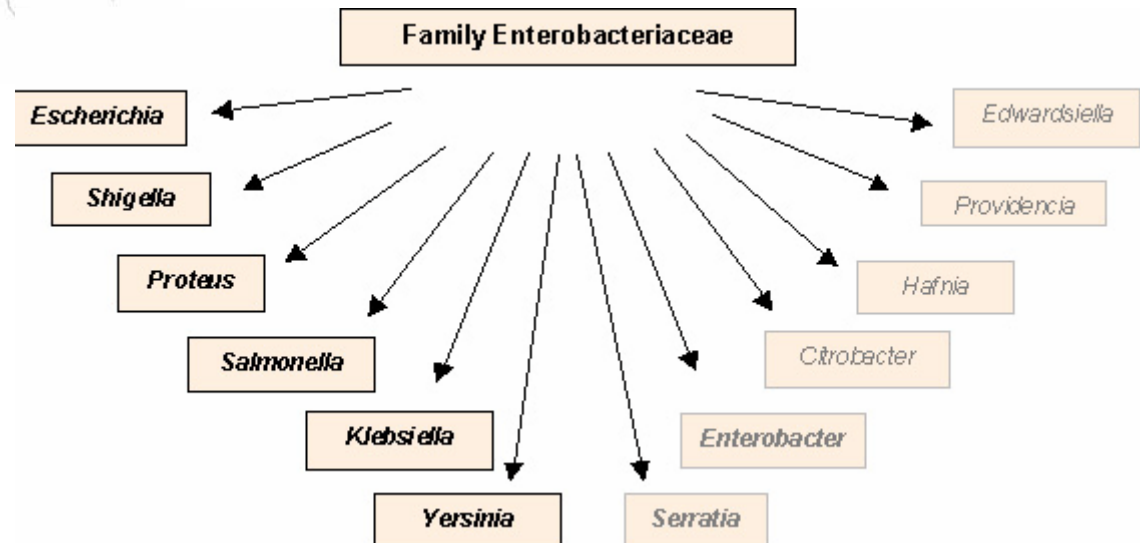
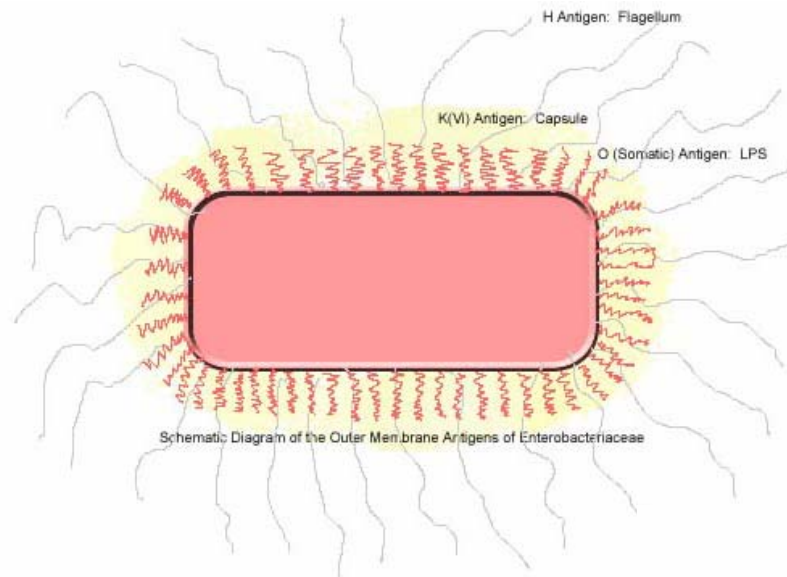
B. abortus



