

CLASSIFICATION OF LIVING BEINGS

Introduction :

1. Aristotle classified organisms for the first time.
2. Two kingdom system includes – Plantae & Animalia.

Demerits of Two Kingdom 1.system

1. No difference in Eukaryotes and Prokaryotes.
2. Heterotrophic Fungi kept in Plantae.
3. Five kingdom system is given by R.H Whittaker (1969) viz. Monera, Protista, Fungi, Plantae and Animalia.

Kingdom Monera –

1. Prokaryotic unicellular organisms.
 2. Most abundant.
 3. Also live in extreme habitats viz. Hotsprings, Snow etc. as endoparasite etc.
 4. eg. *Bacteria*.
- Some bacteria are autotrophic others are heterotrophic.

Archaeobacteria –

- Cellwall different from other bacteria.
- Live in most harsh habitats eg. Halophile.
- Methanogens are found in the gut of ruminants and produce methane (CH_4) gas.

Eubacteria –

- True bacteria.
- Rigid cellwall with or without flagellum.
- Cyanobacteria(Blue green algae) are also included in this group.
- Cyanobacteria are Photosynthetic autotrophs, unicellular, colonial or filamentous, with gelatinous sheath.
- Have Heterocyst for N_2 fixation eg. *Nostoc*, *Anabaena*, *Oscillatoria*, *Rivularia*, *Gloeotrichia* etc.
- Mostly bacteria are Heterotrophs and are useful and harmful both to humans.