

# Classification of Organism

1. There are millions of organisms. It is impossible to study each individual separately. Classification means to categories organism into different groups. Study of an individual of a group gives us the idea of rest of the member of that group.

2. Linnaeus divide all organism into two kingdoms - Plantae and Animalia in his book "Systema Naturae". The foundation of modern classification system was laid in the line of classification system started by Linnaeus. Therefore Linnaeus is called 'Father of Taxonomy'. Due to disputed position of organism like bacteria, virus, fungi and Euglena, there is a need of reconsideration of system of classification.

## Five Kingdom Classification

1. Five Kingdom Classification was proposed in 1963 by R.H. Whittaker. The criteria of classifying organism into five kingdoms are its complexity of cell structure, complexity of body of organism, mode of nutrition, life style and phylogenetic relationship.

**1. Monera :** It includes all prokaryotic organism like bacteria, cyanobacteria and archaebacteria. Filamentous bacteria also come under this kingdom. All organism of this kingdom are microscopic.

**2. Protista :** This kingdom includes unicellular form usually found in aquatic habitats. On the basis of mode of nutrition they are autotrophic, parasitic, and saprophytic. Diatoms, flagellates and protozoa come under this kingdom. Euglena have both heterotrophic and autotrophic mode of nutrition. So, it is placed between plant and animal.

**3. Fungi :** This kingdom includes non-green plants. It has saprophytic nutrition and growing on dead and decaying organic matter. The cell wall is composed of chitin. Example: Mushroom, Mucor, Albugo etc.

**4. Plantae :** This kingdom includes all plants except some algae, diatoms, fungi and member of Monera and protista.

**5. Animalia :** Almost all animal comes under this kingdom except protozoan.

**Binomial nomenclature :** There was the need of uniform international naming of organism. In biology every organism is given two proper names. The first name is genus name always started with capital letter and the second name is species

started with small letter. For example scientific name of human is Homo sapiens. Homo is the name of genus, whose one species is sapiens.

JKChromosome