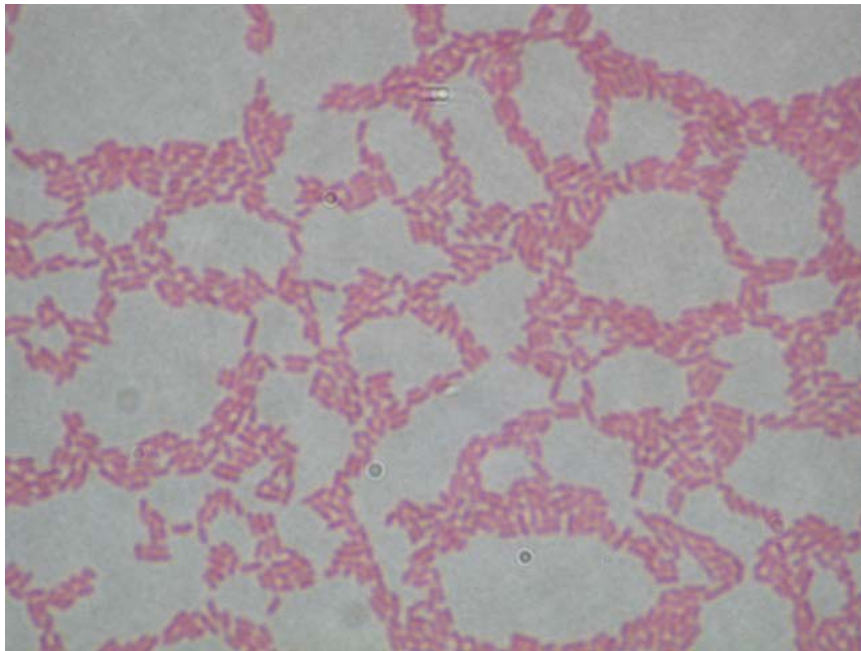
Microorganismos Gram negativos anaerobios facultativos



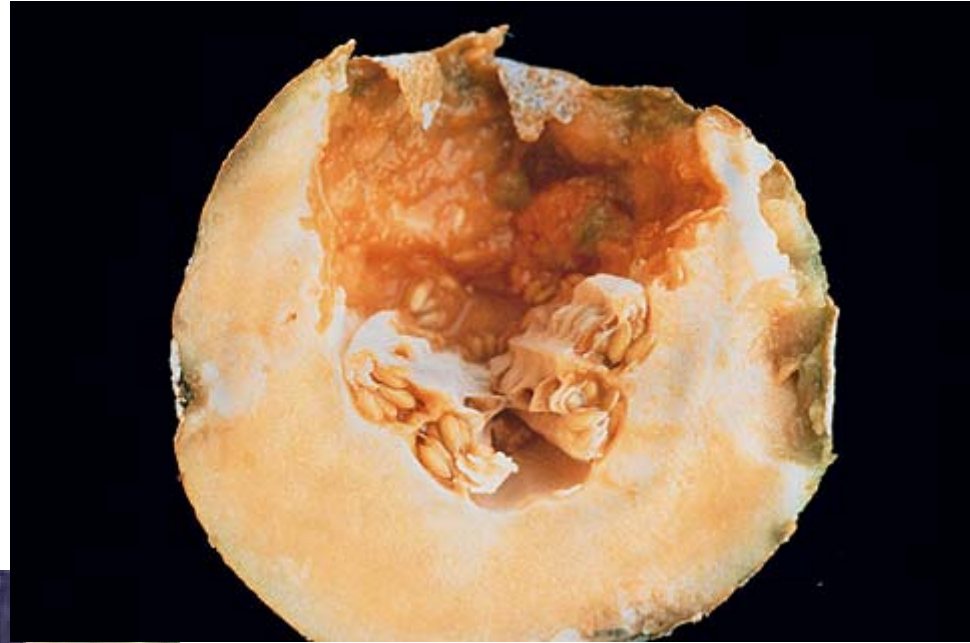
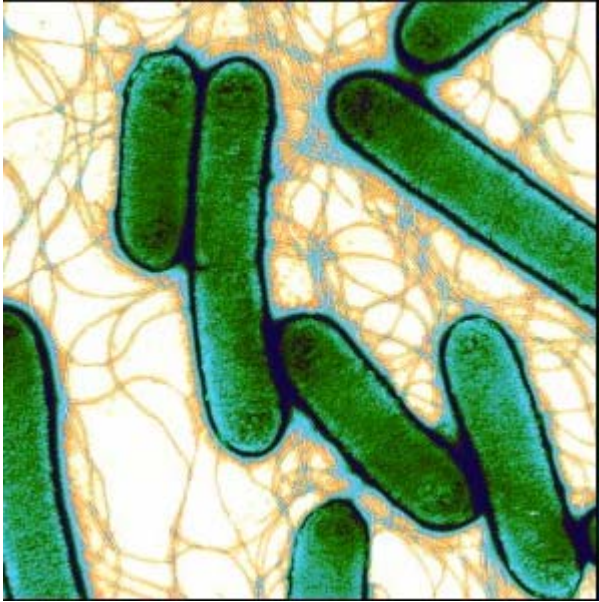
Enterobacteriaceae



