***Yersinia pestis* Differentiation Chart**

Differentiation of *Y. pestis* from other Organisms by Conventional Microbiology Procedures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Organism** | **Gram Stain** | **Growth**  **on SBA** | **Growth on MacConkey** | **Oxidase** | **Catalase** | **Urease** |
| ***Yersinia pestis*** | Gram negative | Slow | Non-Lactose Fermenter | Negative | Positive | Negative |
| ***Yersinia pseudotuberculosis*** | Gram negative | Slow | Non-Lactose Fermenter | Negative | Positive | Positive |
| ***Yersinia enterocolitica*** | Gram negative | Slow | Non-Lactose Fermenter | Negative | Positive | Positive |
| ***Escherichia coli*** | Gram negative | Good | Lactose Fermenter | Negative | Positive | Negative |
| ***Klebsiella pneumoniae*** | Gram negative | Very good, 2-4 mm  colonies  24 hrs. | Lactose Fermenter | Negative | Positive | Positive/ Negative |
| ***Enterobacter cloacae*** | Gram negative | Good | Lactose Fermenter | Negative | Positive | Variable |
| ***Pasteurella multocida*** | Gram negative | Good | Variable | Positive | Positive | Negative |