

Biological Diversity Notes

Cyano Bacteria

- Photosynthesis and organic compound
 - $\text{Light} + \text{CO}_2 + \text{H}_2\text{O} \rightarrow (\text{CH}_2\text{O}) + \text{O}_2$

Escherichia Coli → also known E. Coli

- Proteo bacteria
- Largest most diverse bacterial group
- Alpha, beta, gamma, delta... ect.
 - Evolutionarily distinct lineages
- E. Coli- mammal guts
 - Big role in digestion
- Common in sewage and polluted water
 - Indicator
 - From feces
- Some strains cause disease
 - Contaminated water and undercooked red meat
 1. E. coli O157:H7 → type of strain
 2. Also associated with spinach recall, other leafy vegetables
 - 1 and 2 from above**
 - Death
 - Infection moves quickly
 - Population can double in 20 mins under optimal conditions

Wolbachia Sp.

- Intra cellular bacteria
 - Very similar to mitochondria
- 20% of all insects are infected
 - Inherited
 - KILLS MALE
- Feminization of male insects become true female or in fertile psoudo- females
- Partheon genesis
 - “Virgin Birth”- no mall genetic input
 - Clones of female
 - Virgin birth- no indolement of male

Females acts like a male and have sex with a female and then they switch roles

Helico Bacter Pyloria

- Ulcers (1979 founded)
- That thrives in acidic (low PH environment)

Yersinia Pestis

- “The Black Death”, The Black Plague
- Urban
 - Rats
- 14th century no antibiotics
 - Approximately 1/2 of Europe’s Population