

MORPHOLOGY OF BACTERIA

MORPHOLOGY

- ◉ The shape of bacteria vary with bacteria because every species of bacteria have a definite form or shape.
- ◉ On the basis of their shape bacteria are of following types:
 1. Bacilli or Bacillus
 2. Spherical bacterial or Coccus
 3. Spiral bacterial or Spirillum
 4. Vibrio
 5. Filamentous or Mycelial
 6. Stalked
 7. budded

BACILLI OR BACILLUS

- They are usually rod-shaped with or without flagella.
- Their average length will be 10 micron and average diameter will be 1.5 micron.
- These bacteria may be found into following forms:
 1. Bacillus- when occur singly. Eg- bacillus subtilis.
 2. Diplobacillus- when occurs in group of two. Eg- diplobacillus
 3. Streptobacillus- when rod-shaped cells are arranged in chain. Eg- streotobacillus.

SPHERICAL BACTERIA OR COCCUS

- They are spherical or oval in shape.
- They are approximately 0.5 to 1.25 micron in diameter
- They are found in groups and called cocci.
 - i. Monococcus:- eg- micrococcus
 - ii. Diplococcus:- eg- diplococcus pneumoniae.
 - iii. Tetrads:- eg- streptococcus lactis.
 - iv. Sarcina:- eg- sarcina sp.
 - v. Staphylococcus:- eg- staphylococcus albus.

SPIRAL BACTERIA

- ◉ When they are twisted like a screw and have flagella at one end or both the end.
- ◉ Their size is 10-50 micron in length and 0.5 to 3 micron in diameter. Eg- spirillum, spirocharte

VIBRIO

- When they are small and curved like comma sign (,) and have flagella at one end .
- Their size is 10 micron in length and 1.5-1.7 micron in diameter.
- Eg- vibrio cholerae.

FILAMENTOUS OR MYCELIAL

- ◉ They are filamentous like that of hyphae.
- ◉ Filaments are very small.
- ◉ Eg- beeggiatoa, thiothrix.

STALKED

- These bacteria possess a stalk.
- Eg- caulobacter.

BUDDING

- This bacteria is swollen at places to form buds.
- Eg- rhodomicrobium.