Enterobacteriaceae



Erwinia carotovora



Erwinia amylovora



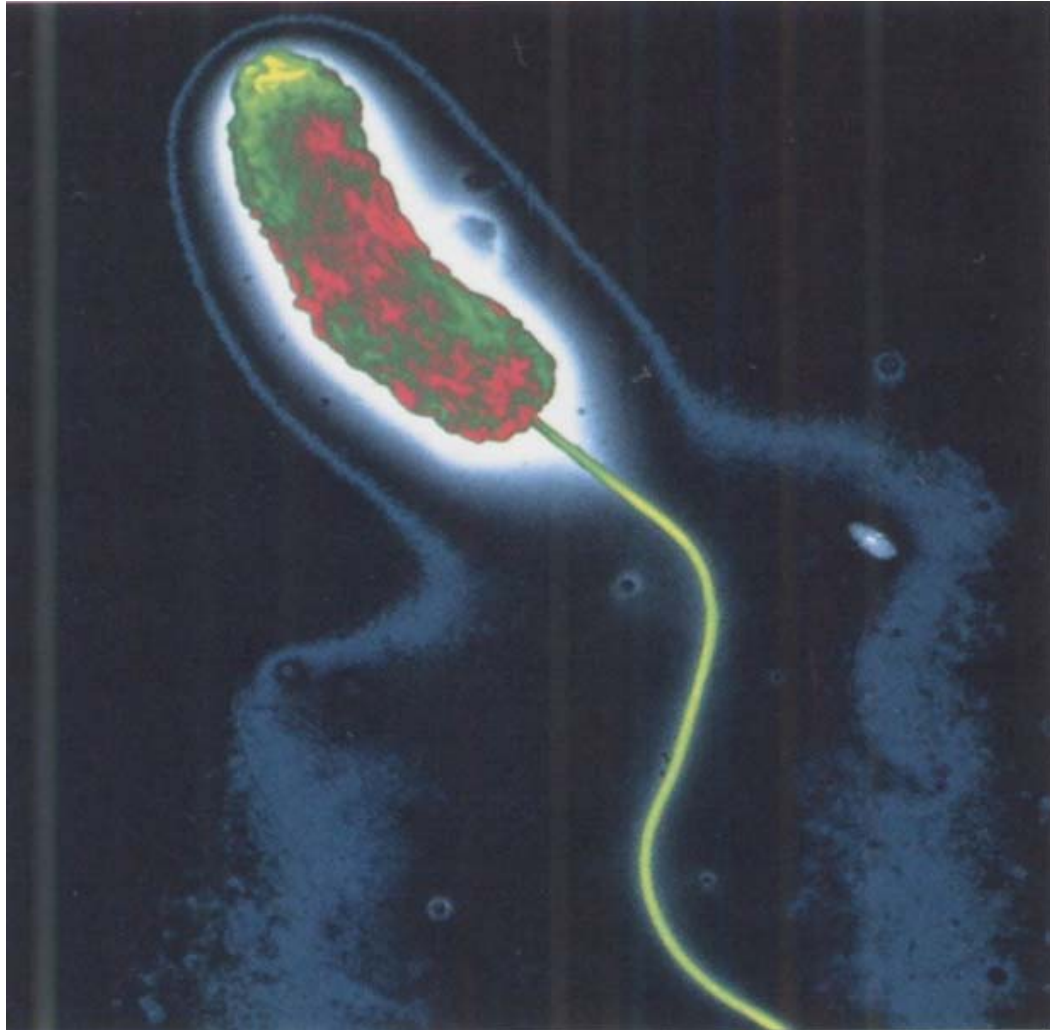
Erwinia amylovora



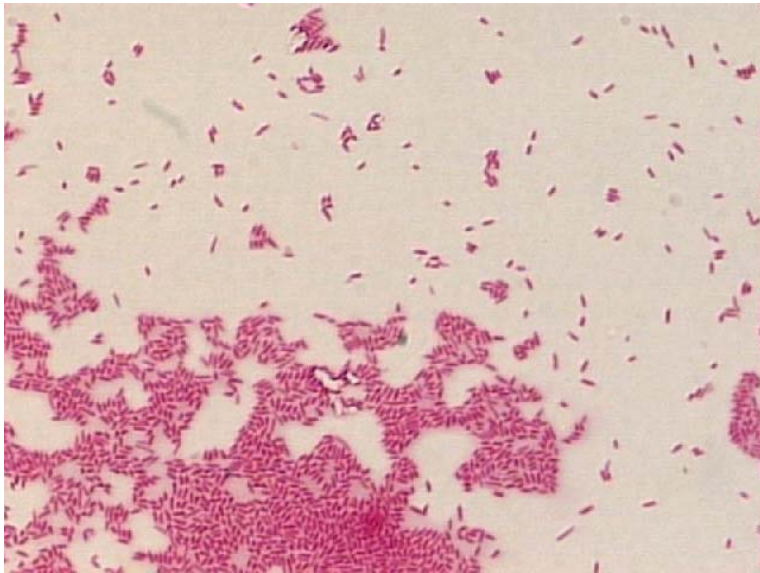
Erwinia amylovora



