

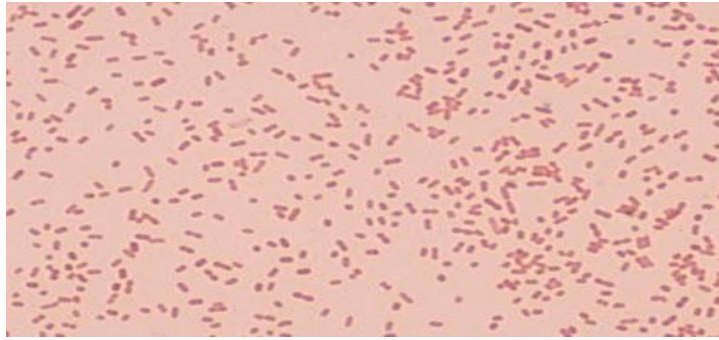
Family: *Enterobacteriace*

Tribe: *klebsielleae*

Genus: *klebsiella* and Genus *Enterobacter*

- They are called coliforms (*Klebsiella*, *E.coli*, and *Enterobacter*)
- Normal inhabitants in the intestine and respiratory tract.
- They are saprophytes in soil and water.
- Some may cause disease.

Morphology:



- Gram negative, bacilli, non motile, capsulated, diplobacilli.
- The capsule appear as halo in gram stain.

Culture character:

- Lactose fermenter on MacConkey agar (pink color).
- produce mucoid colony due to present of capsule.

Biochemical reaction:

-I	M	V	C test
-	-	+	+



-Urease test: +ve (pink-red color)

-H₂S: -ve

TSI test: A/A



-They ferment glucose, sucrose, manitol and produce acid and gas but Not H₂ S.



Diseases:

1) *KL. pneumoniae*:

-It causes lobar pneumonia in man

-It is high pathogenic to mice cause death within 24-48 hr. when injected intraperitoneally.

-It causes also urinary tract infection.

2) *KL. rhinoscleromatis*.

-Cause rhinoscleroma, which is granulomatous lesion in nose and throat.

