Citrate +

*Citrobacter diversus*

(VP neg.)

*Erwinia crysanthemi*

(VP and Hydrogen Sulfide pos.)

*Kliebsella oxytoca*

(VP pos and Hydrogen Sulfide neg.)

Citrate -

***Escherichia Coli***

Citrate

Indole +

*Citrobacter diversus*

*Escherichia coli*

*Erwiniaa chrysanthemi*

*Klebsiella oxytoca*

**Additional Tests**

|  |  |
| --- | --- |
| **Test** | **Result** |
| Methyl Red Reaction | Positive |
| Voges- Proskauer Reaction | Negative |
| Dextrose Fermentation | Acid and Gas |
| Urease Activity | Negative |
| Nitrate Reduction | Positive |
| Catalase Test | Positive |
|  |  |

Rhea Lopez

Microbiology 20

Unknown # 29

*Escherichia coli*

12/09/15

Indole -

The Rest

Indole

Lactose Fermentation -

*Edwardsiella tarda*

*Erwinia cacticida*

*Morganella morganii*

*Proteus mirabilis*

*Proteus penneri*

*Proteus vulgaris*

*Provedencia stuartii*

*Salmonella bongori*

*Salmonella enterica*

*Serratia marcescens*

*Serratia liquefaciens*

*Shigella* spp. (*boydii, dysenteria, flexneri)*

*Shigella sonnei*

*Yersinia enterocolitica*

*Yersinia pestis*

*Yersinia pseudotuberculosis*

Lactose Fermentation

Oxidase -

*Enterobacteriaceae*

Oxidase +

*Aeromonas*

*Pseudomonas*

*Vibrio*

Oxidase

Gram Stain -

*Neisseria*

*Veillonella*

*Acinetobacter*

*Moraxella*

*Brucella*

*Bordetella*

*Bacteroides*

*Haemophilus*

*Bacteroides*

*Pasteurella*

*Francisella*

*Actinobacillus*

*Eikenella*

*Cardiobacterium*

*Flavobacterium*

*Fusobacterium*

*nucleatum*

*Streptobacillus*

*Fusobacterium*

*Vibrio*

*Campylobacter*

*Spirillium*

*Enterobacteriaceae*

*Pseudomonas*

*Aeromonas*

*Alcaligenes*

*Chromobacterium*

Lactose Fermentation +

*Citrobacter diversus*

*Citrobacter freundii*

*Enterobacter aerogenes*

*Enterobacter cloacae*

*Enterobacter amnigenus*

*Enterobacter intermedius*

*Erwinia carotovara*

*Erwinia chrysanthemi*

*Escherichia coli*

*Klebsiella oxytoca*

*Klebsiella pneumoniae* (subsp. ozaenae and pneumoniae)

*Serratia fonticola*

*Serratia rubidaea*

Gram Stain +

*Staphylococcus*

*Micrococcus*

*Peptococcus*

*Streptococcus*

*Peptostreptococcus*

*Enterococcus*

*Corynebacterium*

*Listeria*

*Erysipelothrix Mycobacterium (Acid Fast) Propionobacterium*

*Bacillus*

*Clostridium*

*Actinomyces*

*Arachnia Nocardia (partially acid-fast) Streptomyces*

*Erysipelothrix*

*Lactobacillus*

*Eubacterium*

Gram Stain