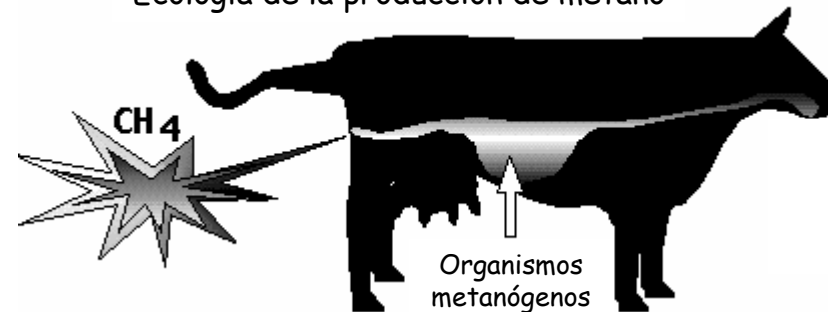
Vibrio



Microorganismos Gram-negativos anaerobios obligados

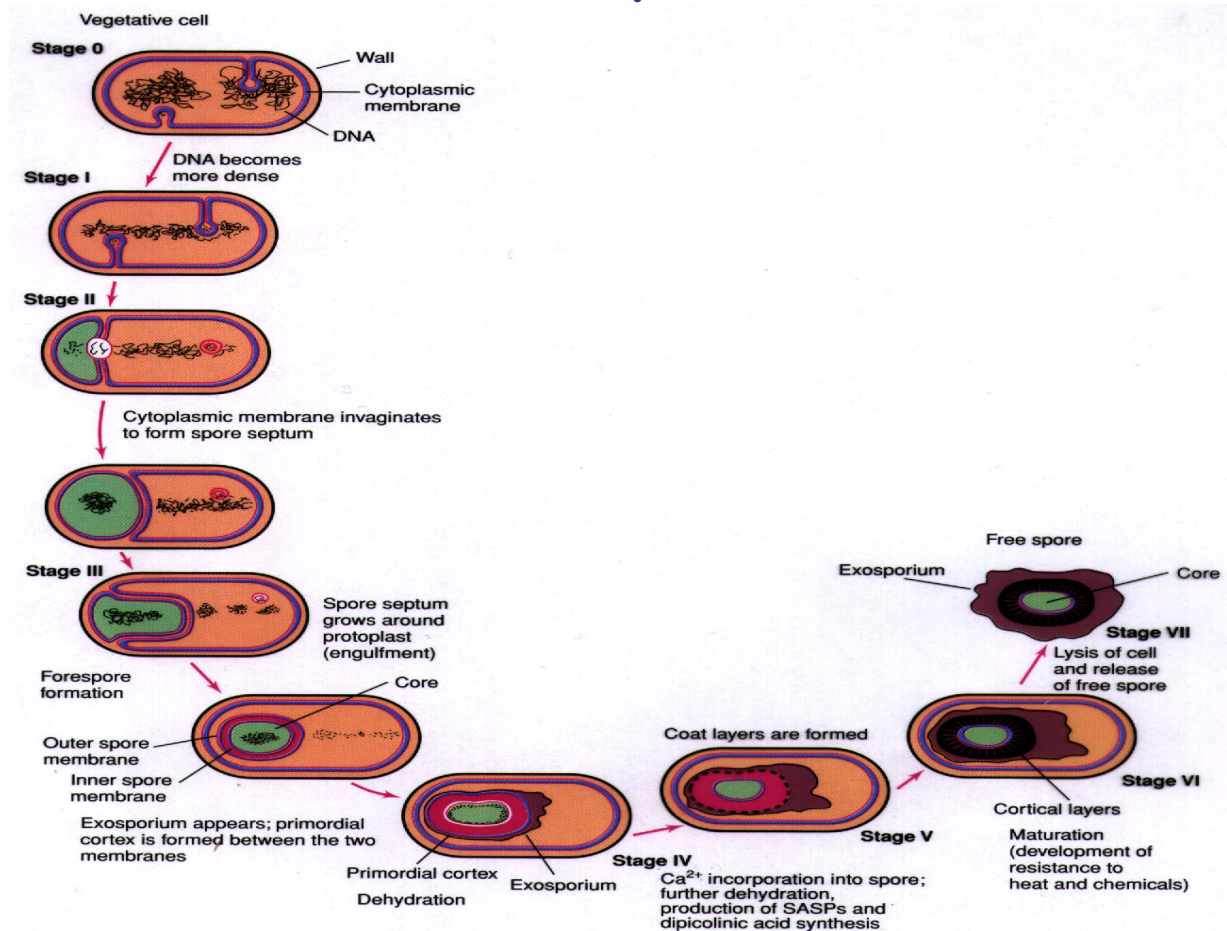


Ecología de la producción de metano



Microorganismos Gram positivos esporulantes

Formación de la endospora



Bacillus thuringiensis



Bacillus thuringiensis



Bacillus thuringiensis



Clostridium botulinum



Clostridium botulinum



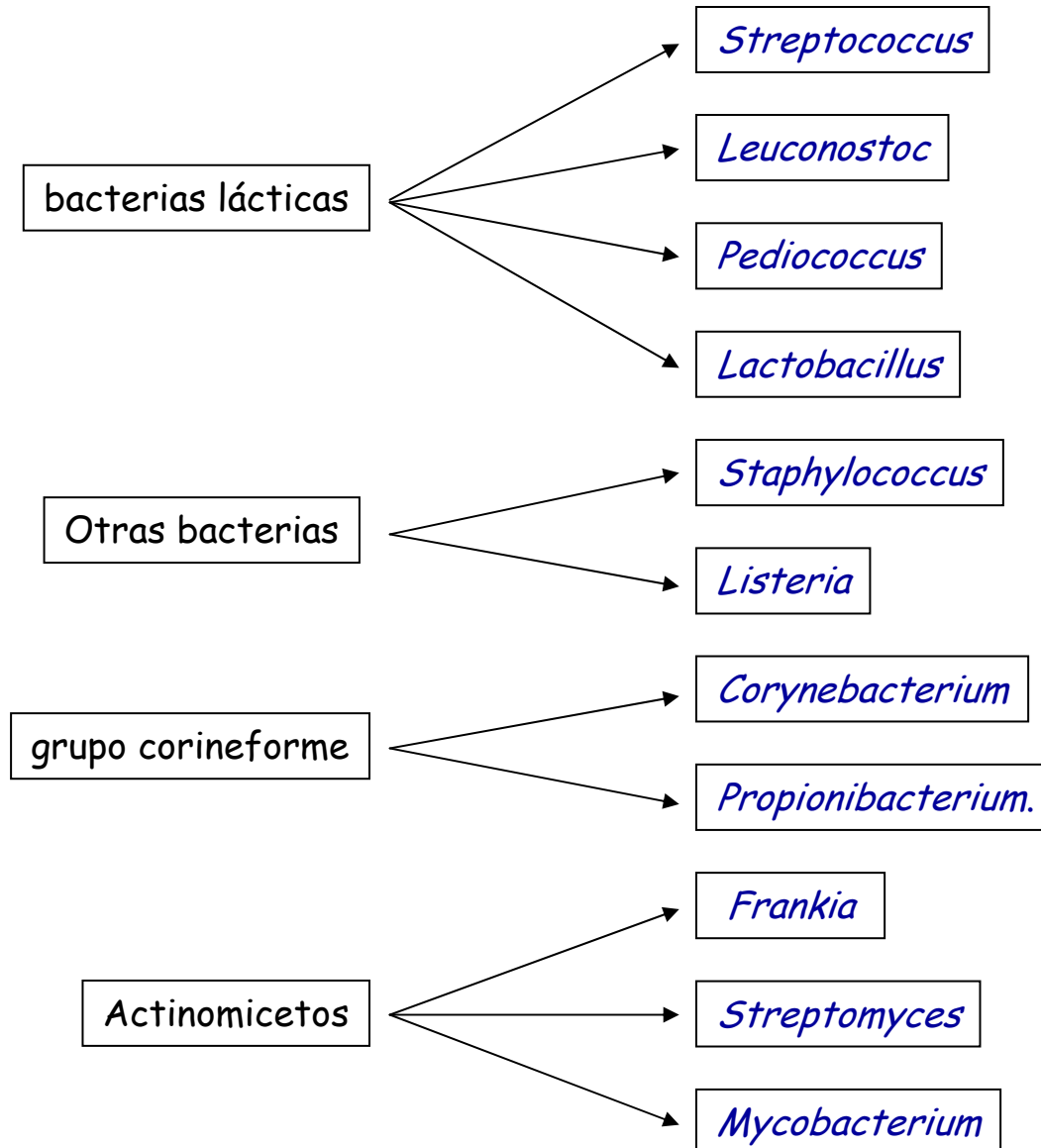
Clostridium tetani



Clostridium tetani



Microorganismos Gram positivos no esporulantes



Microorganismos Gram positivos no esporulantes

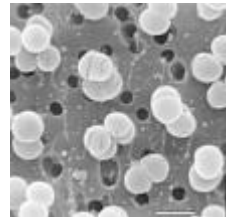
Bacterias lácticas.

Streptococcus

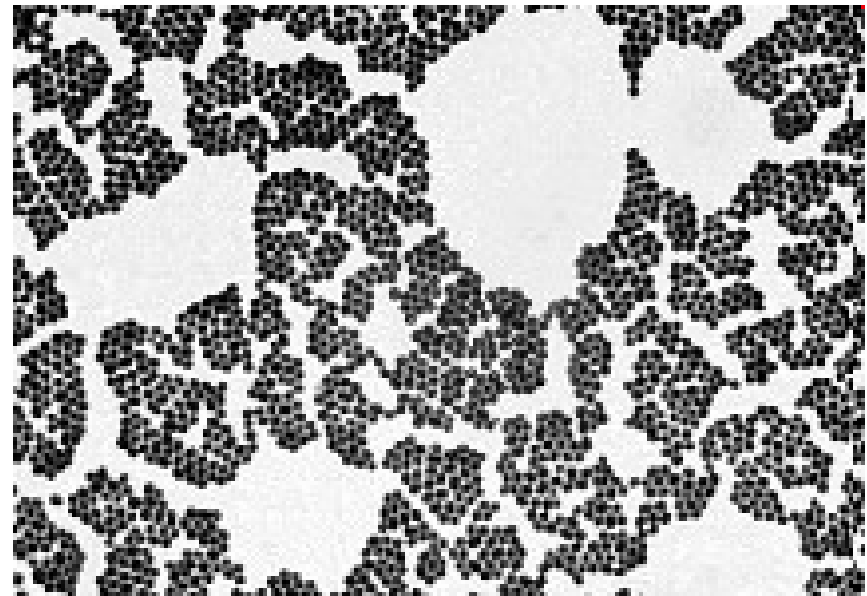
Leuconostoc

Pediococcus

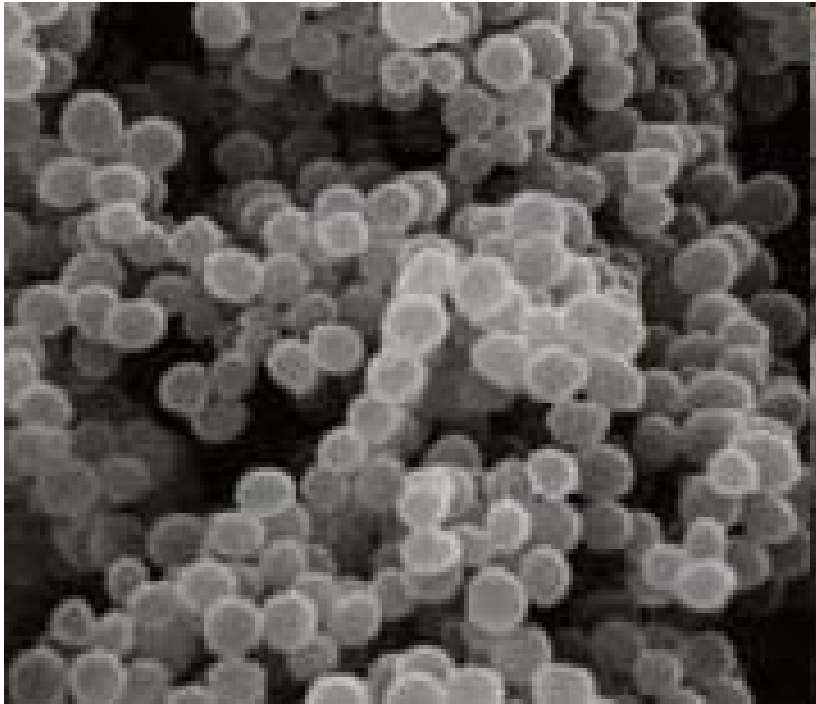
Lactobacillus



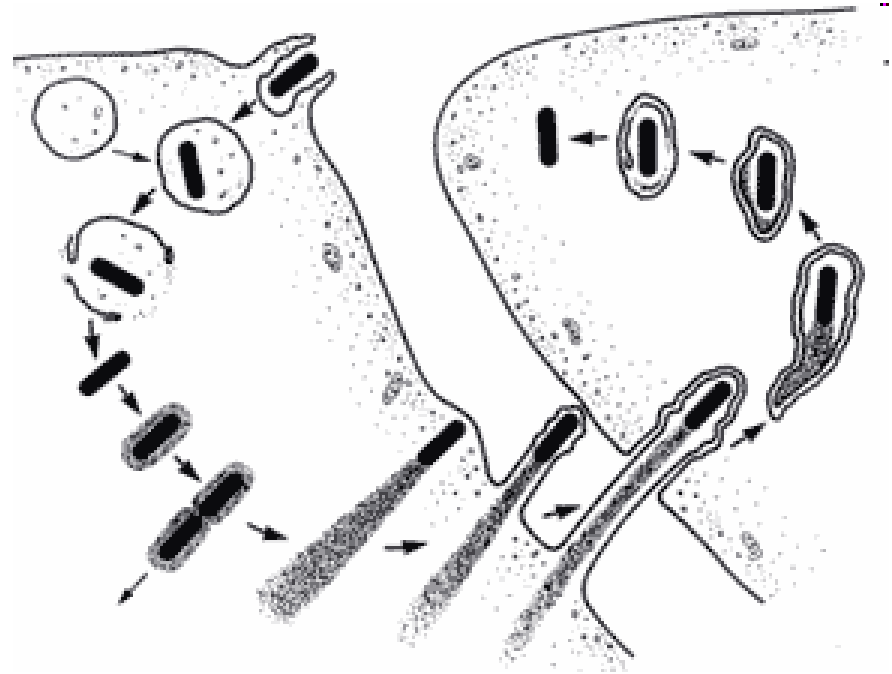
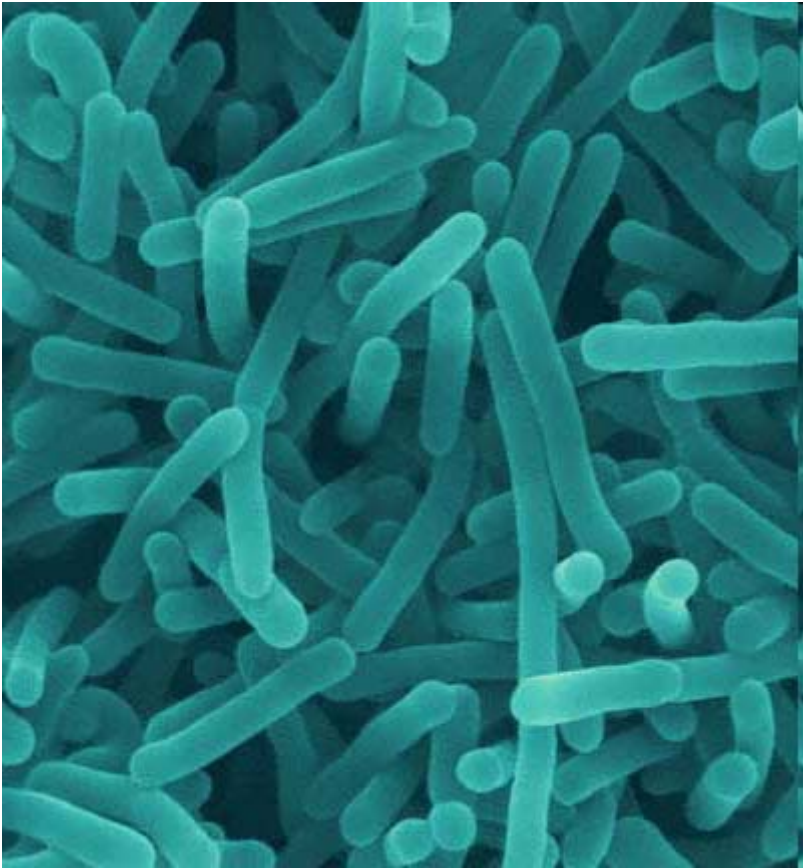
Staphylococcus aureus



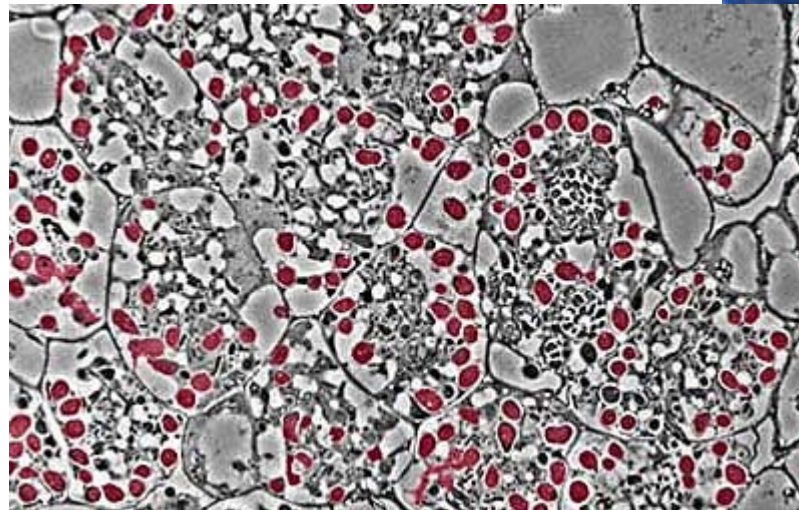
Staphylococcus aureus



Listeria



Frankia



Streptomyces

